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MADRAS RECORD OFFICE

GOVERNMENT OF MADRAS

Revenue DEPARTMENT

G.O. No. 351 Press

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Not to be folded or roughly handled

No. 2.

OFFICE OF INSPECTOR OF FORESTS,
OOTACAMUND, *2nd April* 1874.

From

CAPTAIN C. WALKER,
Officiating Inspector of Forests,

To

J. GROSE, ESQ.,
Secretary to the Board of Revenue, Madras.

SIR,—I have the honor to submit the Inspection Report for the official year 1873-74.

Colonel Beddome visited the Annam[illegible]age in June and proceeded thence to Madura and Tinnevelly returning to his headquarters [illegible]end of July. In September he visited Coimbatore and Madras, and in October and No[illegible]nspected Wynaad and South Canara.

From the 15th November to the 1[illegible]er he was in the North Canara Forests and at Bombay visiting the dockyards, *etc.*, in accor[illegible]ce with G.O., No. 1,087, of the 10th October 1873. In the latter part of December he visited the Ghooty and Cuddapah Plantations. On the 16th January 1874 he proceeded to Coimbatore and Madras, and handed over charge on his departure on furlough for two years on the 2nd February 1874.

From the 3rd to the 6th February I was at Coimbatore and proceeded thence to Salem and Madras, where I arrived on the 10th and remained till the 26th consulting with the Board and making myself acquainted with the general arrangements. I then proceeded on a tour in the South Arcot District, and subsequently visited Trichinopoly and Coimbatore, returning to headquarters on the 19th March.

It will thus be seen that out of twenty-three forest ranges, comprising fifteen Revenue districts, ten were visited. Those not visited were Gumsur and Surada, Golcondah, Kurnool, North Arcot, Bhowany, Collegal, Sattiamungalam, Muddumallai, Sigur, Mettapolliem, Bolamputty, and Sholakarray, Nellumbur and Chenat Nair (Palghaut).

The Inspection Reports submitted after each tour deal so fully with the state of forest matters in each district that it seems unnecessary to recapitulate them here, especially as the Board propose to draw up the General Administration Report in consultation with the Inspector.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) C. WALKER, Captain,
Officiating Inspector of Forests.

No. 1,945.

CHETTERPORE,
26th September 1874.

From

R. DAVIDSON, Esq.,

To *Acting Collector and Conservator of Forests, Ganjam.*

J. GROSE, Esq.,

Secretary to the Board of Revenue, Madras.

SIR,—I have the honor to submit my report on the administration of the Gumsur and Surada Forests in this district for the official year 1873-74, accompanied by a copy of the Forest Overseer's report, and the prescribed Statements noted in the margin.

1. A. Detailed Statement of receipts and charges under "A, Conservancy and Working," and "B, Establishment and Contingencies."
2. B. Statement showing the quantity of timber felled departmentally.
3. C. Do. do. sale of timber.
4. D. Do. do. particulars of stock in hand at the commencement and close of the official year.
5. E. Do. do. timber, &c., disposed of under License and Voucher system.
6. Statement of Fuel Reserves.
7. Do. of Experimental Teak Plantation.
8. A. Monthly detailed Register of Receipts.
9. B. Do. do. of Expenditure on conservancy and working.
10. C. Do. do. of do. on Establishments.
11. D. Do. do. of sums drawn from Treasury for Forest charges.
12. E. Do. do. of timber felled and sent into Store, with 8 original vouchers for value of timber supplied to Department Public Works.

SECTION I.

(a.) *Inspection Tours of Collectors.*—My predecessor does not appear to have had either time or opportunities to inspect the forests during the year under report, and as I took charge of the district just before the close of the year, i.e., on the 2nd March 1874, I had no time to inspect them, but I hope to be able to do so during my next Jamabundy tour.

(b.) *Inspection Tours of Range Officers.*—The various forests have been duly visited by the Overseer with the exception of those situated [illegible]e frontiers. The state of the Overseer's health prevented his visiting them.

SECTIO[illegible]
RESE[illegible]

A. Reserved Forests.—The area of the re[illegible]erved portion of the forests will be communicated to the Board immediately on the receipt of certain information called for from the Forest Overseer.

The Statements B and C show in detail the quantity and value of timber felled and sold by Departmental Agency during the year under report. The sub-joined is an abstract thereof—

Description of Timber.	Timber Felled.		Timber Sold.		Remarks.
	Quantity.	Value.	Quantity.	Amount actually realized.	
	C. FT.	RS	C. FT.	RS.	
Saul	1,712	428	2,264	566	
Sissua	23	10	7	3	
Pia Saul	234	58	156	39	
Holondho	463	116	162	40	
Bheru	17	7	9	4	
Gombari	78	19	50	13	
Total ...	2,527	638	2,648	665	

It will be found from the above that the value of timber felled during the year under report was Rupees 368 against Rupees 580 in the preceding year, and that the amount actually realized by the sale of timber was Rupees 665 against Rupees 666 in the preceding year. These trifling variations call for no remark.

The amount of working charges during the year under report was Rupees 464 against Rupees 548 of the preceding year. The net working charges, after deducting the pay of a gardener employed in the experimental plantation, were Rupees 428, which sum being deducted from the amount realized by the sale of timber by the Departmental Agency during the year, viz., Rupees 665, leaves a net receipt balance of Rupees 237.

B. Fuel Reserves.—There are no fuel reserves in this district, and the statement called for in paragraph 18 of the Board's Proceedings, Forest No. 4, dated the 27th January last, is therefore sent blank.

C. Plantations.—The only plantation in this district is the experimental teak plantation containing an area of 3½ acres. This was originally formed at the close of the year 1869, and it now contains the following trees :—

No. of Trees.	
160	Tectona grandis, Teak.
7	Acacia Arabica.
2	Poinciana Regia.
10	Sapindus emarginatus.
8	Sumach.
3	Inga dulcis.
31	Mangifera Indica.
33	Acacia Ashoka.
15	Artocarpus integrifolia.
1	Cordia Myxa.
10	Bignonia suberosa.
280	Trees.

The four teak trees originally planted are now 20 to 40 feet in height, by 9 to 12 inches girth at the bottom. The soil is said to be well adapted for teak and mango trees. During the hot season want of water is much felt, the gardener has to bring it from a distance of about a mile, as the little pit dug in the plantation is t[illegible]ite dry. At the recommendation of the Overseer I have provided Rupees 100 in the Budget-[illegible]imate for 1875-76 for sinking a well there.

The total cost of this plantation up to the close of the official year under notice was Rupees 165 ; there were no receipts therefrom, as will appear from the accompanying Statement prepared in reference to paragraph 21 of the Board's Proceedings, Forest No. 4.

SECTION III.

FORESTS WORKED UNDER THE LICENSE AND VOUCHER SYSTEM.

The Collections under this head are shown below :—

Description of Timber.	Quantity.	Amount realized.
		RS.
Saul in Cubic Feet	20,240	1,519
Sissua in ,, ,, ...	40	3
Pia Saul in Cubic Feet	1,700	90
Sohon in ,, ,, ...	420	21
Sajo in ,, ,, ...	1,760	88
Bundano in ,, ,, ...	600	30
Moholo in ,, ,, ...	160	6
Kussum in ,, ,, ...	760	28
Doho in ,, ,, ...	300	11
Holondho in ,, ,, ...	2,180	85
Kosi in ,, ,, ...	280	10
Other jungle wood used as timber, Cubic Feet.	8,120	203
Firewood in tons	313	110
Total ...	...	2,204

It will be seen from the above statement that the amount realized on timber removed from forests under License and Voucher system during the year under report was Rupees 2,204 against Rupees 2,993 of the preceding year.

The decrease of Rupees 789 is said to be owing to a smaller number of licenses having been taken by traders in consequence of lowness of the freshes during the early part of monsoon.

There were no charges incurred under this head.

The following abstract shows the results of the License and Voucher system compared with those worked by Departmental Agency :—

Timber (exclusive of Firewood) removed under License and Voucher system.			Timber sold by Departmental Agency.*					Difference between Columns 3 and 8.	
Quantity in Cubic Feet.	Amount of Seigniorage levied.	Rate per Cubic Foot.	Quantity in Cubic Feet.	Amount realized.	Deduct amount of working charges exclusive of cost of plantation.	Net Receipts.	Rate per Cubic Foot.	In favor of License and Voucher system.	In favor of Departmental Agency.
1	2	3	4	5	6	7	8	9	10
36,560	2,094	About 11 Pies.	2,648	665	428	237	About 1 Anna & 5 Pies.	...	6 Pies

From the above results it would appear that selling timber by Departmental Agency is more profitable than disposing of it under the Voucher and License system; but I am not yet in a position to express a decided opinion on the subject.

SECTION IV.

Yield of Forests.

The subjoined statement shows the quantity of timber and firewood sold or removed free of payment from the Gumsur and Surada Forests :—

Timber	Departmentally, Cubic Feet	2,527
	On License ,, ,, ...	36,560
	Free ,, ,, ...	239,780
Firewood	On License, Tons	313
	Free ,, ...	61,532

* No deduction whatever has been made from the working charges shown in Column 6 on account of the proportionate cost of the increased stock of timber of Rupees 50 value which remained on hand at the close of the year under report, because a portion of the last year's stock was sold for Rupees 77 more than the estimated value, and, because, if it were not for this, there would have been a deficit in the balance of about 27 Rupees worth of timber.

SECTION V.

Financial Results.

The accompaniyng Statement A shows the receipts and charges during the year, and the following is an abstract thereof :—

Items.	Receipts.	Amount.	Items.	Charges.	Amount.
		Rs.			Rs.
I.	Sale of Timber brought to Depôt by Departmental Agency	665	I.	Timber expenses for felling, &c.	273
II.	Sale of Timber, &c., removed on License...	2,204	III.	Feed and keep of cattle ...	133
VII.	Sale of confiscated drift and waif timber	7	VI.	Plantations	36
			VII.	Forest Work, viz., cutting creepers, &c.	22
					464
				2 Establishment and Office Contingencies	2,574
	Total ...	2,876		Total ...	3,038

From the above statement it will be found that the charges, inclusive of Rupees 60 being the rent of the Forest Office which is debited to Provincial Services, and is not therefore shown in the Forest Accounts, exceed the receipts by Rupees 222.

The receipts from all sources during the year (including Rupees 513 being value of timber supplied to the Public Works Department) were Rupees 2,876 against Rupees 3,678 of 1872-73. The decrease of Rupees 802 is said to be chiefly the result of the Zemindars of Korada and Ronaba having diverted the traders to their own forests by underselling the Government.

The expenditure of the year under notice was Rupees 3,038 against Rupees 3,200 of 1872-73. The decrease of Rupees 162 is owing partly to the rent of the Forest Office having been debited to Provincial Services, and partly to the reduction in the item of "Feed and Keep of Cattle" in consequence of the death of five buffaloes during the latter part of the year 1872.

The following Statement shows the receipts and charges of the Gumsur and Surada Forests :—

G.—Statement showing the Financial transactions of the Forest Department for 1873-74.

Expenditure.	Receipts.	Difference between Columns 1 and 2.	Value of Timber in Depôt.	Increase of Stock during the year.	Decrease of Stock during the year.	True results of the year calculated on Columns 3, 5, and 6.
1	2	3	4	5	6	7
Rs. 3,038	Rs. 2,876	Rs. —162	Rs. 861	Rs. 50	Rs. ...	Rs. —112

The stock in hand at the commencement and the close of the official year is shown in Statement D in detail, an abstract of which is given below :—

H.

—	At the commencement of the year.	At the close of the year.	Difference	
			In favor of the year.	Against the year.
	Rs.	Rs.	Rs.	Rs.
Gumsur and Surada Forests	811	861	50	...
Total Assets ...	811	861	50	...
Add total valuation of Timber as per Statement B	638			
Total ...	1,449			
Deduct total valuation of Timber sold during the year	665			
Total ...	784			
Add increase on the valuation of the last year's stock	77			
Balance of Stock at the close of the year ...	861			

From the above it will be seen that the value of stock on hand at the close of the year is more than that at the commencement of the year by Rupees 50.

SECTION VI.

GENERAL REMARKS.

There is a great falling off in the Forest Revenue owing, as has already been stated, to some of the Zemindars having diverted certain traders by underselling Government. The Overseer complains of the insufficiency of the present preventive staff, and urges the necessity of entertaining six additional Peons, at Rupees 6 each per mensem. Though I have not yet come to any definite conclusion on the point, I have made provision for this increase in the Budget-Estimate for the next official year.

Twenty-five persons were prosecuted under mischief for felling, burning, and destroying trees in the forests to the value of Rupees 300, and for having illicitly encroached upon portions of forest ground for cultivation purposes. Of this number, only fifteen persons were punished—eleven for one, and four for two months' rigorous imprisonment each, respectively.

The health of the Forest Establishment has been very indifferent, and the Forest Overseer says that he has been completely bed-ridden for a time from attacks of fever and diarrhœa. He assigns this as his excuse for omitting to furnish this office with data for the preparation of this report. I regret the delay that has unavoidably resulted therefrom.

The subjects in paragraphs 3 and 5 of the Overseer's report will receive early attention.

The report is not as complete as I could wish in consequence of the non-receipt from the Overseer of information on certain points ; but I have thought it proper not to delay its submission on that account, in consequence of his illness, as it is already over due.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) R. DAVIDSON,
Acting Collector,
and *Conservator of Forests, Ganjam.*

Enclosure 1.

Forest Office,
Russelcondah, 16*th August* 1874.

From

Mr. T. G. FREEMAN MacCALLY,
Overseer of Forests, Gumsur,

To

R. DAVIDSON, Esq.,
Collector and Conservator of Forests, Gumsur,
Ganjam District.

Sir,—I have the honor to forward my Annual Report and Accounts for the official year 1873-74.

2. The various forests under my charge have been duly visited, excepting those on the frontiers which from ill-health I was disabled, but I trust to do so as soon as I am able to undergo the exposure to those malarious localities.

3. Their conservancy has been attended to consistent with the means at my disposal, which is quite inadequate ; from the scattered state of these forests, interspersed as they are by numerous villages and their wet and dry cultivation (which have been originally formed from forest clearances), the ryots of each village depend on them for their wants in domestic, agricultural and building purposes free of taxation for unreserved wood, as well as all the villages of Gumsur and Surada, where there is little or no forest within their limits. Where encroachments in the forest have been discovered from new clearances aside cultivation, it has been reported and dealt with magisterially ; also parties who have usurped lands in the interior of, and destroying forests and bringing them under cultivation illicitly have also been dealt with accordingly, but since the receipt of Proceedings of Government, dated 20th December 1873, No. 2,052, a number of parties who have committed themselves by mischief or theft in forest matters have been reported, and as soon as the Conservator's permission is given to do so, they will be prosecuted. Direct prosecutions have ceased since the above order, and the parties who have committed themselves are under the impression from the references made that they will escape punishment.

4. All the produce of the new grounds illicitly brought under cultivation by the destruction of forest has been treated agreeably to Revenue Circular, No. 20, under "Sevoy Jama."

5. A number of forest lands which had been given on Kowle Bunjurs before the conservancy was established, and even after it without the knowledge of this department are being examined by me wherever it was possible within forest tracts, and I regret to state that I have observed several that have exceeded their limits doubly and trebly in quantity to that allowed to the parties in their puttas, by which there has been much destruction of forest, which I have brought to the notice of the Tahsildar of Gumsur for inquiry. The Curnams and Carjees or village authorities render little assistance in bringing these clearances to notice, notwithstanding the warning issued by the Collector on the subject, which originated from my representation when I brought the Kookoolbah, &c., Bunjers to his notice on 20th September 1869, and alluded to it in my Annual Report for 1869-70.

6. All the applications during the year for lands within the forests required for cultivation "on Kowle" were referred to this department by the Tahsildar of Gumsur. They were one by one duly examined by me and reported upon when returning them, explaining the quantity of the trees on the various grounds, and if they could, or not, be granted for cultivation. Many of these grounds I found to have been usurped by the applicants who had destroyed the trees on them, and brought portions under cultivation illicitly before they had ever made their applications. The Tahsildar of Gumsur was informed of it, and the produce of such lands have been treated under Revenue Circular, No. 20, and the parties dealt with magisterially.

7. The cattle of this department remained as it was in last year—three buffaloes. I did not consider it prudent to purchase any to replace the five that had died, the cattle in this Range

being not so healthy as desirable, since the prevalence of the cattle disease of last year. These will be replaced when good and healthy animals are procurable.

8. My small experimental Teak Plantation, which was only 150 feet square when it was first begun (and the first four teak trees introduced in the forests of Gumsur by me planted in it on the 29th November 1869), has been gradually increased and occupies a space now of 2½ acres. These four trees are now in dimensions as follows :—

1 Forty feet high by one foot girt at bottom.
1 Twenty-five feet high by ten inches girt at bottom.
2 Twenty do. by nine do. do.

The 156 since planted are below these dimensions to a few inches from the ground. This ground is well adapted for the growing of teak and mango, the other plants that I have added to it are very poor in appearance. Many seedlings were destroyed by white-ants, some have been replaced. During the hot season difficulty is experienced from the want of water, and the Malee, or man in charge, has to go the distance of a mile for it, when the little pit with water, which is in the plantation, is dried up ; this generally occurs in the hot weather. A well sunk in the plantation is desirable.

9. The following are the trees in the plantation :—

	No.
Tectona grandis, Teak	160
Acacia Arabica	7
Poinciana regia	2
Sapindus emarginatus	10
Sumach	8
Inga dulcis	3
Mangifera Indica	31
Acacia Ashoka	33
Artocarpus integrifolia	15
Cordia Myxa	1
Bignonia Suberosa	10
Total ...	280

10. 503 cart-loads of unreserved kinds of wood, equivalent to 10,060 cubic feet, were permitted to be felled and removed from the forests, free of taxation, for the rebuilding of sixty-three ryots' houses burnt during the year, the seigniorage of which, if it had been realised, would amount to Rupees 251-8-0.

11. 137,832 cart-loads of firewood for fuel have been estimated as removed from the forests during the year by the whole of the ryots of Gumsur and Surada equivalent to 61,532 tons, free of taxation, the seigniorage value of which, if realized, would amount to Rupees 21,536-4-0. For agricultural purposes the unreserved kinds of wood used by ryots free, has been estimated at 11,486 cart-loads = 229,720 cubic feet, seigniorage value, if realized, would amount to Rupees 5,743.

12. 159 cart-loads of reserved wood = 2,526·985 cubic feet were felled and removed by this department during the year which was consistent with the demands anticipated.

13. Forty-three cart-loads of reserved wood = 597·962 cubic feet were sold by this department to private individuals for Rupees 152-1-7.

14. The Department of Public Works, No. 3 Range, was supplied with 120 logs of timber = 2,049·830 cubic feet to the value of Rupees 512-6-11.

15. 1,828 cart-loads of reserved and unreserved kinds of wood = 36,560 cubic feet were felled and removed from the forests on the Voucher and License system, the seigniorage of which amounts to Rupees 2,094-8-0, and 701 cart-loads of firewood = 313 tons, at Rupees 109-8-6, making a total of collections of Rupees 2,204-0-6.

16. During the rafting season advantage having been taken of the first freshes the rafts that had been grounded were floated down the rivers, the license holders consequently took out very few licenses for rafts fearing disappointment, as the freshes during the past monsoon have been very low, there has been therefore a falling off of seigniorage on this account.

17. Having in my last report alluded to the Zemindars of Ronaba and Korada of Gumsur Taluq and their agents carrying on extensive traffic in wood from their forests, which has to go through ours ; their under-rating the seigniorage which is levied in Government forests has drawn away most of our customers who have preferred the Zemindari from the cheapness of seigniorage ; the wood also sold by them under-rates the sales of this department. The Zemindari traffic has, I regret to say, resulted in our collections being less, and has affected the Revenue of this Department, the sum of Rupees 161-6-0 being against it for this year. I need only add to what I have already said in my last report, that the Zemindari forests are being fast denuded of their best timber, no conservancy means being adopted for their preservation, and ere long, I hope, our license holders will fall back on one forests for their wood. The strictest supervision being necessary for the protection of our forests on the Zemindari frontiers, I preferred my request for sanction to a few watchmen or extra peons being employed, but it was not complied with.

18. Twenty-five persons were prosecuted under mischief for felling, burning, and destroying trees of the reserved and unreserved kinds in the forests to the value of Rupees 300, usurping the grounds and bringing them under cultivation illicitly ; of these only fifteen were punished by the Tahsildar of Gumsur as follows :—

Four persons to two months' rigorous imprisonment.
Eleven ,, to one month's ,, ,,

19. The health of my establishment has been very indifferent this year, also several of my peons have been occasionally laid up from fever, dysentery, and spleen, and I have never suffered so severely from the former disease and diarrhœa and other ailments, as of late, from which I have been completely bed-ridden, resulting in my constitution being much affected, and occasioned, I regret to say, much delay in the transmission of these papers, which would never have occurred, had not protracted ill-health since the close of the official year been an obstacle.

1 Set of	9	Statements.
1 ,, of	5	do. A, B, C, D, and E in duplicate with eight Department Public Works vouchers attached (original.)
1 ,, of	5	do. A, B, C, D, E.
Total	19	

20. I append herewith nineteen Statements with eight vouchers attached as per margin.

21. The total amount of receipts has been Rupees 2,363-5-1, and the value of timber supplied the Department of Public Works, No. 3 Range, Rupees 512-6-11, makes total of revenue Rupees 2,875-12-0, deducting this from the expenditure of Rupees 3,037-2-0, leaves a balance against the department of Rupees 161-6-0. The value of timber on hand is Rupees 860-11-3, from which amount Rupees 161-6-0 against the department being deducted, leaves a balance of Financial Results of Rupees 699-5-3 as per statement attached.

FINANCIAL RESULTS.

Receipts.

	Rs.	A.	P.			
Sale of timber at depôts	152	1	7			
Sale of timber removed by purchasers	2,204	0	6			
Sale of confiscated timber	7	3	0			
				2,363	5	1
Value of timber supplied to Department of Public Works...				512	6	11
Total, Receipts ...				2,875	12	0

Expenditure.

Conservancy and Working	463	9	0		
Establishment	2,559	6	0		
Office Contingencies	14	3	0		
				3,037	2	0
Balance against the Department ...				161	6	0
Value of timber depôts on the 31st March 1874				860	11	3
Deduct sum against the department				161	6	0
Balance, Financial Results...				699	5	3

(Signed) T. G. F. MACCALLY,
Overseer of Forests, Gumsur.

No. 1,996.

From

R. DAVIDSON, Esq.,
Acting Collector and Conservator of Forests, Ganjam,

To

J. GROSE, Esq.,
Secretary to the Board of Revenue, Madras.

Camp Berhampore, 2*nd October* 1874.

Sir,—Adverting to paragraph 4 of the Proceedings of the Board of Revenue, Forest No. 4, dated the 27th January last, and my report on the administration of Forests, No. 1,945, dated the 26th ultimo, I have the honor to state, for the information of the Board, that the Forest Overseer expresses his inability to give the correct area of the reserved forests as they have not yet been surveyed, but that he estimates them to contain an approximate superficial area of 600 miles.

2. With regard to "the number or value of the timber or other valuable trees contained in them" the Overseer says that he is not aware of any method of estimating their number except by counting them, which is quite impossible.

3. A copy of his letter on the subject, dated the 27th ultimo, No. 50, is herewith sent.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) R. DAVIDSON,
Acting Collector and Conservator.

Enclosure 1.

No. 50.

From

Mr. T. G. F. MacCALLY,
Overseer of Forests, G.

To

The Deputy Collector in charge of Treasury, Chetterpore.

Forest Office,
Russelkondah, 27*th September* 1874.

Sir,—In reply to your memorandum of the 24th instant, No. 2,078, with reference to the following question therein alluded to, (1), Area in acres of the portion of the reserved forests, I would beg to state that the Gumsur Forests have never been surveyed and they are so interspersed with villages and their cultivation—which have been formed from forest clearances—that it will be necessary for it to be done before this information can be accurately given. The taluq has never been surveyed by "Revenue;" the Revenue and Demarcation Survey Departments have recently entered this taluq and only made a beginning.

2. I have estimated the forests of Gumsur approximately to be of a superficial area of 600 miles, as stated in my annual report for 1869-70, the felling of timber of large girt, *wherever found*, being departmentally, while that below five-feet girt being permitted to be felled under the voucher-and-license system.

3. With reference to the second question, (2), Estimated number and value of timber and other valuable trees contained in them, I would beg to state that these are natural forests and self-propagated from seed; that I do not understand any method of estimating their number but by counting them, which is an impossibility. If these were artificial forests and originally registered their number could have been ascertained.

4. Under these circumstances, I was disabled to give the information required and therefore could not include it in my report.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) T. G. F. MacCALLY,
Overseer of Forests, Gumsur.

No. 719.

From

J. F. SNAITH, Esq.,
Acting Principal Assistant Collector,
in charge of the District,

To

J. GROSE, Esq.,
Secretary to the Board of Revenue, Madras.

Vizagapatam, 12*th May* 1874.

Sir,—In accordance with Revenue Board's official memorandum, dated the 20th February, Forest No. 22-222, I have the honor to report on the administration of the Golugonda Forest for the year 1873-74.

2. The amount realized during the past year by the sale of timber and bamboos was Rupees 324-13-0 against Rupees 40-3-0 in 1872-73. The increase is due to the more stringent enforcement of the conservancy rules and more careful supervision of the forest peons.

3. The total expenditure for the year on salaries and contingencies was Rupees 488-3-6, a considerable saving having been effected by the dismissal of the Overseer in August last.

4. Twelve criminal prosecutions were undertaken during the year and in seven cases convictions were obtained.

5. The people complain that the rates levied for timber, *etc.*, not required for domestic purposes are too high, but they do not seem to be excessive.

6. The system of granting free passes to ryots does not produce satisfactory results as the ryots frequently trade with the wood so obtained. Careful supervision will, however, do much to remedy the evil.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) J. F. SNAITH,
Acting Principal Assistant Collector,
in charge of the District.

No. 226.

From

W. D. HORSLEY, Esq.,
Collector of Cuddapah.

To

J. GROSE, Esq.,
Secretary to the Board of Revenue, Madras.

Cuddapah Collector's Office,
on Circuit at Kanalmudgu,
30*th September* 1874.

Sir,—I have the honor to submit my report* of the administration of the Forests in this District for 1873-74.

* With statements.

2. No portions of the forests are reserved except for railway fuel. To reserve forests for timber at a distance from the railway is unnecessary, because the demand is little more than local.

In the Pullampett taluq, through which the railway passes, it will not be possible to reserve forests for timber as well as for fuel. It is as much as I can do to obtain hill tracts for the latter purpose, and I could not reserve for timber in that taluq without interfering with ryots' privileges. Patches of forest where red-sanders is known to thrive may be enclosed with advantage to save the saplings from destruction by the shepherds.

3. At Ballapalle there are two tracts of forests set aside as fuel reserves. No. 2 is still unfenced, as money was not available for the purpose till too late in the year. No. 1 is an old reserve, and the expenditure incurred consists of the monthly salaries of two watchmen. The same is to be said of the Salakuntachenu reserve. The Codoor hill reserve has been partly fenced, but the sum, Rupees 500, advanced to the Contractor does not appear in the year's accounts, as the work was not completed at the close of the official year. The Yerraguntakota reserve was also incompletely fenced at the close of the year, and, similarly, Rupees 1,500 advanced to the Contractor do not appear as a charge against the reserve. The only expenditure has been the salary of watchmen. These last two reserves are those I alluded to in my last year's report as to be taken in hand when certain difficulties as to roads and boundaries had been overcome. In another portion of forest not reserved it has been necessary to employ watchmen to prevent a neighbouring Shrotriemdar from felling in the Government Forests. As reserves the Yerraguntakota and Codoor hill tracts may be said to be complete, and thus Acres 7,000 have been added to the reserves, making the total estimated extent in this district Acres 11,133. I have made arrangements for adding large tracts of hill forest to the reserved area.

4. No fuel or timber have been taken from the reserves, nor will they be taken so long as the open forests can supply the railway with fuel. Consequently there are no receipts while the charges exclusive of the cost of fencing have amounted to Rupees 518 including the salary of watchmen on the Shrotriemdar's boundary.

5. The plantations have not increased in number or in extent since last year. It is very much to be regretted that such useless and expensive works were ever commenced, or, if undertaken, that they were not properly started. If the ground had been ploughed, manured, wells dug, and the trees transplanted from nurseries into large pits, there would have been a better show now for the money that has beeen spent. But even then the plantations as fuel reserves would be failures financially.

6. The red-sander experimental plantation at Codoor is doing very well. The soil is good, and the Deputy Conservator, whose headquarters are at Codoor, has been able to give more of his attention to this, than to the other plantations. I never could understand the object with which this plantation was formed. Every one knows that red-sanders grows in the Pullampett taluq, and what was the experiment that was to be tried by means of the Codoor plantation is not apparent.

7. The remaining four plantations are for the purposes of fuel. That at Upparapalle appears to have thrived the best. The Pullampett plantation has, I think, been carelessly worked, and the progress made is less than it should have been. There is an improvement in parts of the Reddipalle plantation, but on the whole this work is a failure owing to the poorness of the soil. The Kamalapur plantation I have been unable to visit this year. There have been naturally no receipts from any of the plantations. The experimental work at Codoor has cost Rupees 441-12-0. The fuel plantations have cost Rupees 2,648-13-6. The charges this year have been smaller than those of last year by Rupees 6,289-13-8. These figures will not tally with those in the statements, because for some mysterious reason connected with accounts the salaries of the establishment employed on the Kamalapur plantation is debited to one head of account, Expenditure B, while the salaries of the servants on the other plantations are debited to Working Charges in Statement A. This decrease in expenditure is owing to reduction of establishment. It was not known till late in the year what would be the allotment for working charges, and the reduction was made fearing that the grant would be exceeded. The smaller the expenditure on these useless plantations the better. I hope to be able to reduce the charges still further. When the open spaces in the plantations have been ploughed and sown broadcast it will only be necessary to keep two men on each plantation to watch and to keep up the fences. No such reduction can be made on the experimental plantation.

8. The open forests are worked on the license and voucher system. The receipts amount to Rupees 50,329-9-2, a smaller sum than that collected in the year before by Rupees 516. The decrease is not large, but it will increase yearly until the Shrotriemdars have denuded their forests, when the demand will again be made on the Government Forests. The loss of revenue is not so much to be regretted, but it is a pity that forests, wherever they may be, and to whomsoever they may belong, are being injudiciously felled, so that they must in a few years disappear altogether. The receipts include seigniorage collected on engine wood. The expenditure is included in the working charges of the district.

9. The Railway Company pay Rupee 1 for every 1,000 lbs. of wood received from the Contractors. Tons 17,430 of wood have been received by the Company who have paid seigniorage amounting to Rupees 39,043, a sum in excess of last year's receipts by Rupees 2,102. Thus the Railway continues to eat up the forests to an extent which quite puts into the shade all the much talked-of havoc committed by the people of the country. Out of Rupees 50,300 receipts on account of seigniorage, Rupees 39,000 have been paid by the Railway Company, while only Rupees 14,000 have been paid by the people generally. The increase in the receipts on account of engine wood is ascribed to the consumption of fuel by machinery connected with the building of the new Cheyair Bridge.

10. The sale of wood stored in depôts has this year fallen off. The demand for red-wood has been slight. I do not know whether special circumstances connected with trade will account partly for this. There is, however, no doubt that owners of private forests such as Agraharamdars and others are underselling the Government, and are drawing customers from the depôts. The sales of depôt wood this year realized but Rupees 1,819, while during the previous year the receipts were Rupees 21,884. Of this last sum, Rupees 17,920 were realized by the sales of red wood alone. It is, therefore, quite clear that the decline in the demand for red-wood this year has caused the decrease of Rupees 20,064 in the receipts. The collection of red-wood stumps and roots in the depôts will cease until a demand arises. The cost of collecting and carting wood to the depôts amounted to Rupees 9,857, including seigniorage. The value of the wood remaining in the depôts at the end of the year was Rupees 12,018.

Vide Statement D.

11. The value of wood taken by the ryots on free passes was Rupees 3,036. This sum does not represent the value of all the wood taken, because only bandy-loads and not head-loads of wood are taken into account, and because the people do not always apply for passes but take the wood and risk detection. The Deputy Conservator estimates the proper value at double what the passes issued show. Even if it were more than double the item is a small one, and the drain on the forests is almost nothing compared with what the Railway takes. The money realized by confiscations amounts to Rupees 463.

12. There have been only twenty-one criminal prosecutions. Convictions were obtained in sixteen cases. This shows that the Forest Rules have not been harshly or unnecessarily worked. I can mention no instance in which the provisions of G.O., No. 2052, dated December 20th, 1873, have caused a miscarriage of justice, but there is no doubt, as the Deputy Conservator says, that cases may arise in which offenders may escape punishment in consequence of that order. I do not myself see the necessity of the order.

13. The total revenue from the forests amounted to Rupees 52,657. The total expenditure was Rupees 20,890, leaving a net profit to Government of Rupees 31,767, which, when added to the value* of wood remaining in the depôts, amounts to Rupees 43,785. The receipts were

*Rupees 12,018.—*Vide* Statement D.

estimated in the budget at Rupees 55,500. Considering the falling off in the red-sander wood sales, the decrease in the actuals is unimportant. The charges as sanctioned by Government amounted to Rupees 9,694 more than those actually incurred. This decrease is accounted for by a smaller expenditure on the plantations and by the economy enforced at the commencement of the year when it was not known what allotments might be made for expenditure. The total decrease of revenue, as compared with last year's receipts, is due to the falling off in the wood-depôt sales, and but for a reduction of expenditure the decrease would have been large.

14. Fever has as usual been more or less prevalent in the forests. There have been three deaths among the forest servants, but I think on the whole fever has not been so severe as in former years.

15. Enclosed is the Deputy-Conservator's report.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) W. D. HORSLEY,
Collector.

ENCLOSURE No. 1.

No. 24.

DEPUTY CONSERVATOR'S OFFICE,
CAMP CODOOR, *29th April* 1874.

From

H. H. YARDE, ESQ.,
Deputy Conservator of Forests, Cuddapah District.

To

W. D. HORSLEY, ESQ.,
Collector and Conservator of Forests, Cuddapah.

SIR,—I have the honor to submit you the Annual Administration Report of my Range for the official year 1873-74, together with the necessary accompaniments.

SECTION I.

2. (*b.*) *Inspection Tours of Range Officer.*—During the year under review, I have continued in charge of the Range, and during the period, my visits and the number of days I was out of headquarters were as follow :—I made 109 visits ranging over 178 days to the following places :—Salakuntachenu, Ballapalle, and Yerraguntakota railway fuel reserves. Kamalapur, Reddipalle, Pullampett, and Upparapalle in the Cuddapah, and Ghooty railway fuel plantation in the Bellary District. Boodooguntapulli, Punnuskonale, Yellalavarekundrikey, Vacateemudgoo, Nukunapulli, Shettiguntah, Nagavaram, and Strinivassapuram Kothapulli Agraharam hills and forests. Rajumpett tannah, Buthunguddah, Vobulvarepulli, Gathalla, and Vurdiahgarepulli villages for periodical auction of confiscated timbers. Ten days was occupied in my proceeding to Nellore and back to give evidence in the suit filed by the Venkatagherri, against the Kalaistry Rajah, for some portion of the hill forests. In November and December 1873 I was sick and convalescent for twenty-two days from dysentery and fever, and the remaining 151 days were spent at headquarters, which time was occupied in office routine work, preparation of administration report and annual accounts and returns, monthly accounts and returns, periodical auctions at depôts, &c., &c., besides being engaged with the Revenue Settlement Officers regarding the disputes of boundaries of Shrotriemdars' lands, and jungles, and our forests, and the very important work of selecting plots for railway fuel reserves in the Pullampett taluq. During these travels and visits, I could not but notice the insufficiency of our establishment as a Forest Police to watch against illicit and clandestine felling, the outlets from forests being too numerous, and the tannahs situated so far apart.

SECTION II.

RESERVES.

3. *A. Reserved Forests.*—None. Only that in all the forests the felling of teak is strictly prohibited, while the red-sander posts and its roots and stumps are felled and stored departmentally in our depôts, and sold periodically by auction. Previously (some years back) licenses used to be issued for the dye-wood and posts.

B. FUEL RESERVES.

4. *Ballapalle Railway Fuel, No.* I.—From 1st April 1873 to 31st March 1874 two watchmen have been employed at the rate of Rupees 6 each per mensem, making the charge on this reserve for the period Rupees 144, and is the same it cost in 1872-73.

5. *Ballapalle Railway Fuel, No.* II.—No expenditure has been incurred on this reserve during the period for which this report has reference to. No men employed, and the plot is as yet unfenced. Money was not available till too late in the year, and consequently had to lapse Cost for 1872-73, nil.

6. *Sallakuntachenu Railway Fuel.*—Rupees 216 were spent during the year by the employment of two watchmen and a gardener at Rupees 6. each per mensem, being the same as it cost in 1872-73.

7. *Codoor Hill Railway Fuel.*—No cost as yet. No men employed. Fencing work in progress, for which an advance of Rupees 500 has been made, but does not find a place in this account, the work not being completed and accounted for in the past year's bills. In 1872-73 nothing was spent on this reserve.

8. *Yerraguntakota Railway Fuel.*—From the 1st September 1873 to 31st March 1874, Rupees 84 was the expenditure on account of the two watchmen employed at Rupees 6 each per mensem. Rupees 1,500 is an advance to Contr[illegible]r for fencing against this reserve ; from the non-completion of the work, a bill for that amount has not been submitted, nor does it appear in this year's account. Cost for 1872-73, nil.

9. *Strinivassapuram Kothapulli Agraharam Jungles.*—This is a Shrotriemdar's jungles adjoining our forests, and as they are working them, two watchmen were engaged to prevent the wood-cutters entering ours for illicit felling, costing Rupees 144 for the year. Cost for 1872-73, Rupees 144.

10. The cost for travelling by rail to visit these railway fuel plots for the past year has been Rupees 229-12-0, being Rupees 102 in 1872-73, and the total cost for all the above, including the watching of the last-mentioned Shrotriemdar's jungles, Rupees 817-12-0 as per Statement A., "Expenditure A, Conservancy and Working ; VI. (*a.*) Reserve Tract, Railway Fuel," while the total expenditure in 1872-73 was Rupees 606. The excess in total expenditure during the year 1873-74 is Rupees 211-12-0 caused chiefly by my more frequent travels, by rail, to visit these railway fuel plots, with an addition of Rupees 84 on account of the employment of two watchmen on the Yerraguntakota railway fuel reserve during the year.

11. Having curtailed the expenditure on all the railway fuel plantations in this and the Bellary District and other heads of the working charges, and anticipating a saving of Rupees 6,207-7-10, on my application sanction was accorded in your letter, No. 7, dated 20th January 1874, for utilizing that amount on the railway fuel reserves, and accordingly Rupees 1,500 were advanced to the Contractor on the Yerraguntakota, and Rupees 500 on the Codoor Hill railway fuel reserve. The end of the official year following so closely on, the work could not be completed and bills submitted. It would not have been judicious to have planted the bank with young aloes when there was no rain, as they would have died away from want of moisture. As soon as

the early rains commence that work will be carried out, measurement made, and completion bill forwarded for the outstanding advance of Rupees 2,000, thus Rupees 4,207-7-10 of the savings, sanctioned to be spent on reserves, have lapsed. I must reiterate my previous assertions with reference to the improvement of the jungles within the enclosures of our railway fuel reserves, chiefly attributable to prevention of fires and trespasses of all kinds. The plots have become dense by the undergrowth and saplings being saved from getting scorched and burnt. Nurseries are being maintained on the finished reserves, and young plants put out from them in open spaces and where the trees are scant; and, where practicable, I would advise ploughing and broadcast sowing of seeds, and left to their own resources for springing up, as do the other plants of the forests in their natural way of germination.

12. The form or statement called for in Board's Proceedings, No. 133, dated 27th January 1874, paragraph 18, is herewith appended.

C. Plantations.

13. *Codoor Red-Sander Experimental Plantation.*—On this plantation, to decrease the distances of the trees young plants have been put in between each two, in pits and channels. Red-sander seeds have been collected, nursery-beds prepared, and sown with them together with different other species. The general upkeep of the nursery was attended to. The whole of the plantation weeded and cleared of overgrowth of useless plants, and the younger plants watered throughout the hot months when they needed it very much. Of the 2,438 plants brought on the list of established trees, the following are the numbers and species. Pterocarpus santalinus 1,000, Albizzia Lebbek 300, Tectona grandis 200, Cassia florida 500, and Melia Azadirachta 438, thus increasing them to 21,438, which computed at the total cost will give us nearly 0-3-10 per tree, or 4 per Rupee.

	Rs.	A.	P.
Plantation working charges	273	12	0
Hired establishment	168	0	0
Total ...	441	12	0

14. The expenses incurred on this plantation during the year 1872-73 were Rupees 444-9-2, or Rupees 2-13-2 more than the present. There has not been much change in the system on this plantation owing to its being an experimental one, accounting for the very slight difference in expenditure.

15. *Upparapalle Railway Fuel.*—In all 12,469 plants were supplied from the nursery, *viz.*, 3,729 freshly transplanted out, and 8,740 casualties replaced. Of the former, the following species, 2,800 Albizzia Lebbek, 55 Pterocarpus marsupium, 400 Terminalia glabra, and 474 Mangifera Indica, and of the latter 8,700 Albizzia Lebbek, and 40 Pterocarpus marsupium. The casualties that occurred 1,954, *viz.*, 621 Albizzia Lebbek, 652 Melia Azadirachta, 256 Acacia Arabica, 12 Muthy, 28 Pterocarpus marsupium, 325 Cassia florida, and 60 Casuarina equestifolia. Forty-two nursery-beds prepared and sown with seed, as follows: 9 Melia Azadirachta, 14 Pterocarpus santalinus, 7 Mangifera Indica, 9 Albizzia Lebbek, 2 Adinanthera Pavonina, and one Mahogany: 1,738 pits excavated, 3 bags Pterocarpus santalinus, and 33 measures Acacia amara seeds collected, 86,953 plants watered, 60 nursery-beds weeded, 3,808 plants weeded and cleared around, 187 channels, or 1,194½ chains channelling cleared and weeded, 59 channels or 191 chains fresh trenches sown with Albizzia Lebbek seeds, 150 failed channels of the Albizzia Lebbek sown with Albizzia Lebbek and Tamarindus Indica seeds, the former 56 and the latter 94; 28 failed channels of the Eugenia jambolana sown with 20 Tamarindus Indica and 8 Melia Azadirachta, 980 pits sown with the seeds of Tamarindus Indica, being 440 where the Melia Azadirachta, and 540 where the Albizzia Lebbek failed. The general upkeep of the nursery by occasional watering at times, and daily when the weather was adverse, together with the weeding and clearing of the beds, were looked to—

	Rs.	A.	P.
Plantation working charges	484	8	0
Hired establishment	156	0	0
Total ...	640	8	0

16. The expenditure on this has been Rupees 117-1-0 less than last year.

17. *Reddipalle Railway Fuel.*—21,397 plants weeded and cleared around, 44,097 plants watered, 28 chains aloe fencing repaired, 11 acres land cleared of brushwood for ploughing and sowing Acacia Arabica seeds broadcast, 297 chains channelling cleared and weeded, 10 chains planted with thorn fence where it was impracticable to make the aloe fence grow, 3,575 plants put out from the nursery, *viz.*, 580 Melia Azadirachta, 2,870 Albizzia Lebbek, and 125 Cassia florida; 1,010 pits excavated. Casualties 1,745 in the following species: Casuarina equestifolia 201, Cassia florida 50, Acacia Arabica 472, Albizzia Lebbek 1,020, 1 Mahogany, and 1 Artocarpus integrifolia. Thirty-five nursery-beds prepared and sown with seed, *viz.*, 34 with Albizzia Lebbek and 1 Mahogany; 670 chains fresh channelling sown with Albizzia Lebbek, Tamarindus Indica, and Acacia Arabica seeds; 40 channels or 600 chains old channelling sown with the Albizzia Lebbek, Tamarindus Indica, and Acacia Arabica seeds in which they failed to germinate previously, and watering and general upkeep of the nursery:—

	Rs.	A.	P.
Plantation working charges	494	7	6
Hired establishment	156	0	0
Total ...	650	7	6

18. This year's expenditure is less by Rupees 1,878-14-0 than 1872-73.

19. *Pullampett Railway Fuel.*—Two by chain land cleared for ploughing and broadcast sowing; 19 channels or 499 chains of channelling cleared and weeded, 2,700 plants weeded around, 1,303 pits excavated, 120 measures Albizzia Lebbek seeds collected, 37 nursery-beds prepared and sown with seed, *viz.*, 1 Mahogany, 6 Muthy, and 30 Albizzia Lebbek, 5,697 plants were supplied from the nursery though 6,587 was the number transplanted out, the remainder 890 were taken from the channels where they were growing too closely together, *i.e.*, thinning, *viz.*, 1,677 Melia Azadirachta, in all 1,534 from nursery and 143 from channels. Cassia florida 861, 112 from channels and 749 from nursery, 2,285 Albizzia Lebbek from nursery, 674 Eugenia jambolana, 635 from channels and 39 from nursery, 26 Pterocarpus santalinus from nursery, 1,064 of the 6,587 transplanted were the casualties replaced in the following kinds: Casuarina equestifolia 1,064, Melia Azadirachta 200, Cassia florida 175, and Albizzia Lebbek 634. Plants watered 44,788. The number of casualties that occurred during this period was 1,915 as follows: 118 Cassia florida, 20 Casuarina equestifolia, 870 Albizzia Lebbek, 610 Melia Azadirachta, 227 Acacia Arabica, and 70 Eugenia jambolana, 7 channels or 63 chains failed channelling sown with 45 Eugenia jambolana, 9 Acacia Arabica, and 9 Albizzia Lebbek seeds; 16 channels or 149 chains fresh channelling sown with 24 Eugenia jambolana, 24 Albizzia Lebbek, 16 Acacia amara, 8 Cassia florida, 44 Tamarindus Indica, 22 Acacia amara, and 11 Acacia Arabica. The general upkeep, or usual attention to the nursery was not overlooked:—

	Rs.	A.	P.
Plantation working charges	499	5	0
Hired establishment	155	8	0
Total ...	654	13	0

20. This year's expenditure has been Rupees 3,560-8-0 below that of 1872-73.

21. *Kamalapur Railway Fuel.*—58,210 plants weeded and cleared around, six wells cleared spaded, and deepened, 155 nursery-beds prepared and sown with seed, *viz.*, 149 Albizzia Lebbek and 6 Casuarina equestifolia, 6 chains aloe fencing repaired, 400 Acacia Arabica seeds collected; 6,000 pits excavated; 8,300 plants put out from the nursery, 3,800 Albizzia Lebbek and 4,500 Casuarina equestifolia; 21,000 pits sown with seeds, 12,000 Albizzia Lebbek, and 9,000 Eugenia jambolana; 780 Casuarina equestifolia trees pruned; 16,760 casualties replaced, 260 Casuarina equestifolia, and 16,500 Albizzia Lebbek, and nurseries kept up by watering and weeding :—

	RS.	A.	P.
Plantation working charges	283	1	0
Sanctioned establishment...	420	0	0
Total ...	703	1	0

22. Expenditure for 1872-73 was Rupees 907-14-6, and is Rupees 204-13-6 above that of 1873-74.

23. The total expenditure on all the plantations has been, as per Statement A, Expenditure A., Conservancy and Working, VI. Plantations, Rupees 2,670-9-6, not including the Rupees 420 against the last plantation "sanctioned establishment," which is incorporated in the amount of Rupees 6,588 exhibited in the above-mentioned Statement, Expenditure B. Establishment, I. Salaries, *viz.*, one head gardener at Rupees 10, three under-gardeners at Rupees 6 each, and one peon at Rupees 7, making a total of Rupees 35 per mensem.

24. In 1872-73, not including the "sanctioned establishment" on the Kamalapur Plantation, the total expenditure on all was Rupees 8,518-11-2, while 1873-74 has been Rupees 2,670-9-6, or Rupees 5,848-1-8 less than 1872-73.

25. In April 1873, though there was only a small drizzling shower of rain, yet it came when it was much needed; it was not quite general. Some plantations were fortunate, while others did not get this fall. In May there being no rain much was the disappointment, and the plants commenced to look very bad from want of moisture. In the early part of June the heat was very excessive, and most part of the casualties occurred during this time; but towards the end of the month a couple of drizzling showers came to the rescue, and relieved me of much anxiety as I expected I would have had to report very unsatisfactorily on the health of the plants, especially the younger, though it did not tend to entirely put a stop to the plants dying away. In July there being no rain, casuals occurred to some extent, and to prevent further losses watering had to be taken on hand. August may be said to be the beginning of the planting season, and having had some few downpours of rain, advantage was taken of them; some transplanting work and replacing of casualties from the nurseries was got through sowing of seeds in channels that failed to germinate, and some fresh channels; besides putting out of plants in open spaces in channels and in lieu of those that died from last year's flooding; broadcast sowing could not be commenced from want of further rains during the month. During September as was anticipated the rains came and were heavier in the southern part of the Pullampett taluq, and the plantations there benefited more, however much good was done to all as the plants and trees commenced to look green and healthy. Copious showers of rain fell during the months of October and November, and much was done in the planting line as far as was permitted having in view the curtailment of expenditure under all heads. With the exception of a drizzle we have had no rain in December, though, as must be expected at this time of the year, the plants looked healthy on account of the heavy falling dew at nights, and cool days. In the months of January, February, and March 1874, the mangoe showers entirely failed us, consequently the want of water was and is being much felt, and the younger plants have to be supported by frequent watering to prevent unusual casualties being reported, the difficulty being increased by the limited establishment, water being scarce, and the heat increasing daily, attended with high dry winds. The established plants are increasing in number as well as size and their appearance satisfactory on the whole, only the young plants suffer greatly. In August and September a good deal more planting and sowing work could have been done only for not knowing the sanctioned Budget Estimate for the year, till January 1874, though an advance only was placed at my disposal about the middle of July 1873, consequently I was almost in the same predicament during October and November. The establishment in consequence was curtailed for fear of exceeding the sum that would have been granted. Even in 1872-73, I was placed, similarly, under clenched circumstances, and a whole planting season irretrievably lost.

SECTION III.

26. *Forests worked under License and Voucher System.*—This system is in force throughout the district. None of the forests are strictly reserved from felling operations, with the exception of the selected plots for railway fuel reserves and which have not been as yet worked, and so they have not commenced to pay. A cost is incurred in maintaining them, taken from the working charges of the district; and I have explained in my paragraph 3, under "A., Reserved Forests," the description and nature of the departmental working.

27. The realization by the above system has been Rupees 50,329-9-2, as per Statement A., Receipts, heading I and VI. for 1873-74. That for 1872-73 Rupees 50,846-7-6, being Rupees 516-14-4 more than the present year. This includes the removal by wood-cutters of timbers, firewood, bamboos, &c., on licenses, and engine firewood taken by the Railway Company. In another section will be shown the quantity taken exclusively by the Railway.

28. *Timbers supplied to Public Works Department.*—No sales have taken place during the year to this department, as per Statement E1.

29. *Engine Firewood.*—To the extent of 17,430 tons $60\frac{3}{12}$ lbs. was taken during 1873-74, realizing Rupees 39,043-4-2 at Rupee 1 per 1,000 lbs.; while in 1872-73, 16,491 tons $566\frac{4}{8}$ lbs., valued at Rupees 36,940-6-6, was the revenue derived from this source, being 938 tons $1,734\frac{4}{8}$ lbs., or Rupees 2,102-13-8 in excess of 1872-73, as per Statement E. last column.

30. The demand during this year must have been great, and hence a larger quantity accepted from the Contractor by the Company, the system being that the latter deducts Rupee 1 on every 1,000 lbs. supplied by the former, and pays into the Cuddapah and Pullampett Treasuries on account of the Government. The excess may also be accounted for, owing to the Cheyair Bridge works at Goondloor requiring wood for engine purposes for the stationary ones working in this river.

31. *Quantity of Timbers of all descriptions felled and stored in Depôts.*—77,440 maunds red-wood roots and stumps at Rupees 4-9-8 per 1,600 lbs. = Rupees 5,571-0-8; $971\frac{3}{4}$ cubic feet, or 583 red-sander second-class posts at Annas 10 per post, or $1\frac{3}{4}$ cubic feet = Rupees 364-6-0 were the quantities collected and stored in the depôts of Codoor and Ballapalle and paid for accordingly, or what it actually cost the department, to which must be added Rupees 468, what was paid for a Gumastah at Rupees 15 and four watchmen at Rupees 6 each per mensem, and Rupees 8 for storing and piling the above timbers, &c., aggregating Rupees 6,411-6-8 in all, as per Statement A. Expenditure A. Conservancy and Working, heading I., Timber Expenses for Felling, &c.

32. Statement B. shows the above-mentioned quantities collected as per colmuns 3 and 4; but 5, 6 and 7 exhibits the rates and valuation by addition of the rates of seigniorage per cart-load as was in vogue when licenses used to be issued for these commodities, *i.e.*, Rupees 3 on every 1,000 lbs. red-wood roots and stumps, and Rupees 6 to every twelve posts of twenty cubic feet per cart-load, making the valuation of the former Rupees 9,201-0-8, and the latter Rupees 655-14-0, and total of Rupees 9,856-14-8.

33. The collections during 1872-73 was 82,447 maunds 15 lbs. red-sander roots and stumps; 210 or 350 cubic feet first class, and 1,773 or 2,788½ cubic feet second-class Pterocarpus santalinus posts. And in 1873-74 dye-wood roots and stumps 5,007 maunds 15 lbs. less than 1872-73, and second-class posts 373 or 621½ cubic feet in excess of 1872-73. The second-class posts being in more demand, or realizing better prices, collection was made, while the first-class posts collection was postponed till a demand was heard of. There was also no calls for the dye-wood.

34. This is the extent of departmental felling, and these are the descriptions in which good profit can be expected, consequently taken on hand. I do not advocate working by departmental agency in the other kinds, as they deteriorate very much from long standing in the open, exposed to the weathers, and purchasers being diffident to purchase from our depôts owing to wood-cutters being able to undersell us and our rates.

35. *Timbers of all descriptions sold to Merchants from Depôts, by tender or auction and the quantity to be accounted for.*—1,038 feet $9\frac{5}{12}$ inches Thumbah wood stored for very many years in our Codoor Depôt was sold by public auction to the highest bidder, and brought in Rupees 632; six posts or ten cubic feet first class and 986 posts or 1,643½ cubic feet second-class red-sander posts, the former realizing Rupees 21, and the latter Rupees 1,166-11-3, making a total of Rupees 1,819-11-3, as per column 4, Statement C., and Statement A., Receipts, heading I.

36. In column 5, difference between columns 3 and 4, Rupees 354-13-7 is shown as decrease against the Depôt Thumbah wood. The wood had been lying in store for a very lengthened period without finding purchasers, having deteriorated very much, and was becoming still more so as each day passed by, which necessitated their being put up to auction to the highest bidder. The actual cost to the Government for this wood was Rupees 779-1-5 at 12 Annas per cubic foot, so that the real loss has only been Rupees 147-5-0. The amount entered in column 3, Rupees 986-13-7, was made out by the addition of Rupees 4, the seigniorage to every bandy-load of twenty cubic feet. I must say that what was had for them was a respectable sum in comparison to the condition of the logs. The increase on the posts, as per column 5, Statement C., shows Rupees 71-0-4 by similarly adding the hitherto usual seigniorage of Rupees 6 per cart-load of twenty cubic feet; but what was actually paid by the department was Rupees 520-12-0, and a clear profit of Rupees 666-15-3.

37. In last year's account there was a balance, on 1st April 1873, of 1,038'-$9\frac{5}{12}$ cubic feet Thumbah wood, 19,328 maunds red-sander roots and stumps, six posts or ten cubic feet first, and 866 posts or 1,443½ cubic feet second-class Pterocarpus santalinus posts. The addition as per Statement B, columns 3 and 4, by collection in 1873-74, Thumbah nil, red-sander roots and stumps 77,440 maunds, first-class red-sander posts, nil, and 583 posts or 971½ cubic feet second-class red-sander posts, making a total of 1,038-$9\frac{5}{12}$ cubic feet Thumbah wood, 96,768 maunds dye-wood, six posts or ten cubic feet first, and 1,449 posts or 2,415 cubic feet second-class red-sander posts. The sales during the year 1873-74, Thumbah wood 1,038-$9\frac{5}{12}$ cubic feet, as per paragraph 35, red-sander roots and stumps, nil, six posts, or ten cubic feet first, and 986 posts or 1,643½ cubic feet second-class red-sander posts, which being deducted from the total assumed by last year's stock and the present year's collection will leave a balance of stock on hand on the 1st April 1874 of 96,768 maunds red-wood roots and stumps valued at Rupees 11,497-8-0, and 463 posts or 771½ cubic feet second-class red-sander posts at Rupees 520-14-0, making a total of Rupees 12,018-6-0 as per Statement D, "Particulars of Balance."

38. In the year 1872-73, the sales from depôts amounted to Rupees 21,884-3-7, and in 1873-74 Rupees 1,819-11-3, being Rupees 20,064-8-4 less than 1872-73, the decrease being especially from not having sold the collection of red-wood roots and stumps during this year, which realized Rupees 17,920 in 1872-73. The red-sander posts also had no demand during this period.

39. *Confiscations.*—The amount realized by sales under this head has been Rupees 463-14-3. —*Vide* Statement A., Receipts, heading VII., and is Rupees 99-5-9 less than 1872-73.

40. *Elephant and other Cattle and Carts employed in the Forests and their Work.*—Fifteen carts were employed for removing from the forests the confiscated timbers at cost of Rupees 12-6-0, as per Statement A., Expenditure, A. Conservancy and Working, heading I., "3, Carriage of Confiscated Timbers."

41. In 1872-73 Rupees 17 was the cost against this head, being Rupees 4-10-0 in excess of the present year's expenditure.

42. *Free Felling.*—Statement F. shows the quantities taken free by ryots in each taluq for their *bonâ fide* agricultural, &c., purposes, and valued at Rupees 3,086.

43. The above has been taken from the account kept in each taluq by the Revenue authorities, on being issued with books, and they have all been for bandy-loads, no account being kept of removal by head-loads. Those villages nearer the hills and a distance from the Taluq Cutcherry evade obtaining the free passes, supplying themselves according to their wants, and have been known to subject themselves to having their wood confiscated when bringing without the necessary authority. Under all these circumstances, I think I will not be far out in my calculation, should I say that twice as much as is shown in the above statement has been taken by the ryots principally by head-loads in all the taluqs for which the statement has reference to. To obtain somewhat accurate estimate of what is really taken by head-loads, is a difficulty that cannot be overcome, as our establishment is too limited and situated so far apart; but if each village authority, I think, be empowered to issue free passes, keep an account, and submit them monthly, or quarterly, we may be able to come to a pretty fair conclusion on this head.

44. The valuation in 1872-73 for the timbers, &c., taken was Rupees 1,792-8-0, and is Rupees 1,293-8-0 below that of 1873-74.

45. *Outstanding Advances.*—Amounts to Rupees 2,000 advanced to Contractor engaged for fencing the Yerraguntakota and Codoor hill railway fuel reserves, *viz.*, Rupees 1,500 on the former and Rupees 500 on the latter, which it was impracticable to finish and measure up before the close of this official year, as the advance was only made towards the latter end of February 1874.

46. *Trespasses or Damages committed in the Nurseries, Plantations, or Forests and the results of criminal prosecutions.*—The results in cases have been out of twenty-one cases sixteen, or 76·4, and of seventy-one persons concerned and tried fifty-three, or 74·46 per cent. convictions obtained; but I do not mean to assert that this comprises the whole of the offences for breach of the Forest Rules, &c.; innumerable must be the instances in which detection has not ensued; but of those that that were taken on hand, shows a very fair average in convictions, ranging from a fine of 1 Rupee, to three months' rigorous imprisonment.

47. Cattle trespasses have been pretty frequent on the plantations; but as no damages were sustained they were in all cases impounded, and I am of opinion that the fines imposed under the Pound Act sufficed.

48. The annual fires still remain undisturbed, causing much loss to the young saplings especially, and the depredations by cowherds from all parts of the taluqs, and even the adjoining districts, by hewing down branches of trees and trees bodily, as fodder for their cattle during the hot or non-cultivating season, remaining penned up in the hills for months till the rains commence in the plains. By the employment of watchmen on all the railway fuel reserves, these fires have been prevented in them, and other trespasses also, which tended to the improvement of the trees and their young.

49. I cannot but refer to the restrictions contained in G.O., No. 2052, dated 20th December 1873, paragraph 2, with reference to forest prosecutions, which materially interferes with the obtaining of redress for breach of the Forest Rules. Wood-cutters and Odders of the district, *i.e.*, those resident in the villages belonging to, and adjacent to the forests, may in a measure delay their stay till the orders alluded to are received and prosecution ensues; but those coming from other districts and far-off villages will naturally evade the procedure by escape to their native places, and evidence lost by lapse of time. All professional wood-cutters chiefly come from the Nellore and North Arcot Districts, and to trace them after a time has been allowed to elapse will prove a matter of great difficulty, so that I would suggest a modification in the rule on this head.

SECTION IV.

Yield of Forests.

50. *Amount of Timbers, &c., &c., taken from the Forests during the Year.*

Timber.		Firewood.		Bamboos.		Charcoal.		Barks of Wood.		Palmyrah.			Red-Sander Roots and Stumps.			Red-Sander 1st-class Posts.			Red-Sander 2nd-class Posts.		
Departmentally.		Departmentally.		Departmentally.		Departmentally.		Departmentally.		Departmentally.			Departmentally.			Departmentally.			Departmentally.		
On License.		On License.		On License.		On License.		On License.		On License.			On License.			On License.			On License.		
Free.		Free.		Free.		Free.		Free.		Free.			Free.			Free.			Free.		
Total.		Total.		Total.		Total.		Total.		Total.			Total.			Total.			Total.		
80,180	cubic feet.	17,757	tons, 580 6/8 lbs.	1,055	bandies, 642 Ass loads.	1,598	parahs.	132	bandies.	13¾	trees.		77,440	maunds.		971⅓	cubic feet.				
27,200	cubic feet.	734	tons, 1,840 lbs.	160	bandies.																
107,380	cubic feet.	18,492	tons, 180 6/8 lbs.	1,215	bandies, 642 Ass loads.	1,598	parahs.	132	bandies.	13¾	trees.		77,440	maunds.		971⅓	cubic feet.		971⅓	cubic feet	

51. The firewood in column 2 "On License" includes the quantity of fuel taken by the Railway Company, not from our reserves, but from the forests in general. The only difference in the system being that the Railway Company pay into the Government Treasuries Rupee 1 on every 1,000 lbs. supplied by the Contractor, whereas other merchants pay the prescribed seigniorage beforehand into a Treasury.

52. This section exhibits the thorough inaction on our forests during the year, the quantity smuggled not being ascertainable.

SECTION V.

53. Financial Results.

Receipts.

				Rs.	A.	P.
For the year 1873-74.—*Vide* Statement A.				52,657	1	8
Expenditure.						
A. Conservancy and Working.—*Vide* Statement A.			11,912	2	2	
B. Establishment.						
Heading I., Salaries	6,588	0	0			
,, II., Allowances	1,980	0	0			
,, III., Contingencies	106	12	6			
			8,674	12	6	
Expenditure on Ghooty Plantation, Bellary District.—Vide *Statement A.*						
VI. From 1st April 1873 to 31st March 1874	227	2	0			
,, Amount drawn in 1873-74 to recoup the permanent advance for expenditure incurred in the months of February and March 1873	75	13	0			
			302	15	0	
				20,889	13	8
Net profit to Government				31,767	4	0
Balance of stock on hand on 1st April 1874.—*Vide* Statement D. ...				12,018	6	0
			Total ...	43,785	10	0

54. The sum of Rupees 3,086, being the valuation of free felling during the year, does not find a place in the above financial results.

55. My Budget Estimate for 1873-74 was as follows: Receipts Rupees 55,500, and expenditure under A. Conservancy and Working, Rupees 28,150, B. Establishment, headings I., II., and III., Rupees 9,160, making a total of Rupees 37,310. The revision as per G.O., No. 1356, dated 5th December 1873, *viz.*, Rupees 16,500, for A. Conservancy and Working, and Rupees 14,000, B. Establishment and Contingencies, amounting to Rupees 30,500 for both the Bellary and Cuddapah Districts. The actual receipt has been Rupees 52,657-1-8, or Rupees 2,842-14-4 less than was anticipated, attributed to, as I have already stated, to the non-sale of the stock of red-sander roots and stumps in my depôts. The actual expenditure for both the Cuddapah and Bellary Districts, Rupees 20,805-13-8, and is Rupees 16,504-2-4 below that of my, and Rupees 9,694-2-4 less than the Board's proposed estimate. The cause of decrease in expenditure has been owing to the curtailment of establishment on plantations, as per paragraphs 11 and 25, and the cheaper system introduced of ploughing and sowing broadcast, thus the surplus to Government credit of Rupees 31,767-4-0 instead of Rupees 18,190 as was anticipated by me in August 1872, when my Budget Estimate for this year was being prepared. There has been savings also under the head B. Establishment and Contingencies. The working charges only on the Ghooty plantation in the Bellary District has been incurred from sums drawn in the Cuddapah District.

56. Results of the previous year 1872-73 were as follow:—

Budget Estimate.				*Actuals.*					
		Rs.						Rs.	A. P.
Receipts			50,000	Receipts				73,260	15 1
Conservancy and Working	15,000			Conservancy and Working	18,093	13	6		
Establishment, &c...	9,000			Establishment, &c....	8,651	14	10		
		24,000						26,745	12 4
		26,000							
Deduct Supplemental Estimate for working charges		5,000							
Total ...		21,000		Total ...				46,515	2 9

57. Had there been a demand, and I had sold my supply of dye wood, my revenue would have enhanced by about Rupees 20,000 more at least.

SECTION VI.

58. *General Remarks.*—I am also of opinion that, taking into consideration the present requirements of the railway, the existing reserves are not large enough. During this year the two tracts of 4,500 acres are being fenced in, called the Codoor Hill and Yerraguntakota railway fuel reserves; the third tract Ballapalle No. 2 of 1,730 more acres will be commenced, and which are alluded to in Board's Proceedings, No 133, dated 27th January 1874, on sanction being granted for the expenditure under "A. Conservancy and Working, heading VI. (*a*) Reserve Tract Railway Fuel," and that plantations for railway fuel purposes will be a source of loss to the State compared with reserves, taking into consideration the nature of the soil and other difficulties we have to contend with in bringing these trees to maturity, which will be some very many years hence. The suggestion of ploughing and sowing broadcast with the Acacia Arabica seeds and other hardy indigenous plants are being taken on hand on all the plantations, in lieu of the more expensive system of sowing seeds in pits and trenches. The disappearance of all the low-land forests along the railway is very perceptible, being removed to the verge of the

both ranges of hills through which the line runs, and I would recommend the forests having a few years rest.

59. To reserve strictly the best forests would be attended with much difficulty arising from the privileges and immemorial rights of the agricultural population. It has taken years to finally succeed in procuring a few thousands of acres of jungles for fencing for railway fuel purposes, and in addition, should we contemplate a further restriction to excluding cattle, &c., from timber reserves, I fear we shall never hear the end of the complaints by the ryots. The Shrotriemdars, who have demarcated forests and established their claims to hill forests, have commenced to work them in competition to our depôts, and have entirely prohibited ryots of other or Government villages adjacent to theirs, entering their jungles for grazing cattle, taking leaves for wet-fields, or for obtaining wood for agricultural implements though they have had such privileges from time immemorial. Up to the setting up of these claims by these Shrotriemdars, we have issued licenses for felling in these forests, and allowed all ryots (including those of the Shrotriemdars) to supply themselves with their agricultural requirements, and these claims rest on no title-deed from the Government. The Pymash accounts showing their boundaries even do not establish them, *i.e.*, the boundaries therein named, give the name of a particular hill on the east, another on the south, and so on; but this cannot mean they have a right up to the heights or water-falls. We may say for a certainty that the claims alluded to first originated and asserted since the demarcation operations commenced on a fair field being opened for traffic in railway fuel, &c. In corroboration of the Government right to these forests, as above said, the issuing of licenses up to date, the revenue by giving out on contract, the collection of wax and honey in these disputed hills; and the statement of very old inhabitants of adjacent villages in pointing out the limits, which is of frequent occurrence when crimes have been committed, ought to suffice.

60. These Inams not being Service Inams was granted to Polygars for the prevention of crime in ghauts and ghaut roads, and I think the ghauts and hills over which the latter have control were included in their Inams for this purpose, whereas the Inams to the Brahmins were for their subsistence, consequently only cultivable lands and low-land forests (fit for cultivation after being cleared) were intended for these clai[illegible]; more especially as these endowments were granted at a time when forests were not cons[illegible]d such valuable property as they are nowadays with this vast consumption of railway fuel, and the easy transport of forest products, and timbers to the Presidency and other large towns, make them avariciously inclined for as much hill forests as they can possibly secure under the present Permanent Settlement.

61. The sum of Rupees 1,030 remains in my hands as a permanent advance on the 1st April 1874, being Rupees 1,000 on account of working charges, and Rupees 30 for contingent expenditure.

62. I am glad to be able to report that I have not had any complaints worth noticing against the Forest administration, with the exception of the people generally being much indisposed towards our securing portions of the forests, as railway fuel reserves, which they wish to make out, interferes with their grazing rights by curtailing the area; but I disagree with them on this point from the fact of there being very ample space for their pasturage on the slopes and table-land of the hills, while our reserves occupy only a few thousand acres in comparison to their miles.

63. The free-pass system has been working more freely during the year under review; nearly double the quantity of last has been taken during the present; and I am of belief, as the method becomes more generally known, clandestine felling for such purposes will eventually give way, and the necessary legal authority obtained in all cases, in furtherance of which I would (and I have already done so separately) recommend other authorities, such as overseers, &c., being empowered to issue these passes on application, by ryots, during their tours and travels.

64. *Health and Conduct of Establishment.*—I have been ailing with fever and dysentery during the year with other slight attacks of fever at different times, and of short duration. My overseer also has had some small important shocks of fever. Two of my tannah peons and one reserve watchaman died from severe attacks; and I must say this disease has been rather prevalent and varied in its description during 1873-74, though we have had pretty good falls of rain.

65. And I am happy to be able to bring to notice that all and every one of my subordinates and establishment have conducted themselves satisfactorily, even with the enhanced work of all kinds imposed on them. The office work has increased enormously after the new system of accounts was introduced, which I find very difficult to conduct with such regularity as is expected with one single writer, to assist whom I am obliged to engage the service of one of the Duffadars who understands English, and the necessity of supplementing the strength of my establishment seems very necessary, as was sugested in my revision list forwarded sometime ago.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) H. H. YARDE,
Deputy Conservator of Forests.

No. 160.

BELLARY, 29th May 1874.

From
H. SEWELL, Esq.,
Acting Collector of Bellary,

To
J. GROSE, Esq.,
Secretary to the Board of Revenue.

I HAVE the honor to submit my report on the administration of the Forest Department during the official year 1873-74.

2. The only locality where the department has established itself is at Ghooty where a fuel plantation has existed since 1st May 1869 to meet the wants of the railway.

3. From the enclosed report of Deputy C[illegible]rvator, it will be seen that 14,990 plants have been put down during the period under review. [illegible]m the statement showing the cost, etc., of the plantation received from the same officer, and [illegible]w forwarded, it appears that the plantation consists altogether of 64,600 plants.

4. The total expenditure on this plantation amounts to Rupees 563-2-0, of which only Rupees 336 have been debited to this district on account of the fixed establishment which comprises a head gardener on Rupees 10, and three gardeners at Rupees 6 each, making the expenditure Rupees 28 per mensem. The cost per tree is stated by the Deputy Cónservator to be Annas 2-4.

5. The great want of this district is water; and to meet this want, seven wells have been cleared and deepened.

6. The plantation is still in its infancy, and no returns can be expected perhaps for some few years to come, owing to the extreme poverty of the soil and the scanty rainfall.

7. There are no sums remaining unadjusted in connection with the Forest Department in the accounts of this office.

ENCLOSURE No. 1.

DEPUTY CONSERVATOR'S OFFICE,
CODOORE, 17*th April* 1874.

No. 20.

From
MR. H. H. YARDE, Esq.,
Deputy Conservator of Forests,

To
H. SEWELL, Esq.,
Acting Collector and Conservator of Forests, Bellary.

I HAVE the honor to submit you the annual Administration Report of my range for the official year 1873-74, together with the necessary accompaniments.

SECTION I.

B.—*Inspection Tours of Range Officer.*—During the year under review, I continued in charge of this range, which comprises only the Ghooty Railway fuel plantation. I was unable to visit the plantation in the first month of the year (April 1873), owing to press of business with reference to the preparation of the administration report, annual accounts and returns for 1872-73, and other important works in the Cuddapah Forest Range. In the remainder of the months, viz., from May 1872 to March 1873, I visited the plantation eleven times, ranging over twenty-two days, at two days per inspection.

SECTION II.—RESERVES.

A.—*Reserved Forests.*—Nil.

B.—*Fuel Reserves.*—Nil.

C.—*Plantations, Ghooty Railway Fuel.*—The total number of plants supplied from the nursery during the year was 14,990, 4,640 being freshly transplanted out in the following species, viz., 2,300 *Melia Azadirachta*, 2,140 *Albizzia Lebbek*, and 200 *Bassia latifolia*; the remainder 10,350 casualties of different kinds replaced by 8,360 *Melia Azadirachta*, 1,020 *Albizzia Lebbek*, and 970 *Bassia latifolia*. The casualties that occurred during this period were 5,660, *Melia Azadirachta* 5,050, and 610 *Albizzia Lebbek*. 4,680 pits excavated, 49,600 plants watered, 1 acre of land cleared of brushwood and overgrowth, 80 acres land ploughed up and sown broad-cast with 224 measures *Acacia Arabica* seeds. Seven wells cleared, spaded, and deepened, 25,050 plants weeded and cleared a round, 124 measures seed collected, viz., 18 *Albizzia Lebbek* and 106 *Acacia Arabica*, besides 4,940 palmyra seeds. 5,420 palmyra seeds sown in pits that were excavated for the purpose, 157 nursery beds prepared and sown with the following kinds of seeds:—40 *Albizzia Lebbek*, 18 *Cananga odorata*, 13 *Cassia florida*, 84 *Melia Azadirachta*, and 2 *Bassia latifolia*. Besides the above described, other minor works were got through, such as the general up-keep of the nursery, by constant watering and weeding, repairing the fence wherever required, clearing the channelling of overgrowth of vegetable matter likely to impede the growth of the younger plants, etc.:—

	RS.	A.	P.
Plantation working charges including pitting, rail charges, etc.	227	2	0
Fixed Establishment	336	0	0
Total ..	563	2	0

Against the head of Fixed Establishment as per Statement A, Expenditure, A. Conservancy and Working, I. Salaries, Rupees 336, is exhibited at the rate of Rupees 28 per mensem for a head gardener at Rupees 10, and three under-gardeners at Rupees 6 each, drawn from the Ghooty Taluq Treasury; while the working charges in the same Statement "VI. Plantations," of Rupees 227-2-0, was drawn from the Pullempett Treasury in the the Cuddapah District and spent on this plantation.

In 1873-74 Rupees 725-10-0 less than 1872-73 was expended for working charges, while the "Fixed Establishment Expenditure" remains stationary at the same figure, viz., Rupees. 336. The decrease in expenditure has been owing to the curtailment in the employment of the hitherto number of coolies under contemplated change of operation, *i.e.*, from the more expensive method of trenching and pitting and sowing in them from nurseries to the easy and cheap mode of ploughing and sowing broad-cast.

The statement called for in Board's Proceedings, No. 133, dated 27th January 1874, is herewith appended.

Computing the established plants at about 62,000 with the total expenditure up to date we arrive at seven per rupee, or about Annas 2-4 per tree, but very many more thousands of late year's putting out, etc., arriving at maturity, or an age at which they may be brought on the category of established trees, will contribute much to lessen the cost per tree in after years.

SECTION III.

Forests worked under License and Voucher System.—Nil.

Timber supplied to D. P. W.—Nil as per Statement E.I.

Engine firewood.—Nil.

Timber firewood, bamboos, etc., removed by wood-cutters.—Nil as per Statement A., Receipts Heading II.

Quantity of timbers of all descriptions felled and stored in Depôt.—Nil as per Statement B.

Timbers of all descriptions sold to Merchants from Depôts, by tender or auction, and the quantity to be accounted for.—Nil as per Statement C.

Confiscations.—Nil.

Measures taken for extending and improving the forests.—Nil.

Elephants and other cattle and carts employed in the forests and their work.—Nil.

Free felling.—Nil as per Statement F.

Any valuable rare or new plants.—Nil.

Forest products.—Nil.

Outstanding advances.—None.

Trespasses or damages committed in the nurseries, plantations, or forests, and the results of criminal prosecutions.—Cattle have now and then made inroads into the plantation; but, as they had not caused damages more than trespassing, they were impounded, and the prescribed fees imposed, which, I am of opinion, proved sufficient punishment to the owners of the cattle.

SECTION IV.

Yield of forests.—Nil as per Statement E.

Stock of timber in Depôts at end of the year.—Nil as per Statement D.

SECTION V.

Financial results.—Nil, no revenue derived.

SECTION VI.

General Remarks.—The soil of this plantation is very poor more so than any of the plantations in the Cuddapah District even. In some portions are to be found a fair growth in the *Acacia Arabica* from broad-cast sowing, and in other places the *Melia Azadirachta*, and *Acacia Arabica* are showing tolerable growth in pits and channels. That portion of this tract, which is found to be much impregnated with soda, seem utterly useless for other than planting of palmyra seeds, and accordingly a good quantity of them have been put down. Other seeds and seedlings have been over and over tried; the former die away after germinating, and the latter shortly after being transplanted out; consequently sowing in pits and trenches will be adandoned to a great extent, and broad-cast sowing increased.

In the first quarter of the year there was one small shower of rain in April 1873, and a couple of unimportant ones in June, which, however, tended to revive the younger plants, though much disappointment was felt at having none in June, when the plants were commencing to look very bad, and the heat excessive.

In the first month of the second quarter the want of rain was much felt, and the casualties may be said to have occurred chiefly in it. The rains in August, scanty, came to the rescue; but it was not free from reports of casualties. September opened out with some drizzling showers, allowing us to some extent to proceed with ploughing operations and sowing of *Acacia Arabica* seeds broad-cast. They were not heavy and continuous enough to enable us to transplant from the nursery, where such was practicable according to the nature of the soil. They also were productive of much good to the younger plants in causing them to change their sickly appearance. The third quarter was all that could be expected. Nearly all the casualties that were reported during the hot months were replaced, and the *Acacia Arabica* seeds sown in previous months commenced to germinate. In November, taking advantage of the rains, plants were put

out from the nursery, and, being aided by the heavy dew at nights and cool days, the whole of the plants were looking cheerful and green; while December brought forth no rain, yet the season at that time of the year was such as not to change the good looks the plants had assumed in the other two months of the quarter.

In the fourth or last quarter, comprising January, February, and March 1874, we have not had a day's rain, even the early mango-shower entirely failed us. The want of water was, and is being, much felt, which, together with the excessive heat and dry winds, more especially in the last month, is telling very much on the health of all the plants. The springs in the wells are fast failing, though they are frequently deepened to support the younger plants by occasional watering and up-keep of the nursery. The healthy appearance they assumed in the foregoing quarter has been entirely lost. Rains at an early date only will save the plants greatly.

The established trees as already shown should at least have been trebled or doubled, if the casualties had not been so great in previous years, chiefly owing to the nature of the soil, the plants were dying away no sooner they were put out, and having had to be planted over and over made the cost increase, else the cost per tree would have only been one-half of that given.

The establishment have worked satisfactorily, and their health has not been much disturbed, though all have had some slight attacks of fever during the year.

No. 341.

From

J. HOPE, Esq.,
Acting Collector of Kurnool,

KURNOOL,
2nd September 1874.

To

J. GROSE, Esq.,
Secretary to the Board of Revenue.

I have the honor to submit my annual report on the forest administration of the district for the Official year 1873-74, with the usual Statements.

2. *Section I., Inspection tours (a) of the Collector.*—I did not personally visit the forests in the course of the year, but, in the month of March, I made a tour by Atmakur to Nandial, and had thus an opportunity of inspecting some of the most important forest stations.

3. *(b) Of the Range Officer.*—Mr. Boileau was in charge for eleven months of the year, and was absent on privilege leave for one month from 9th October 1873. During the eleven months, he was in camp for 169 days, or an average of fifteen days per month. Considering that he suffered a good deal at different periods from fever, guinea-worm, and boils on the feet and legs, he must be allowed to have done a very creditable amount of travelling.

4. *II. Reserved tracts and contemplated operations.*—In my report for last year, I stated that all the forests between the Nandikanama and Velgode ghauts, had been closed, with the exception of a small tract adjoining the Basavapuram station. This tract also, which forms one of the richest parts of the forests, was closed in August 1873, so as to secure complete conservancy in the reserved tracts. A small portion of the reserves adjoining the Velgode station were opened for three months from 7th March 1874, as directed in Board's Proceedings, Forest Miscellaneous No. 8-323, dated 19th January 1874, to enable the merchants of Velgode, to recover the advances they had previously made to the Wadders, for felling and carting wood from the forests. Another portion of the reserve near Bukkapuram, is opened to the public, but only for felling jungle-wood and stakes. These latter are very much in request in the neighbourhood, for Sugar-cane Plantations, etc., and, as it was found difficult to prevent them from being smuggled from the forests, it was thought better to allow them to be cut, on payment of seigniorage.

5. The area of the forests thus reserved is about 300 square miles, but I regret I am unable to furnish information regarding the number and description of the trees in it. Board's Proceedings, Forest No. 4-133, dated 27th January 1874, was received only on 3rd March, towards the close of the official year, and there was not sufficient time to collect any information on the subject. I shall, however, endeavor to obtain the necessary details, if possible, in the course of this year, and embody them in my next report.

6. *B., Fuel Reserves.*—There are no fuel reserves in this district, and, as remarked in my last report, it would appear that such reserves would not pay here.

7. *C., Plantations.*—The Statement called for in paragraph 21 of Board's Proceedings, Forest No. 4-133, dated 27th January 1874, is appended.

Names of Plantation.	Year in which formed.	Area.	Description of trees.	No. of trees.	Cost. During the year.	Cost. Up to the year.	Receipts. During the year.	Receipts. Up to the year.
					RS. A. P.	RS. A. P.		
1. Woncaram Training and Experimental Plantation.	1869-70	About 15 acres.	Mango ...	1,250	479 3 4	*1,411 9 8	* "Mr. Boileau" says 1,072-6-8, he has been called on to explain.	
			Redwood.	140	.....	.....		
			Somi ...	40	.....	.....		
			Billoo ...	14	.....	.....		
			Kanaga ...	6	.....	.....		
			Sambranie.	3	.....	.....		
2. Muttikonda Teak Plantation.	1866-67	½ acre.	Teak... ...	132	.....	52 12 0		

8. *I. Woncaram Plantation.*—The expenditure on this plantation during the year was Rupees 479-3-4, against Rupees 315 last year. The increase was due to the coolies being paid for February and March 1873, in this office. The Board would observe from the Statement, that the Redwood trees have decreased from 150 last year, to 140 the year under report, and the Somi trees from fifty to forty. The *largest Redwood tree* has not increased more than 2½ feet in height, or more than one inch in girth. In the Mango, there was an increase of 520 trees, the number at the end of the year being 1,250, against 730 in 1872-73. The largest tree increased from seven feet, to only eight feet in height. About 400 Mango plants were transplanted in 1872-73, and 550 in 1873-74, and in a total of nearly 1,000 trees, there were 425 casualties, or more than 42 per cent. of the whole number transplanted. Mr. Boileau attributes this large percentage to the inexperience of the gardeners, whom he describes as were "Village coolies." He says he planted twenty trees himself, and showed them how to do it, but still they could not do it properly themselves. These twenty trees planted by Mr. Boileau, are said to be in a "healthy condition, and some three times the size of those put out by the gardeners."

9. The total expenditure up to the end of 1873-74 was Rupees 1,890-13-10, which gives an average of more than Rupees 1¼ per tree on the total number (1,453) existing on the plantation, or more than Rupees 2 per tree, excluding the saplings remaining out of those transplanted in 1872-73 and 1873-74. It is clear, therefore, that, as stated in last year's report, the plantation is a failure, and any further expenditure on it would be a waste of money. The question of closing the plantation has been referred* by the Board for the opinion of the Inspector of Forests, and that officer has lately informed me that he must defer an expression of opinion, till he has had an opportunity of personally visiting the plantation.

* Paragraph 20 of Board's Proceedings, Forest No. 4-133, dated 27th January 1874.

10. *II. Muttikonda Plantation.*—There was no work performed during the year under review, and no expenditure was consequently incurred. The 132 Teak trees said to be on the

plantation last year, continued to live during the present year. The height of the largest tree increased from 15 to 21 feet, and the girth from 10 to 11 inches. One tree had a girth of 13 inches, and between 40 and 50 had a height of 18 feet, the average height of all the trees being 12 feet.

11. *Nandial Nursery.*—This was maintained from the Local Funds, and placed under the Forest Assistant, owing to its vicinity to his bungalow. The nursery was closed in June 1874, and the trees that were left after thinning, are being allowed to grow into a tope.

12. *Section III., Voucher and License System.*—The receipts realized from seigniorage on licenses, amounted to Rupees 29,496-0-11 against Rupees 29,490-14-0 last year. Of these Rupees 23,113 were levied on 10,113½ bandy loads of timber, against Rupees 24,587 the previous year. This small decrease is due to the closing of the Basavapuram Forests (one of our best paying tracts) from August 1873. The whole of the reserved tracts, too, were open during 1872-73, for five months up to September 1872, while, in 1873-74, only a small portion of it near Velgode, was opened from 7th to 31st March 1874, under the Board's Proceedings, quoted in paragraph 4. To prevent a further decrease in the revenue, consequent on the closing of the Velgode forests, a new station was opened at Nallakalava, and licenses granted for felling timber in the forests adjoining.

13. Seven thousand eight hundred and twenty-seven, and a half bandy loads of Bamboos at 5 Annas, and 6,167 bullock and donkey-loads at 2 Annas, were also cut, at a seigniorage of Rupees 3,216-15-6. The receipts last year were Rupees 3,230-15-6. Thirty-five thousand five hundred and eighty-seven and eleven-twelfths cavadi loads of Charcoal were removed for Rupees 2,224-3-11. The amount last year was Rupees 1,616-11-6. One hundred and twenty bandy-loads and eighty-two head-loads of Firewood were taken for Rupees 96-13-6. Last year, the sum collected was Rupees 55-11-0. There was thus an increase under firewood, though the seigniorage on bandy-loads was reduced from 1 Rupee to 4 Annas, and head and bullock and donkey-loads allowed to be cut free, under G. O., No. 3,225, dated 31st October 1873. A seigniorage of Rupees 45 was also levied on fifteen bandy-loads of Bark at 3 Rupees per load. There were no receipts under this head last year, and I can find no orders of Government authorizing the levy of seigniorage on this article. Mr. Boileau, however, states that seigniorage is being charged from the commencement of Forest conservancy, and Major Beddome informed me last year that the same is the practice in other districts, though he admitted that there are no specific orders of Government on the subject. This question will be referred for orders, in a separate communication.

14. *Section IV., Yield of Forests.*—The annexed Statement shows the total yield of forests during the year.

Name of Range.	Timber						Bamboos.			Charcoal.	Forest produce bark.
	On license.				Free.		On license.		Free.	On license.	On license.
	Departmentally.	Reserved and Jungle wood.	Firewood.		Timber.	Firewood.	Number of bandies.	Number of bullock or donkey-loads.	Number of bandies.	Number of cavadi-loads.	Number of bandies.
			Number of cubic feet.	Number of head-loads.							
	c. ft.	c. ft.			c. ft.	c. ft.					
Kurnool	1,306	202,270	2,400	82	29,020	375,700	7,827½	6,167	99	35,587 11/12	15

15. (1) *On License.*—The details are given in Statement E.

16. (2) *Departmentally.*—Statement B. shows that 613 feet 1 inch of Inamaddi and 241 feet 7 inches of Yepi logs, valued at 15 Annas per cubic foot, at Rupees 801-4-0, were felled on the Cumbum side during 1873-74. This, added to 486 feet 3 inches* of Inamaddi, valued at Rupees 486-4-0, in depôt at the beginning of the year, makes a total of 1,340 feet 11 inches valued at Rupees 1,287-8-0. Of this, the whole of the old stock was sold for Rupees 258-2-0, at a loss of Rupees 228-2-0. Most of it was damaged from having been kept long in the depôt unsold, and only a few cubic feet could be sold, for their value, viz., Rupee 1 per cubic foot. The price of the rest had to be reduced to Annas 8 per cubic foot to induce any one to buy them, the reduction to Annas 12 having been tried without any effect. Of the new stock, the whole of the Yepi logs and 478 feet 2 inches of the Inamaddi were sold at their actual value, viz., Rupees 674-12-3. The balance† at the end of the year was thus 134 feet 11 inches of Inamaddi logs valued at Rupees 126-7-9. The total amount realized by sales was Rs. 932-14-3, against Rupees 418-2-4 last year. Of this, Rupees 810-6-11 worth was sold in the Cumbum Depôt, and Rupees 122-7-4 worth at Nandial. There were no sales from depôt opened last year at Kurnool.

* Statement D.

† Statement D.

17. *Wood supplied to the Department Public Works.*—There was no wood supplied to the Department of Public Works during the year under report.

18. *Free felling.*—Twenty-nine thousand and twenty cubic feet or 1,451 bandy-loads of timber, 3,75,700 cubic feet or 18,785 bandy-loads of firewood, and ninety-nine bandy-loads of bamboos were removed free from the Kurnool Forests.

19. *Section V., Financial Results.*—The total receipts from all sources amounted to Rupees 31,854-1-7 against Rupees 31,011-12-7 last year. The increase was chiefly in depôt sales of timber, and sales of confiscated wood. The expenditure amounted to Rupees 11,315-10-5, showing an increase of Rupees 3,229-1-10‡ over last year. The increase of Rupees 1,408-14-10 was due to an increase of Rupees 2,388-12-2 under the heads noted in the margin, and a decrease of Rupees 979-13-4 under Communications and Buildings, etc., and collection of seeds. The increase of Rupees 1,500 under "Rent of leased forests" is due to the purchase of Achayya's forest lands for that sum, under Board's Proceedings, No. (Forests), 49-1,745, dated 5th September 1873. The increase under "Timber expenses" is due to the increase in departmental§, felling, and in confiscated timber. The increased expenditure for plantations has been explained in paragraph 8. The decrease under "Communications and Buildings, &c.," does not call for remark.

	Rs.	A.	P.
‡ Working expenses	1,408	14	10
Establishment	1,820	3	0
Total ...	3,229	1	10

	Rs.	A.	P.
Rent of leased forests	1,500	0	0
Timber expenses	749	6	10
Plantations	139	5	4
Total ...	2,388	12	2

§ Quarterly felled.

1872-73	Nil.
1873-74	854 feet 8 inches.

20. The increase of Rupees 1,820-3-0 under Establishment is chiefly due to Mr. Boileau's temporary promotion to a Deputy Conservatorship, and the increased pay and allowances* he received.

	Pay.			Allowances.			Total.		
	Rs.	A.	P.	Rs.	A.	P.	Rs.	A.	P.
* 1872-73 ...	1,427	11	3	1,056	0	0	2,483	11	3
1873-74 ...	2,676	12	5	1,450	13	5	4,127	9	10
Increase ...	1,249	1	2	394	13	5	1,643	14	7

21. *Section VI., General remarks, Free Pass System.*—Mr. Boileau is of opinion that this system works very badly, and that much wood is cut free without these free passes, so that the figures shown in the Accounts are much below the actual quantity felled. This he supports by stating that only half the villages in the five taluqs bordering on the Nallamalas show any

firewood cut on free passes, and that a large proportion of these villages have cut under ten bandies only. Mr. Boileau does not attempt to prove in what way, or to what extent, the privilege has been abused. The fact that some villages take out fewer licenses than others can, of itself, be no proof that the system has been working badly. In the taluqs of Ramalkota and Pattikonda, which are traversed by the Yerramala Hills, many of the villages on the western or regur portions, do not take out any licenses at all for firewood, because of the trouble and expense of bringing it, and, as a matter of fact, the ryots generally use cowdung, cholum, and cotton stalks, etc., as substitutes for fuel (*vide* Mr. Chase's letter, No. 58, dated 1st March 1871). Mr. Boileau has evidently overlooked this important consideration, when trying to condemn the free pass system as a whole; and until specific instances are brought to light, in which wood brought on free passes may be found to have been misappropriated for sale to the public, I do not think the existing arrangements should be disturbed.

22. Ninety-nine cases, with 274 persons were prosecuted during the year, of whom 141 persons in fifty-three cases were convicted, and the rest acquitted or discharged.

23. The health of the forest officers and peons this year is reported to have been better than last year, with the exception of Mr. Boileau, as stated in paragraph 3.

I have the honor to be,
Sir,
Your most obedient Servant,
(Signed) J. HOPE,
Acting Collector.

ENCLOSURE No. 1.

DEPUTY CONSERVATOR'S OFFICE,
NANDIAL, *5th May* 1874.

From

E. H. BOILEAU, Esq.,
Forest Assistant.

To

J. HOPE, Esq.,
Collector of Kurnool.

SIR,—I HAVE the honor to forward my Administration Report for the official year 1873-74.

SECTION I.

Inspection tours of the officer in charge.—During the eleven months I was in charge I have been in camp for 169 days, an average of fifteen days per mensem, while in the previous year I was 204 days travelling, showing an average monthly of seventeen days. I have been unfortunate this year in getting guinea-worm, boils on my feet and legs, and also fever; but in 1872-73 I only had fever, a man with fever can travel, while one who has any thing the matter with his feet cannot well do so.

SECTION II.

Reserved Forests and contemplated operations.—(A) The Basavapuram Station was closed in August, as it formed part of the "Reserve;" this was our principal station, not only did it yield the largest revenue, but has some of the finest forests in the Nallamalas. I have seen a tope of nearly entirely Nullamuddi trees of about ten square miles or more; as in this plateau so in others the finest and largest trees are to be met with; those on the sides of hills are generally poor, this is on account of the hills being rocky and covered all over on some hills with large round stones.

I have also noticed that in places where the bamboo thrives, trees are few and far between; but when a tree is discovered, it will, in nearly all cases, be found to be of an immense size. Junglewood stakes are allowed now to be felled in the Bukkapuram jungles, although forming a part of the "reserved" tract. This was much required, as the ryots did not mind being prosecuted for theft as long as their Sugar Plantations were safe. In some places they use bamboos for stakes: but those about this station are very thin, and so were quite useless. Achayya's durkhasts were sold to the Forest Department in September, a purchase which ought to have been effected long ago; this should be followed with the purchase of *all* durkhasts that issue chitties for wood other than firewood, and an order be issued that no new puttas be given to ryots or others on any condition. The Yelgode Station has been reopened for three months to allow the merchants to get back their advances to the Wadders; it will be closed again on the 7th May 1874. The Kistamchettipally Station was opened in February of this year as it was not in the "reserves."

(B.) Plantations.—Woncaram Plantation the soil of some parts of this plantation are extremely poor, composed of a whitish clay, impregnated with salt; the remaining portion is good. The trees planted on the former are extremely small, especially the Redwood which either seem to die off or won't grow. Those on the latter are in good health. In 1873 I had about 550 young Mango plants put out into pits. The largest Redwood tree is about 12 feet high, and with a girth of about 8 inches. The largest Mango is 8 feet and odd inches. I have also a few Somi, Kanaga, Billoo, and Sambranie. The expenditure has been *Rupees* 479-3-4, or *Rupees* 164-3-4 more than of last year. This extra amount is caused by my paying the gardeners (5) and coolies (8) for work done during February and March in April, and coolies who were employed in assisting the gardeners, no coolies were engaged this hot weather, as the 500 Rupees allotted would not have covered expenses. The number of trees in the plantation are as follows:—

140	Redwood trees	10 Casualties.
6	Kanaga	...
14	Billoo	1 Casualty.
40	Somi	10 Casualties.
3	Sambranie...	...
1,250	Mango	425 do. about.

During the rainy season I had about 550 Mango planted out, the year before about 400 to 500 (this was not included in the 730), say a total of 1,000 plants, out of which one-third have succumbed to the hot weather. The gardeners are to blame, for it is to their carelessness only that I attribute this high percentage. The way in which they transplant young trees is most slovenly, although I planted out twenty trees myself and showed them how to do it. By the way, the trees which I transplanted are all in a healthy condition, and some three times the size of the ones put out by the gardeners. In the first place the so-called gardeners are simply village coolies of Erinapadu, so they know nothing of gardening, although they can dig, water, and other such works which do not require training or experience.

Muttikonda.—This plantation has the same number of trees in it as last year, 132. The largest is 21 feet and odd inches, with a girth of 11 inches, but one tree had a girth of 13 inches. About forty to fifty trees were over 18 feet; the general average being 12 feet. I should say expenditure, *nil.*

Nandial Nursery.—This plantation is in very good order now; the buffaloes and other cattle are a constant nuisance, for in the hot weather they eat and break down the trees. This year it is not so bad as last hot season, because I have been pounding them every day. In April and May 1873 there was not a young tree left, but they sprouted up when the rains commenced, and are very fine-grown and healthy plants. In 1873 I had about 150 plants put out, and these plants are all alive in consequence of my being present when transplanting was going on, which I could not manage to do when transplanting was going on at Woncaram, it being twelve miles away from head-quarters. No plants have been given out to ryots, etc., and the Nursery is to be turned into a tope, the best thing that could be done with it, for it is situated at the junction of two roads (which are

much used), and on market day at Nandial I should say at least 400 people come past the tope, the Koondair river running at the foot of the Nursery induces them to stop either to eat their food, wash, or have a chat. Before it can be turned into a tope, the trees must be thinned, and old and new nursery beds dug up; and this I hope to see done before the rains commence. All expenses are paid from the Local Funds.

C.—Fuel Reserves, etc., etc.—None.

SECTION III.

Voucher and License system.—The number of bandies taken out of these forests will be seen by looking over Form E, (yearly). For this district this system undoubtedly works better than departmental felling. Firstly, because the rates asked for by contractors are high (there being no competition); secondly, if we fell for the Department of Public Works, the natives will not take the timber, for the latter prefer fresh wood. I don't mean *green*, but beams that seem to be seasoned outside, that is, after they have been felled for three or four months. The wood merchants know this, and never keep wood on hand for any length of time preferring to sell the wood at a small profit in place of no profit and sometimes for what they can get, this enables them to keep up their stock, with *no bonâ fide seasoned wood*. If felling departmentally is to be extended in this district, I should recommend felling for the native purchasers, as they buy more steadily; though each buys in small quantities yet the total amount will be large. But on the other hand the Department of Public Works buy a large quantity at long intervals; which is not so paying as the former method, and depôts should be placed at strategical points, (and not at the head-quarters of the Forest Officers,) such as Dupad on the border of the Guntoor District, on an old Government road or at Markapur; these places are chosen because bandies cannot cross the Vella condahs to the south. The former place is large, and has an annual fair; I believe the latter is also large, and people are always coming to the Cutcherry, besides which, it is on the border of the Nellore District. Wherever the depôts are placed, one thing must be borne in mind and that is that only wood which is required should be felled (the dimensions, and description of timber can be discovered by following the size, etc., cut by wood merchants. For instance, Inamaddi beams should be 15 feet × 9 inches × 9 inches or 12 feet × 9 inches × 6 inches, or 12 feet × 6 inches × 6 inches and not the large size which were felled before in 1867-68. People are not allowed to fell Inamaddi bandy poles because they break Rule VI. by so doing, hence we ought to supply the demand by felling departmentally, the same with Tunki and Red Saunder pounders, etc, etc. In this way felling departmentally would work well; but in other cases such as felling bamboos, firewood, or junglewood posts, rafters, etc, the system now in vogue must be adhered to. The rivers though few might be made very useful for floating, viz., Bowanassy, Carli, Vakeelair, Parlair and Goondlacumma. The Tumpalair would not do as I hear, it has three anicuts across it. Also the irrigation canal for floating to Cuddapah, the current is too strong for rafting up stream, the number of coolies which would be required for towing would be great, and therefore it would be ruinously expensive, while down stream a man or two to guide the raft would be all that is wanted.

SECTION IV.

Yield of Forests and Expenditure.—The expenditure of the year has been Rupees 2,909-14-10 or Rupees 1,408-14-10 more than that of last year. This increase is easily accounted for—first the purchase of Achayya's land in the forest, viz., for 1,500 Rupees; secondly, a timber shed was built for the Cumbum Depôt for a few rupees short of 100, this is constructed of almost entirely of Palmyra; thirdly and lastly, sixty-six Inamaddi and twenty-six Yegi beams were felled and carted to depôt for 642 Rupees, the remainder under Head I. is for conveyance of confiscated wood *Rupees* 169-1-6, for stacking Rupees 9-8-0, total *Rupees* 819-9-6. These ninety-two logs are all sold except thirteen on hand. Only fifteen bandies of bark were taken out of the forests, of course the items of forest produce are very numerous, but the rights of the Chensuars must be looked after, these poor people in the hot weather have a precarious living, as they are not able to collect the root they subsist on in the rainy and cold season, therefore they are obliged to live on fruit, and by barter with the merchants, in which they are most fearfully imposed upon. It is only where there is a large village of Chensuars that they manage to collect the fruit, honey, etc., without hindrance or interference from the villagers, where there are only five or six huts, they live on the fruit they collect daily, the villagers taking the forest produce for sale or exchange for grain.

SECTION V.

Financial Results.—The revenue is Rupees 31,854-1-7, or Rupees 842-5-0 more than that of 1872-73. I have already compared the two years in a separate Account, and forwarded the same, so need only remark on the separate items. No wood has been supplied to the Department of Public Works or other departments; last year there were receipts for 247-0-8 Rupees. Under Head I. an addition of 611-12-7 Rupees worth of wood was sold; but this needs a little explaining. Out of this extra amount 206-15-4 Rupees must be deducted as it was not a real transaction, it is the value of thirty-nine Inamaddi logs at 8 Annas a cubic foot. In 1871-72 they were reduced to 1 Rupee again, as there were only one or two sold, they were again reduced to 12 Annas per cubic foot; not finding purchasers at this rate I was perforced to reduce it *again* to Annas 8 when they were brought up on speculation by two enterprising Mussulmen, *i.e.*, the Nandial man bought up those (16) at Nandial, and those (23) at Cumbum by the Cumbum man. Some of them were very rotten, others were weather beaten, and white-ants were attacking them. The above reductions were made with the consent of the Conservator of the Kurnool Forests. The logs were too large for native houses, and if they had been reduced three years ago to 12 Annas they would have been sold, and not resulted in so much loss as now. Head II. is only 5 Rupees more this year, and I don't expect it ever to rise above 30,000 Rupees as our "reserves" since my taking over charge have been closed completely and are not so nominally as previously.

This should be shown under IX. Miscellaneous.

Head IV. is rent of my bungalow for the official year. Heads VII. and IX. relate to the sales by auction, the former for the two-thirds of the amount paid for confiscated and waif timber, the latter for unclaimed deposits. They amount respectively to Rupees 1,229-12-7 and Rupees 114-14-8, showing an increase of Rupees 430-12-2. The increase of receipts may be put down to the purchase of Achayya's durkhast in September 1873, together with the opening of the Yelgode forests from 7th of February 1874, for three months to let them regain the advances they had made to Wadders; but on the other hand our best station, Basavapuram, has been closed for eight months out of the twelve. It may fairly be said that the revenue is up to the mark, although the balance in favor of Government is not so much as the previous year; yet it must not be forgotten that the expenditure has been unavoidedly higher, hence the deficiency.

SECTION VI.

General Remarks.—I have this year introduced the system of making my peons go monthly or weekly tours of the villages surrounding their tannah stations, and every village must be visited at least once a month, each peon has a list of the villages to be inspected. This, I think, has had a good effect in stopping smuggling a good deal, because the peon by inspecting the surrounding villages, checks the other roads leading from the forests, which do not come near the station, (therefore used by unscrupulous parties) and besides *nearly all* my peons are illiterate, and consequently are *quite* useless in checking licenses which come to the station for passing, as they put their mark to the license and voucher not knowing what they are signing, so this work is usually performed by the village authorities (as it always has been) but the services of the peon are now utilized, but if they were literate our receipts *must* obviously rise very considerably; for instance if a peon goes to inspect the forests, he comes upon a bandy of wood, the men often show an old license, the peon, not being able to read, passes the bandy; while if he could read and write, the bandy would or ought to have been confiscated. The number of cases up to the 20th of January 1874 were 100, no prosecutions have taken place since that date. The peons have, on the whole, behaved well with the exception of two; one was dismissed for falsifying his diary and going to his village without leave, the other was suspended for three months for

drunkenness on three occasions, the second time he was fined. Health of peons have been better than usual, although several were on leave for several months at a stretch, one peon went on leave on account of bad fever and has never returned, so struck his name off the list as I suppose he succumbed to it, otherwise he would have written for an extension. Four or five peons suffered from guinea-worm, also one duffadar, this man also came in for a good bout of fever, one duffadar was at the head-quarters of the Overseer acting as Gumasta for the whole year. The Overseer and clerks have been all right, with now and then slight attacks of fever. The feelings of the people I don't know much about, but this I know that, if the Reddy of a village sets a bad example (and I know several) by stealing timber, all the villages around take wood without a license on every possible occasion. From what I have been informed, we only get about half of the *bonâ fide* revenue, the remainder is taken off clandestinely; but to prevent this the number of peons and other subordinates required would be enormous, and the pay of Establishment and Working charges, etc., would leave little room for profit. I, therefore, recommend that ALL *canal bridges** be guarded; the village authorities† and other Government servants being ordered to check all bandies (when possible); also more stations are required to guard the numerous roads leading from the forests along which stolen wood is conveyed generally on moonlight nights. The working season generally commences from the end of November and work increases to middle of April, when it falls again until the middle of June or commencement of the monsoon, during the rains the receipts are very small. Another way that smuggling could be finally stopped would be to bring out a Forest Act, *this must be done*, or else the forests have very poor chances of being conserved in a thorough manner. When prosecutions are instituted the fines rarely exceed 5 Rupees, and in the case of imprisonment, two days; but this is optional, as the defendants are allowed to pay a fine. The only cases where they are not fined are those which come before the village Magistrates whose sentence by the bye is usually *two hours* imprisonment,‡ mind you, two hours!! How can it possibly be expected of us to hinder smuggling when *such* a sentence is passed, the prisoner naturally thinks it a grand lark, and of *course* will not renew his thieving propensities. Granted that *all* Government servants (within, say, twenty miles of the forests) are ordered to check bandies (especially the police, taliaries, and taluq peons); also obnoxious durkhasts are brought up; and, lastly, (but not least), that a Forest Act is brought out, then not only will smuggling be effectually done away with, but the receipts will rise, and conservancy will follow as a matter of course. Let the first 100 men I catch conveying away wood without a pass be sentenced to a month's imprisonment each, and see what an effect it will have on smuggling. The option of paying fines must be stopped if possible. The only ones who can stop smuggling at present are the Tahsildars and the village authorities whose villages are on unguarded Forest roads where no station is. The former by not being so lenient in their sentences and by ordering village authorities whose villages border on the forests to help us instead of assisting the smugglers. The latter by checking every bandy (free or tax) and confiscating *all* without license, and not releasing them on payment of a couple of annas, or so adding by the way "The Konda Dhora ordered us to pass bandies." The system of giving free passes to ryots I don't think works well, as a number of the ryots cut without a pass, and bring the "reserved" woods all mixed up with firewood, the favorite "reserved" timbers brought are Billoo, Chirimon, and Inamaddi. The fault lies as much with the village authorities as with the ryots if the wood is cut without a free pass, the village Magistrate says the ryots have not asked for a pass, while the ryots say they asked for one but were themselves asked for a present. That is to say the charge for a bandy of firewood is 4 Annas, but together with this the station village authorities take their little fee of 2 Annas to 4 Annas. The former (if not given) refuses to grant a free pass so the ryot either steals the firewood and risks confiscation, or goes without wood. The latter if the fee is not forthcoming refuses to pass the wood so the bandy is confiscated from being brought after time has expired. Another reason for my saying the free pass system works badly is, that the ryots will not have their bandies or passes checked at the station; consequently, if so inclined, they go to the forests several times on the same license on roads not leading to stations, and on the pass bring posts, bandy poles, etc., etc., and also bring *all* woods indiscriminately viz. Inamaddi, etc., etc. Several village authorities have told me that not one half of the firewood bandies have passes, and out of the ones that have passes, few come to the station for checking purposes. As instances take Wonalla, Yerraguntla and Valepanoor and other villages innumerable which have not come to my notice. Besides all take firewood free, (whether a ryot or not) and also wood for burnt houses, cultivation wood is useless for one who is not a ryot unless he takes it for sale. And what I say is that it is impossible to tell whether it is for a ryot or any one else. If the system works well why do so many firewood bandies have no licenses. The Government (are supposed to(?)) give the wood free, then why not take advantage of this privilege and have all bandies of firewood covered by *free* passes. At present at our stations we have Firewood Enter books, but as our stations are unfortunately far apart, I should recommend books for passing firewood bandies be given to all village authorities whose villages border on the Nallamalas, and which are on unguarded forest roads, and where stations are a very long distance from each other certain well chosen villages should be made stations for passing bandies of timber, bamboos, etc., the forest peon then would be ordered to inspect the station once a week to see that the Account books are kept up regularly daily, and have the bandies, and the amount of timber on each bandy correctly entered. Auction sales have been held in sixty-six villages, the particulars are as follows:—

		Rs.	A.	P.
Deputy Conservator	42	817	13	0
Overseer	19	365	6	11
Duffadars	5	21	14	0
Total ...	66	1,205	1	11

I am unable to compare the bandies on free passes of this and the previous year as the Accounts have not been received as yet. But should say the amount of cubic feet will be about 5,00,000, last year it was more than 3,50,000 for firewood bandies only. In some taluqs there are only a few bandies given, for instance Koilkuntla out of about ninety villages only three village authorities issued licenses. I ask, how did the others obtain their yearly supply of firewood? These three villages issued for the Yerramalas, and this accounts for the number of Koilkuntla Taluq villagers cutting without license in the Nallamalas, this is prohibited as they ought to obtain their supply from the Yerramalas. But the former being denser and better forests, it saves time and money to come to them for their firewood, with comparatively speaking no risk of confiscation; as the roads are so numerous that they are able either to go to or past the stations as it pleases them. I am sorry the Free Pass Accounts have not arrived, as I should have liked to have compared them in detail, but when they do come, I will forward them with a letter, in which I hope I shall be able to compare and explain them at some length in detail. I am herewith sending you an account of the amount and number of villages in which auction sales have been held, the amounts refer to the total sums realized, and not, only that credited to Government. The remainder due for auction sales was sold by the Tahsildars. Trusting that my report is of a proper length.

I have the honor to be,
Sir,
Your most obedient servant.

(Signed) E. H. BOILEAU,
Acting Conservator of Forests.

(True Copy.)

(Signed) J. HOPE,
Acting Collector.

* As all roads meet before the bridges have been reached.

† Of the villages close to the bridges.

‡ In the village chavadi.

No. 499.

North Arcot,
Collector's Circuit Office,
Palmanair, *26th September* 1874.

From

W. S. WHITESIDE, Esq.,
Collector of North Arcot,

To

J. GROSE, Esq.,
Secretary to the Board of Revenue, Madras,

Sir,—I have the honor to submit, herewith, a report on the administration of the Forests in this district for the official year 1873-74, received from Mr. Sheffield, the Deputy-Conservator of Forests.

2. The Forest Officer has visited the several forests and plantations under his charge several times during the year; the number of times he visited each being entered in Section I. of his report.

3. Up to the end of the past official year there were no reserved forests in this district, but one has since been formed, as the Board are aware, on the Tripatti Hill exclusive of the tract assigned to the Pagoda.

4. Of the two Railway fuel reserves—Mamandoor four square miles, and Amboor six square miles—the latter has, as the Board are already aware, been ordered by Government to be abandoned. The subject has since been submitted for the reconsideration of Government, and their final orders are awaited. There have been hitherto no receipts from the reserves, and the Deputy-Conservator says that some years must necessarily elapse before any can be expected.

5. The expenditure on these reserves during the year was Rupees 181-3-0 and Rupees 19-2-6, respectively, the total expenditure up to the year being Rupees 2,323-10-11 and Rupees 222-10-6. The small expenditure of Rupees 19-2-6, as just shown on the Amboor Reserve, was incurred in altering the situation of the boundary stones.

6. The number of railway fuel plantations in the district remains the same as in the preceding year, viz., nine inclusive of the experimental plantation at Ammundy. The plantation at Ammundy has, however, been extended. It now covers an area of about 160 acres, while in the preceding year it measured 60 acres only. The total extent of these plantations is now about 1,345 acres, and the number of trees in them, which are chiefly Casuarinas, may be reckoned in round numbers at 470,000.

7. The receipts during the year were Rupees 600, and the expenditure Rupees 5,568-4-4. There were scarcely any receipts from these plantations up to the preceding year, but the large sum of Rupees 25,897-1-11 has been spent on them up to date.

8. The total receipts from the forests in charge of the Deputy-Conservator of Forests amounted to Rupees 16,844-15-8. The greater portion of this amount, Rupees 13,341-5-6, was realized by the sale of timbers on the license system, while the amount realized by the sale of timber, &c., removed by Government Agency, amounted only to Rupees 2,178-8-0. The sale of forest produce realized Rupees 515-12-6, of confiscated timber Rupees 294-5-5, and of timber supplied to the Public Works Department Rupees 509-6-0. The miscellaneous receipts were Rupees 5-10-3.

9. The expenditure amounted to Rupees 18,179-2-11, of which Rupees 7,961-10-0 appertain to conservancy and working charges of establishment.

10. The value of timber on hand on the 31st March 1874 was Rupees 2,836-4-0, a sum which is Rupees 1,742-4-0 in excess of the value of timber on hand on 31st March 1873 according to present valuation. The balance therefore in favor of the North Arcot Forests is Rupees 408-0-9. The value of timber felled by Departmental Agency during the year was Rupees 2,987-8-0, and that sold to the Public and the Department of Public Works, Rupees 2,687-14-0.

11. The forests and jungles in this district would be in a more satisfactory footing were the recommendations contained in my letter of the 23rd July last, No. 386, sanctioned at an early date.

12. Mr. Sheffield, the Deputy-Conservator of Forests, is a very zealous and energetic officer, and my acknowledgments are due to him for the praiseworthy manner in which he conducted his duties during the year under review. I have also pleasure in mentioning very favorably the services rendered by Mr. Forester Newman during the year under review. He has done his work very well and deserves promotion.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) W. S. WHITESIDE,
Collector.

Enclosure 1.

Office of the Deputy Conservator of Forests,
North Arcot, Kurcumbadi, *9th April* 1874.

From

Mr. T. SHEFFIELD,
Deputy-Conservator of Forests, North Arcot,

To

W. S. WHITESIDE, Esq.,
Collector of North Arcot.

Sir,—I have the honor to submit the Administration Report on the North Arcot Forests for the year 1873-74.

SECTION I.

Inspection Tours of the Officer in charge.

I have been in charge the whole of the year and have inspected the Forests of Vellore, Poloor, and Chendragherry several times. I have monthly visited the whole of the plantations once and many twice; have inspected the Mamandoor Reserve seven times, and have visited the Palmanair Plantations five times, and Venkataghirikota Plantations twice on special duty for opening plantations at those places for the Jungle Conservancy Department, having been absent altogether from Head-quarters 180 days.

SECTION II.

Reserves.

A. Reserved Forests.—None strictly speaking, but we do all we can to restrict the felling as much as possible to the common timbers, leaving the reserved timbers for departmental felling and on license on special application; but I hope in a short time entirely to put a stop to the issue of licenses for the reserved woods.

B. Fuel Reserves.—Mamandoor Reserve.—I am glad to report that this reserve continues to improve, and will, I feel sure, give a good return in a few years for the money spent on it. The

young Red-wood still grows vigorously, and all the other trees show an equally favorable rate of growth. It is at present impossible to estimate the production per acre with any thing like accuracy on account of the unequally covered nature of the reserve, and I think we shall have to wait for felling to take place before we can know with certainty the yield.

Amboor Reserve.—We are still waiting the final orders of Government, before again starting work on this reserve. It is, as I have already reported, simply impossible to get a block of jungle, free of all private rights, in place of this which it is proposed to give up, because the villagers claim rights to pasturage, leaves, timber, &c.; for every piece of jungle in the district near the line has the same rights and privileges. We must therefore entirely give up all thoughts of a fuel reserve near Amboor, or take the block already demarcated.

There have been no receipts from the reserves during the year, nor has there been any since their formation, and some years must yet elapse before any can be expected.

The Statement below shows the area, cost, &c., of the Reserves :—

Name and Situation of the Reserve.	Year in which the Reserve was formed.	Area.	Charges. During the year.	Charges. Up to the year.	Receipts. During the year.	Receipts. Up to the year.
			RS. A. P.	RS. A. P.		
Mannadoor situated close to the Line from 90½ to 92¼ miles on the North West Line, 8 miles north of Tripatti Station ...	1871 July.	2,560	181 3 0	2,323 10 11	Nil.	Nil.
Amboor situated about 4 miles from, and South of, the Amboor Railway Station in the Vellore Taluq ...	1872 March. But work stopped shortly after by order of Government.	3,840	19 2 6	222 10 6	Nil.	Nil.

The small expenditure of Rupees 181-3-0 this year, compared with Rupees 654 spent last year, is owing to the fencing nurseries and other heavy works being completed last year; this year we only fire-traced the reserve and sowed seed in bare places by digging small holes and sowing four or five seeds in each.

The expenditure this year on the Amboor Reserve was incurred in altering the situation of the boundary stones. The previous expenditure in felling jungle to clear a line for the survey, purchase of demarcation stones, &c., but the jungle has grown again and should it be finally decided that the reserve is to be given to us, the work will have to be done over again.

C. Plantations.—The Statement below gives all necessary information regarding the area, description, and number of trees, charges and receipt of the plantations :—

Names of Plantations.	Year in which Plantation was formed.	Area.	Description of Trees.	Number of Trees.	Charges. During the year.	Charges. Up to the year.	Receipts. During the year.	Receipts. Up to the year.	Remarks.
					RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Trivellum ...	January 1868..	434-87	Casuarina ...	136,498	813 0 11	10,290 6 11	*353 2 0	353 2 0	* And Rupees 250 seed supplied to other plantations.
Veringipuram...	June 1870 ...	260-48	Do. ...	191,247	1,428 1 0	6,179 0 0	... ...	... .	Will be planted up to this season.
Thengal... ...	November 1872.	About 110	Do. ...	3,000	6 4 0	121 2 0	... ...	... ...	
Keelminnel ...	March 1873 ...	About 150	Do. ...	7,000	803 10 1	853 10 1	... ...	... ...	
Chaynoor ...	February 1871.	129-98	Acacia and Cassia of species and Casuarina.	81,000	1,450 7 6	3,874 7 6	... ...	... ...	Will be planted up this season.
Gazerlamundum.	July 1871 ...	44-67	Casuarina...	44,000	435 3 0	1,621 1 10	... ...	... ...	Is planted up.
Vannivedu ...	April 1873 ...	About 30	Do. ...	5,000	151 15 8	151 15 8	16 0 0	16 0 0	Will be planted up this season.
Ammundy ...	June 1873 ...	About 160	Do. ...	None.	†237 10 2	237 10 2	... ...	... ...	† Purchase of land, nursery, &c.
Ammerdy ...	September 1867.	25	Many kinds of indigenous and exotic trees.	11,000	162 0 0	2,617 11 9	... ...	... ...	Experimental plantation.

There will, I am afraid, be rather a heavy loss of plants on some of the plantations. We have had hardly any rain since October 1873, and now the hot dry weather is telling on the plants. It must be remembered that all about two of my plantations are in the old beds of rivers and the soil loose sand, and although the Casuarina thrives excellently on such land usually, the percentage of deaths in a bad season must be greater than with other trees on favorable land, *i.e.*, land of a closer nature that retains moisture longer. The Trivellum and Veringipuram Plantations are the only two that are suffering very much. In Trivellum there is a long strip varying from 100 to 20 yards wide running down the centre of the plantation, commencing near the Poiney Railway Bridge and ending where the Poiney and Palar rivers join, a distance of nearly two miles; this strip is where the flood-water of the Poiney broke in and swept 20,000 trees before it on 2nd May 1872; the upper soil which was then pretty good was also swept away, leaving exposed a nasty course shingle. This strip was replanted in July the same year, and was doing well up to this time; some of the plants now being 20 feet high, but from the nature of the soil a season like this tells with severity on the plants standing on it. While the other river has water, the strip, being only a little above the bed, has water sufficiently near the surface to supply the plants, but when water is not found within 2 or 3 feet of the surface in the bed of the river as at present, this strip becomes in a short time perfectly dry, not the least moisture can be detected at 4 and 5 feet from the surface. Watering by coolies is almost useless, as the water runs through this shingle as throuhg a sieve, leaving it in one hour as dry as it was before watering. It is in this piece that the trees are now dying in hundreds, about 5,000 are already dead, about the same number are nearly so, and nearly the whole are drooping and sickly; extra coolies have been put on to water the drooping and try to save as many as possible, to dig out the dead and prepare the land for fresh plants, and to cut up the wood for auction. The land can be replanted for about Rupees 500, but there is two years' dead loss. The remainder of the plantation is kept in very good order at the expense of about 20 women, beyond the usual number to water the plants. This is the first year there has been any receipt from the plantation, the actual money received was only Rupees 353-3-0 being from the sale of branch wood, the pruning of about 50 acres of trees which were pruned just sufficiently for a man to walk under them, but the plantation supplied 250 lbs. of seed, at Rupee 1 per lb., to my other plantations which ought to be counted to its credit.

The Veringipuram Plantation is filled with young plants under three years' old, and has suffered severely from the hot dry season; our establishment is not strong enough to water them more than once in twenty days, whereas they require water at least once a week in this weather, the consequence is a loss already of 19,000 plants, but to prevent any further loss I have put on a great number of coolies extra in anticipation of an extra grant being sanctioned.

The remainder of the plantations call for no remarks, they are all in a fairly satisfactory state.

SECTION III.

Forests worked under the License and Voucher system.

All our forests are opened to fell on license, except the fuel reserves; but we restrict the felling as much as possible to "junglewood," ourselves felling and selling as much of the reserved timbers as possible. It is now proposed entirely to do away with the issue of licenses for the reserved wood, but before this matter can be put on a satisfactory footing, it will be necessary to assimilate our reserved timbers with the reserved of surrounding districts, so that one may not be selling as junglewood what another sells as reserved timber. It would be well also that the Zemindars and other holders of private forests in the district should be requested, as far as possible, to introduce our rules and rates of seigniorage. As we have no forest worked entirely by departmental agency, I cannot compare the results of the two systems, but I think there cannot be any doubt as to which of the two is best. With the license system there is no expenditure beyond that incurred for the watching and preventive establishment, and all receipts in excess of the cost of the above is clear profit, but it is a ruinous system to the forests, and should be put down where possible. There is great waste of timber in the selection, the license holder often felling several trees before he meets with one to suit his purpose, leaves the unsuitable ones to rot in the forest, and takes away only the suitable one. There is great waste in the felling, the axe-man invariably laying the axe 3 or 4 feet from the crown of the roots and spreading the cut over a large surface, and great waste in squaring and cutting up the timber in the forests, therefore, I think that, although the immediate money profit is greater under the license system than under departmental felling, the latter is the cheapest and most economical in the end, seeing that the department would mark all trees to be felled after a careful consideration of the want of the depôt to be supplied, would utilize all felled, and might after a little time, if permanent employment could be found for the woodsmen, train them to cut with the saw, or if with the axe, would see it laid in close to the ground.

Statement showing the Collections under the License system.

Description of Timber, &c., removed under the License system.	Quantity.	Amount realized.
		Rs. A. P.
Reserved wood, bandy-loads	449	1,041 0 0
Junglewood, ,, ...	2,665	2,665 0 0
Do. head-loads	167	20 14 0
Firewood, bandy-loads, at 1 Rupee ...	1,450	1,450 0 0
Do. do. at 6 Annas ...	1,847	692 10 0
Do. head-loads, at 9 Pies... ...	379	17 12 3
Do. do. at 3 ,, ...	853	13 5 3
Charcoal, bandy-loads, at 1 Rupee ...	973	973 0 0
Do. head-loads, at 1 Anna ...	868	54 4 0
Bamboos, bandy-loads, at 8 ,, ...	9,214	4,607 0 0
Do. head-loads, at 1 ,, ...	3,624	226 8 0
Dying Bark, bandy-loads, at 1 Rupee..	190	190 0 0
Forest produce, fruit	...	515 12 6
Railway fuel, bandy-loads of 1,000 lbs.	...	1,390 0 0
Total...	...	13,857 2 0

SECTION IV.

Yield of Forests.

The subjoined statement shows the total yield of the forests under all heads.

Most of the wood, &c., taken free is taken without license under Rule 26 for the conservancy of the jungles of this district, published in the District Gazette of 22nd April 1871. Of all that passes my tannahs, a register is kept, but nearly all is taken by head-loads without passing the tannahs, and of this I can only give the probable amount taken after a careful consideration of the numbers to be supplied and the known wants of each.

These accounts relate only to the taluqs of Vellore, Poloor, and the half taluq of Chendragherry.

	Timber.				Firewood for Railway and other purposes.		Bamboos.		Dying Bark.	Charcoal.	Forest Produce.
	Departmentally.		On License	Free.	On License and Departmentally.	Free.	On License.	Free.			
	Cubic Feet.	Maunds.	Bandy Load.	Bandy Load.	Bandy Load.	Bandy Load.	Bandy Load.	Bandy Load.	Bandy Load.	Bandy Load.	
...	589½	304½	1,129	268	1,918	6,000	5,673	185½	51	311	Sale of Tamarind fruit, Rs. 515-12-6.
...	.....	.....	1,203	190	1,362	4,500	2,298	64	136	335	
...	.....	18,900	803	112½	1,466	1,000	1,696	18½	3	381	
...	589½	19,204½	3,135	570½	4,746	11,500	9,667	268	190	1,027	

SECTION V.

Financial Results

A.—Statement showing the Receipts and Disbursements for the year 1873-74.

Classifications.

Receipts.

I.—Sale of timber, etc., removed by Government agency
II.—Sale of timber removed on license ... ...
III.—Duty on foreign timber ... ...
IV.—Permit fees, etc. ... ...
V.—Grazing dues, etc. ... ...
VI.—Sale of fruits, Babool pods, etc. ... ...
VII.—Sale of confiscated timber ... ...
VIII.—Fines and forfeitures ... ...
IX.—Miscellaneous receipts ... ...
Value of timber supplied to Department Public Works

Total, Receipts

A.—Conservancy and Working Expenditure.

I.—Expenses for felling timber, etc. ... ...
II.—Purchase of tools, etc. ... ...
III.—Feed and keep of cattle, etc. ... ...
IV.—Rent of leased forests ... ...
V.—Charges connected with the collection of Forest produce
VI.—Plantations ... ...
VI.-A.—Forest Reserve ... ...
VII.—Forest work, viz., cutting of creepers, etc. ... ...
VIII.—Forest Survey ... ...
IX.—Experiments to test the value of timber ... ...
X.—Communications, etc. ... ...
Amount refunded into the Treasury ... ...
Miscellaneous charges ... ...

Total, Conservancy and Working

B.—Establishment.

I.—Salaries—
2. Pay of Executive Officer ... ...
3. Office Establishment ... ...
4. Forest Conservancy Establishment ... ...
5. Timber Depôt and Work Establishment ... ...
6. Deputation and Special Allowances ... ...
II.—Travelling Allowances—
2. Executive Officer ... ...
3. Subordinate Establishment ... ...
Gumastah and Peons ... ...
III.—Contingencies—
Office Postage ... ...
5. Sundries ... ...
Fees paid to Monigars for checking licenses

Classifications.	Amount.		
	Rs. A. P.	Rs. A. P.	Rs. A. P.
Balance of timber in depôt on 31st March 1873	1,384 12 0	.....	
Deduct difference in value on timber being re-valued according to the order of Collector in his letter, dated 28th October 1873, No. 969...	290 12 0		
		1,094 0 0	
Add timber felled in 1873-74		2,987 8 0	
Total ...		.....	4,081 8 0
Deduct timber sold in 1873-74, being the depôt rate not the rate realized		.....	1,245 4 0
Balance of timber on hand on 31st March 1874		.....	*2,836 4 0
* Particulars of the balance of timber on hand and valuation—			
21,730 Maunds of Redwood roots, valued at Annas 2 per maund		2,716 4 0	
240 Bandies of Casuarina wood, valued at Annas 8 per bandy		120 0 0	
Increase in stock...		.....	1,742 4 0
Financial results, balance in favor of the North Arcot Forests		.....	408 0 9

B.—Statement showing in detail the Timber felled in the North Arcot Forests during the year 1873-74.

Division of Range.	Description of Timber and other Forest produce.	No. of Cubic Feet.	No. of Maunds.	Rate of Valuation per Cubic Foot.	Rate of Valuation per Maund.	Total Valuation.
1	2	3	4	5	6	7
				Rs. A. P.	Rs. A. P.	Rs. A. P.
Kurcumbadi..	Redwood roots	...	18,900	.....	0 2 0	2,362 8 0
Vellore ...	Sandalwood	...	304½	.....	1 0 0	304 8 0
Do. ...	Yellama beams	126	...	0 10 0	.....	78 12 0
Do. ...	Do. poles	20	...	1 0 0	.....	20 0 0
Do. ...	Casuarina poles and wood	443½	Bandy loads.	0 8 0	per bandy load.	221 12 0
					Total ...	2,987 8 0

C.—Statement of Timber, etc, sold from the Depôts of the North Arcot Forests during the year 1873-74.

Name of Depôt.	Description of Timber or other Forest produce; Number of Cubic feet or Maunds sold, and Rate of Valuation per Cubic Foot or Maund.	Total Valuation.	Total Amount actually realized.	Difference between Columns 3 and 4.	Explanation of difference.
1	2	3	4	5	6
		Rs. A. P.	Rs. A. P.	Rs. A. P.	
Kurcumbadi..	306 Maunds of Redwood roots	38 4 0	51 0 0	12 12 0	
Do. ...	530 Cubic feet of Redwood posts	530 0 0	631 5 0	101 5 0	
Vellore ...	304½ Maunds of Sandalwood	304 8 0	1,153 2 6	848 10 6	
Do. ...	257½ Cubic feet of Mango beams ...	172 0 0	321 14 0	149 14 0	
Do. ...	6 Cubic feet of Yellama beams	3 12 0	8 0 0	4 4 0	
Do. ...	120 do. do....	75 0 0	150 0 0	75 0 0	
Do. ...	20 do. of Yellama poles	20 0 0	31 10 6	11 10 6	
Do. ...	136 Bandy-loads of Casuarina wood ...	68 0 0	151 15 0	83 15 0	
Do. ...	67½ do. do. ...	33 12 0	188 15 0	155 3 0	
	Total...	1,245 4 0	2,687 14 0	... ...	
Total showing aggregate Increase...		... ...	... ...	1,442 10 0	

D.—Statement containing the Particulars of the Stock in hand at the commencement and close of the Official Year 1873-74.

Description of Timber or Forest produce.	Number of Cubic Feet.	Number of Maunds.	Rate per Cubic Foot or Maund.	Total Valuation.
1	2	3	4	5
			Rs. A. P.	Rs. A. P.
Redwood roots	...	3,136	0 2 0	*392 0 0
Do. posts	530	...	1 0 0	530 0 0
Mango beams	257½	...	0 10 8 12/15	172 0 0
Total...	787½	3,136	...	1,094 0 0
Add total valuation of Timber and forest produce felled during the year as per Column 7, Statement B.				2,987 8 0
Total...				4,081 8 0
Deduct total valuation of Timber, etc., sold during the year as per Column 3, Statement C.				1,245 4 0
Compare remainder with total under Column 5...				2,836 4 0

* Original valuation, Annas 3-5 1/16 7/16 per Maund, revalued at Annas 2 by order of Collector in his letter, No. 969, dated 28th October 1873.

General Remarks.—The revenue, although Rupees 3,000 less than last year, is still satisfactory. The falling off of nearly Rupees 3,000 in the receipts for Railway fuel is not to be regretted, for the forests wanted rest. There are, compared with last year, Rupees 3,000 less from sale of depôt timber which I could not get sale for this year. Tenders for the Redwood were invited several times, and the wood was put up at public auction, but there were no bidders at the auction, and the offers by tender were too low to accept; the highest offer was only Rupees 12-8-0 per ton, at the same time the London sales were quoted at £6-15-0 a ton. I fully believe we should find a better sale for our Redwood if we took it to Madras and disposed of it there by auction or tender; the plan might, at any rate, be tried, and, if found not to answer, abandoned.

Smuggling of timber and wood is still very prevalent, although, perhaps, not to quite such an extent as formerly. There has been sixty-eight persons prosecuted for smuggling during the year, and twenty-four of that number convicted, but most of the people detected with smuggled wood have not been prosecuted for want of sufficient evidence, in these cases we merely confiscate the wood found with them.

The health of the establishment has been moderately good. I am the only one who has been seriously ill, most of us have had fever occasionally, but are all in good health now.

The Foresters and the Duffadar in charge of Chendragherry Forests have given every satisfaction in the discharge of their duties. The Office Writer and Gumastah, the Duffadars, Pygust, and Peons have also given satisfaction.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) T. SHEFFIELD,
Deputy Conservator of Forests, North Arcot.

COLLECTOR'S OFFICE, CUDDALORE,
6th August 1874.

From

No. 407.

J. H. GARSTIN, ESQ.,
Collector of South Arcot,

To

J. GROSE, ESQ.,
Secretary to the Board of Revenue, Madras.

SIR,—I have the honor to submit the Forest Administration Report of this district for 1873-74, received from the Deputy-Conservator only on the 1st instant, with the nine statements which accompanied it.

2. The report contains a detailed account of the forest operations of the year, and as it seems to me unnecessary to enter into a recapitulation of those details, I confine my observations to the general results of the year.

3. The total receipts from forests amounted to Rupees 5,615-3-1, including the value (Rupees 66-2-3) of timber supplied to Public Works Department, which, under existing orders, is not recovered in cash, but which nevertheless should, I think, be treated as a receipt by the Forest Department. The receipts of the year under review exceed the estimate by Rupees 615. The increase occurred chiefly in Item 2, and in Miscellaneous Receipts.

4. Of the total expenditure, a sum of Rupees 3,622-14-6 only was for conservancy and working charges, and Rupees 6,421-6-9 for the salaries of the Deputy-Conservator and his establishment and office contingencies. The expenditure under both heads was within the sanctioned grant for the year as shown in the margin.

	Sanctioned grant. Rs.	Actual expenditure. Rs.
Conservancy and Working.....	3,700	3 623
Establishment etc.....	6,560	6,421

SECTION II.

5. *A. Of the Deputy-Conservator's Report.*—The operations of the Forest Department during the year consisted in felling and conveying to the timber depôts 1,089 cubic feet of reserved timbers from the various jungles of the district, under the conservancy of that department, valued at Rupees 624, besides the removal of 920 cubic feet of timber, valued at Rupees 84, from the Chengum to the Trinomallay Depôt, also in the collection of 16½ths maunds of gall-nuts and other minor forest produce. These results are by no means satisfactory, but more would doubtless have been done had it not been for the severity of the fever season and the illness and death of the forester and the difficulty of supplying his place quickly and efficiently.

SECTION II.

6. *B.* The chief operations in the nine Imperial fuel-reserves in the Trinomallay and Tindivanum Taluqs consisted in fencing the boundaries of some of the reserves near Gingee. In the three local reserves, the boundary of some 3,000 acres has been surveyed. A detailed account of each is given by the Deputy-Conservator in Section II.-B of his report.

SECTION II.

7. *C. Plantations.*—Under this head, the Deputy-Conservator treats of Imperial and Local Jungle Conservancy plantations. The latter should have been reserved for his Jungle Conservancy Report. Nothing of importance seems to have been done during the year in the three Imperial plantations, which are small and merely experimental.

SECTION III.

8. The quantity of timber, reserved and unreserved, removed from the forests under licenses was 31,499 cubic feet, on which a seigniorage of Rupees 1,710 was collected. The seigniorage collected on bamboos was also an important item of receipt; Rupees 1,065 having been collected on 1,420 bandy-loads. These items, together with the seigniorage collected for minor forest produce such as Avaram Bark, etc., raise the total receipts from seigniorage to Rupees 3,880.

OFFICE OF DEPUTY-CONSERVATOR OF FORESTS,
CUDDALORE, 1*st August* 1874.

From

H. L. WOOLDRIDGE, ESQ.,
Deputy-Conservator of Forests,

To

J. H. GARSTIN, ESQ.,
Collector and Conservator of South Arcot.

SIR,—I have the honor to submit the annual report of the South Arcot Forests for the year 1873-74, with the usual Statements A. to G., and the two forms specified in Revenue Board's Proceedings, No. 133 of 27th January 1874 (giving particulars of reserves and plantations) attached.

SECTION I.

(*b.*) *Inspection Tours of the Deputy-Conservator.*—During the year, I proceeded on nine occasions on tours of inspection of works and jungles lying beyond the Cuddalore (head-quarters) Taluq; these inspections occupied 143 days, and the following list will show to what operations the time was given. The Chengum Reserves and Hill-forests were visited on three occasions. Trinomallay and jungles around on four occasions. Kullacurchy Taluq Jungles and the Jungle Conservancy Plantations on channels and tanks once; Gingee Reserves five times, Tindevanum and jungles on three occasions. The Trivanellore (including the Anicut Plantation) Plantations and Trikalore Taluq Jungles on six occasions. Gungavarum Reserve twice. Villapooram Reserve twice, and the Mercanum Jungle Conservancy Plantations and Reserves twice. The Cuddalore Taluq Plantations and Reserve being close to head-quarters (the farthest plantation being about eight miles distant) were visited regularly when I was at head-quarters; the principal plantation upwards of forty times, and others in proportion. The Inspector of Forests visited the district once in the year, the Acting Collector inspected the most important Jungle Conservancy Plantations (lately commenced) several times, and the Collector since his return has inspected the Mercanum and Cuddalore Plantations. The towns and principal villages passed through on the first inspection tour undertaken were Punrooty, Trivanellore, Trikalore, Muttetoor, Gingee, Tindevanum and Pondicherry; on the second, Tindevanum Gingee, Trinomallay, Chengum, Trikalore and Villapooram; on the third, Punrooty, Oolundoorpet, Thiagadroog, Ellavansoor, Kullacurchy, Kutchiroyapolliem, Shunkrapooram and Chinna-Salem; on the fourth, Trivanellore, Trikalore and Trinomallay; on the fifth, Pondicherry, Mercanum, and Alathoor; on the sixth, Gingee, Trinomallay, Chengum, Trikalore, Vettavalum, Trivanellore and Punrooty; on the seventh, Kullenchavady and Kuringipady; on the eighth, Pondicherry, Mercanum, Alathoor, Moonoor, and Bramadasem; on the nineth, Mylum, Tindevanum, Gingee, Anathoor, Trivanellore, Trikalore, Trinomallay, Chengum Pachell, Gingee, and Vanoor.

SECTION II.

Reserves.

A. Reserved Forests.—Properly speaking up to date no forests have been specially formed into a reserve, but I have already proposed three hills with their forests to be so classed. These are, the Thanemallay, the Cavatymallay, and the Trinomallay. The greater part of the Thanemallay (generally included with the Javadi hills) is in the Salem District, but is distinctly separated from the Javadimalley by the valley of the "Cheyar," and cannot well be worked or conserved from the Tripatoor side; the slopes are new, and have been, since conservancy was introduced to this district, worked and conserved by the South Arcot establishment. The River Cheyar above named runs past Chengum Depôt. The large fuel reserve (Moodanai) stretching along the southern and eastern base of this hill is a great protection to it, and the plateau is well worth some attention being bestowed on it, being rich in young Sandal and Teak trees. Fire has been excluded at some trouble from the entire hill, if I except the southernmost spurs which unfortunately were fired so late as March this year, and when the Inspector of Forest was at Chengum.

The Cavatymallay is within eight miles of the cusbah of the taluq and has a fair amount of timber on it, principally young Nummai Trees (*Conocarpus latifolia*), which class of wood is much valued in this district for building purposes; this forest has been closed to felling, though not yet properly formed into a reserve, and no fire occurred this season.

The third named is the sacred hill immediately under which the town of Trinomallay lies. The north and eastern slopes of this hill are thinly scattered over with Satin, Blackwood, and Vengai; but on the southern and western slopes these trees are more numerous, and it is this portion which it is proposed to make a forest reserve of. The situation is most appropriate, abutting as it does on the township itself; its western boundary would extend about three miles along the Chengum Road. The young Vengai and Blackwood Trees have been carefully looked after during the year under report by the peons, assisted occasionally by a watchman. The expenditure for it was Rupees 20-5-8, which has been entered under Forest Improvement. In last year, the expenditure under this heading was Rupees 87-9-6. The usual cutting away of creepers from the young forest trees throughout the rest of the range has not been carried on to the same extent in this year, as no allotment existed.

The rest of the forests are open to license felling for white or third-class junglewood only, and for bamboos; all the first and second-class kinds are reserved for departmental felling, and the operations in this way during the year were 200 trees felled, mostly Maruthey, Vengai, Acha, Karungali and Nummai. These were worked up into 323 logs, containing about cubic feet 1,090; felling and bringing these logs out of the forest cost Rupees 213-7-9; carting them to depôts Rupees 201-10-0; some 16 maunds of Kaduka (*Terminalia Chebula*) nuts were collected from the slopes above the Moodanai Reserve at an expenditure of Rupees 5-1-0; 215 logs of old stock principally "Nummai" were transferred from Chengum to Trinomallay at a cost of Rupees 79-8-0, as better rates could be realized for that class of timber in the latter town. I propose in future to send all the Chengum timber to Trinomallay. The cost of the depôt establishment was Rupees 218-8-8. The amount realized by depôt timber sold to the public in this year was Rupees 932-14-7; 68⅜ths cubic feet were supplied to Public Works Department for Rupees 66-2-3 (the market rates for the classes of wood taken). The balance of Kaduka nuts remaining in hand of last year's stock with the small quantity newly collected were sold for Rupees 141-4-0, or at 100 per cent. beyond cost. The old stock of firewood was sold at 18 Rupees below its original valuation as it was deteriorating; this fuel would have sold well enough had the town not been supplied by free fuel which, by the rules in force, people are allowed to bring in, in head-loads free of charge or license. Besides the above, a sum of Rupees 38-15-4 was credited to forest timber sales account in this year, being the sum realized by sale of sixteen logs of Nummai so late in March 1873, as did not admit of its being credited in its proper year.

The departmental felling and sale transactions on the whole show by Statement D. a decrease of value of stock in the year of Rupees 337-1-6; notwithstanding the sales show an aggregate profit of Rupees 152-4-9 above valuations; the latter item would have been much higher had there been no old stock (too highly valued by the former method) to get rid off. Little remains however now of this old stock; only sixty-seven logs in fact, and it may be affirmed that the ensuing year's operations will show better results. The smallness of the departmental felling operations is to be accounted for by the severity of the fever season and the illness of the forester, K. Ramier, who had to take sick leave in June 1873, but died before its expiry. The post was then held temporarily for a little over two months by Colundavaloo Chetty, a reserve Pygust in North Arcot Range, till the present incumbent, Kader Hossein Sahib, took charge. He, though being comparatively untrained to forest operations, at once pushed on felling operations, but too late in the season for much results. It would tend much to the benefit of this range if a second or sub-forester was allowed for it.

The receipts by depôt sales of timber and other forest produce in the year, as per Statement C., is Rupees 1,197-10-2 less than the receipts for similar items last year, which was Rupees 1,342-6-5, by Rupees 144-12-3, to be explained by there being no felling for the first six months in the year. The expenditure on timber operations and departmental collections of minor produce has been Rupees 718-3-5 in last year, the same item was Rupees 558-6-8; but 276 feet of timber more than in last year were brought out in this, and 920 feet were moved twenty miles nearer to market. On the other hand, only sixteen maunds of produce were collected this year against 147 maunds in last year.

The expenditure on experiments in this year, under which heading I have placed the collection of specimens of wood, dyes, and gums of the district has been Rupees 29-8-0; in last year nothing (6 Annas only).

SECTION II.

B, Fuel Reserves.—Of these there are twelve in the district under the charge of the forest officer. Four in Trinomallay Taluq of old standing, hitherto supported by Imperial Funds. Five in Gingee Division, Tindevanum Taluq, also supported to date by Imperial Funds. One nearer the coast in same taluq by Local Funds, and one in Villapooram Taluq also supported by Local Funds, and one in Cuddalore Taluq also "Local." The whole area is roughly estimated to be a little over 48,000 acres. None have been surveyed. At Villapooram Reserve a survey was commenced with Local Funds in February 1874, but not completed yet, as amount of funds available did not admit of further expenditure. A large portion of the sum estimated for working charges for the reserves for 1874-75 is for the survey and permanent demarcation of them, which is found to be very necessary. It has been proposed to give up one of the five reserves in Trinomallay Taluq (the Annandavady) from the commencement of 1874-75. As the jungle is not required for local nor suited for railway fuel, there has been no expenditure on it to date.

The accompanying statement shows the area, charges, and receipts for each reserve up to 31st March 1874. I have considered it best to enter the local fuel-reserves, *i. e.*, those supported by Local Funds in this statement with those supported by Imperial Funds, as their classification is not yet finally decided, and it will show the extent of reserve operations carried on in this district under the forest officer.

To take them in detail: *Oratthoor Reserve*, situated five miles northwest of Villapooram, is purposed to supply purely local demands, that is, fuel for town of Villapooram and villages near; the jungle was taken over in November 1873, and the cost of it has been borne by Local Funds. It is under the charge of a Maistry who is assisted by two rangers or watchers. It is a promising jungle but in detached blocks, much indented by strips of cultivation with a very lengthy and irregular boundary. The better portions will be enclosed and planted up if funds admit. The rest it is proposed to apportion among the twenty-two villages within whose limit it is situate.

The *Capper Mully Reserve*, situated ten miles southwest of Cuddalore (Town), is similarly destined for village and town supply; there has been no cost on it. There is a large block of dense scrub estimated to be about 500 cawnies, of which only thirty are to be enclosed as an experiment to note the rapidity of natural growth. A large extent of open waste, upwards of sixteen square miles, extends beyond the 500 cawnies of jungle above noted. This waste was formerly all jungle. The demand for firewood on the coast-lying villages has denuded this tract. The people have been in the habit of grubbing up the roots for fuel as well as cutting the bushes, consequently natural reproduction will never take place; but as the soil is tolerable throughout, it would probably be worth "reboisement." *Acacia* sown broadcast after plouging up the land would, I believe, succeed.

Alathoor Reserve, situated four miles from the sea-coast near Mercanum taken up in August 1873, is also proposed to supply village wants (the expenditure on it has been borne by Local Funds). It is under the charge of one watcher, who is under the supervision of the Mercanum Jungle Conservancy Plantation Maistry. The jungle is thick and large, principally "Kachan," large Tamarind, Karungali, Satinwood, Tooringee, and Nagai Trees occur in it. The soil is good, red or dark colored, and water plentiful. As these three are supported by Local Funds, and as a full detail of the work carried on is given in my annual report on the Jungle Conservancy operations under me, I have only alluded to them briefly in this report.

I now come to the reserves supported by Imperial Funds.

Mootacadoo—One of the Gingee Railway Fuel Reserves. Supplemental planting was commenced in 1871, boundary finally settled in 1872, neither fenced nor surveyed and only roughly demarcated; the chief work carried on during the year under report was upkeep of planting of 1872, replacing casualties that occurred, keeping up the nurseries, fencing off with bush and thorns patches of jungle to aid natural reproduction, clearing creepers, etc., from young jungle trees, pruning plantation trees, collecting seeds, keeping out fire, preventing cattle doing more damage than need be, repairing and strengthening bunds around natural hollows to store rain-water, cutting catch-drains to lead the water to them, and dibbling in seeds in the moister spots. On this reserve, there is one stream which runs for six months in the year. Amongst the 33,467 trees existing on 31st March 1873 of those planted in pits during monsoons of 1871 and 1872. On this reserve, 6,951 casualties occurred in the year (it frequently happened that one pit had to be planted again and again before the plant was finally established), 6,851 were replaced with plants of a different description. The kinds most planted in this reserve are *C. florida*, *A. speciosa*, *A. leucophlœa*, *A. amara*, *Melia Azadirachta*, *Azadirachta Indica*, *Prosopis spicigera*, *Strychnos Potatorum*, *Eugenia Jambolana*, *Tamarindus Indicus*: *A. Arabica*, *A. sundra*, *A. odoratissima*, *Casuarina equestifolia*, *Inga dulcis*, *Sapindus emarginatus*, *Pongamia glabra*, *Odina wodier*, *Feronia elephantum*, *Bassia longifolia* in lesser quantity. Some branches of *Thespesia populnea* and a few *Chloroxylon*, *Hardwickia*, *Dalbergia* and *Terminalia* as an experiment. The greatest percentage of casualties occurred among the Nym (*Azadirachta Indica*) Munney Poongen (*Sapindus emarginatus*), Nagai (*Eugenia Jambolana*), Valum (*Acacia Arabica*), and Karungali (*Acacia sundra*); but the failures in the last two sorts were caused by their being nursery plants with very long tap-roots which had to be cut short when planted out, and I find that seed sown broadcast in land scratched over with a mamooty or plough or dibbled in at short distances apart is best for this class of tree. One hundred and seventy-five pits remaining open of those dug in previous years were planted with Katvalai (*A. speciosa*). No more were put down as all the available funds were wanted for upkeep of old work. The bamboo seed dibbled in last year has grown well in many places, and thirty-five measures of Tamarind seed which have been dibbled in throughout the reserve this year are thriving to date; 1,807 young saplings have been cleared out; 1,316 yards of bush-fencing were put up. Two new blocks enclosed for planting up next season, and the rest of the natural jungle carefully attended to. During the last eight months, the deadwood has been cleared out from the living jungle by woodcutters under supervision of one of the reserve establishment.

The cost of these operations was Rupees 511-5-11, viz., supervision (Maistry), Rupees 76-5-0; up-keep, Rupees 424-13-11; fencing, Rupees 8-10-0; planting, Rupees 1-9-0; but Rupees 615-13-2 was the expenditure by accounts to be explained by arrears of wages due for 1872-73 being paid in the year 1873-74. The expenditure by accounts for this reserve for the former year was Rupees 544-6-4. The total number of trees existing on 31st March 1874, of those planted in pits (at 4×4, 6×6 and 8×8 feet apart) in the different years was 34,642. The incurred cost of the operations up to same date was Rupees 1,711-4-6; this will be slightly more than that apparent by accounts rendered, as they do not take in March's wages.

The receipts from this reserve by sale of deadwood, bark, dyes, honey, and wax have been Rupees 331-2-2 for the year ending March 1874, and in the former year was Rupees 8-5-0 (viz., from Tamarind Rupees 2-12-0, and confiscation Rupees 5-9-0). The revenue derived this year was obtained as follows:—

		Net proceeds.		
		RS.	A.	P.
	2,160 maunds of bark...	40	8	0
	19 lbs. and 28 lbs. of honey and wax, respectively	12	9	11
	1,24½ maunds of Tamarind fruit and 22 maunds of dyeroot	3	14	3
	439 bandy-loads of deadwood (firewood)	259	14	0
Confiscations.	21½ bandy-loads of firewood, 44 maunds of bark and 1 bandy-load of mixed timber...	17	4	0
	Total ...	334	2	2

Siroovady—Railway Fuel Reserve lying northwest of the former and nearly adjoining it. The land was taken over in 1872, and supplemental planting commenced same year. A very compact piece of jungle, open to the plain on its northern side for about half mile, hemmed in by rocky hills everywhere else, two large tanks in it, bunds of both breached many years ago, not repaired since, no running stream in it, the boundaries of this reserve were settled in 1872, but it is neither fenced nor has it been surveyed; the chief work carried on during the year was upkeep of the planting of 1872, replacing the casualties, etc., as in Mootacadoo, but not to the same extent. Among the 10,983 trees existing on the 31st March 1873 of those planted in pits, in the former season, 3,662 casualties occurred in this year, 2,697 were replaced with Koné and Katvalai. The first of these, commonly termed "mile koné" from its frequency as an avenue tree along the district roads, I find the best kind to plant for nurses to the permanent growth; Katvalai is also a rapid-growing tree and much valued both as fuel and timber by the people. The sorts attempted in this reserve were originally Koné of sorts, Casuarina, Katvalai, Nagai, Soundel, and Vemboo; the greatest percentage of failures occurred in the Casuarina and Vemboo. The jungle is full of young Parambai Trees grown from self-sown seed; 771 pits remaining open of those dug in former years were planted with Katvalai (*A. speciosa*); further planting was stopped for the same cause as mentioned before for Mootacadoo Reserve; nine measures of Tamarind seeds were dibbled in, in suitable spots; 1,221 sapplings, chiefly Parambai (*A. spicegera*) were cleared out; 2,287 yards of double bush-fencing were raised along a bullock track for about $\frac{3}{4}$ths of a mile, and the ends returned to preserve the jungle at this edge of the reserve from damage by cattle which are allowed to be pastured within it and which always enter by this road; the natural jungle was well attended to here also. The cost of these operations was Rupees 253-10-10 divided as follows: for supervision (Maistry) Rupees 62-5-0; up-keep, Rupees 168-13-10; fencing, Rupees 16-4-0; planting, Rupees 6-4-0. The expenditure by the accounts rendered was Rupees 314-0-1. The excess caused by arrears of former year. The expenditure by accounts rendered for the former year was Rupees 327-10-9. The total number of trees existing on 31st March 1874 of those planted in pits (at eight feet apart), was 10,789. The incurred cost of operations from commencement up to same date was Rupees 660-9-10.

Cottamangalum—for Railway Fuel—lying adjoining to and north of Mootacadoo and to the east of Siroovady was formed in 1869; it then consisted of two reserves; it is a straggling piece of jungle, about four miles long, with a good deal of putta and maniem land partly cultivated partly jungle, of the same growth as the reserve along its eastern and western limits, making a very irregular boundary. The boundaries, indeed, on this side are still in course of settlement relative to the maniem lands within what was the original line of demarcation. It has not been surveyed or fenced, nor is it closed to grazing, goats even being admitted to the outskirts of the reserve. This is consequent upon the line of boundary not being permanently settled, and, therefore, unknown to the herdsmen and even to the Conservancy Establishment in some places. There are several small tanks and masonry reservoirs in this reserve. No running stream, but irrigation channels from the Shankarabarany River run close past the northern edge of this, and similarly to the Siroovady Reserve. This River rises in the Pakkum Hills and runs by Gingee Bungalow; it is more generally known by the name of the Gingee River. Supplemental planting in the openings of the jungle was commenced in 1872; the chief work on this reserve was upkeep of last year's planting, such as replacing the casualites, watering, staking, shading, keeping the young trees free of creepers and to a single head. Collecting and dibbling in seed, twenty-eight measures of Tamarind seed were so treated; fencing the bandy-tract through the planted land leading to Mailcherry Village from Shany Colum, the wood depôt of Mootacadoo Reserve on the Gingee-Trinomallay Road, and special watching entailed by cattle, goats, and sheep grazing within the limits as above stated. Among the 8,534 trees established in pits (at eight feet apart every way) in the openings of the natural jungle, on the 31st March 1873, 4,296 casualties occurred during the year; of these, 2,723 were replaced. The cause of so many casualties here was, I imagine, weakly trees in nursery, they having been reared in too much shade, in too rich a soil compared with the rest of the reserve, forced by too much watering, water being (rather unfortunately in this case) plentiful close to the nursery. Up to the end of February 1872, the planting looked vigorous and healthy. After that the hot season killed them off rapidly; the nursery ground and system of rearing has been changed here; the supplies are not doing very well, though nearly all Katvalai; this *Acacia* with *Cassia florida* doing best of all that have been tried. Some extra expenditure should be incurred for watering the plantations in this reserve on account of the gritty nature of the soil. No pits were newly dug, and only eighty-nine young trees put out in pits remaining from last year's work; 2,530 trees of last year's planting, which required support, were staked and tried. From 882 young jungle trees, the undergrowth and creepers were cleared away; 1,515 yards of bush-fencing raised, half-mile of roadway cut out, and a drain sixty yards in length cut (four feet greatest depth) to lead the rain-water draining from the Mailcherry Hill to a large old stone-built reservoir, before dry, now from this little work containing water during the hot season. The cost of these and general conservancy operations was Rupees 208-12-0, divided as follows: Rupees 52-7-5 for supervision; Rupees 147-0-7 for upkeep; Rupees 8-4-0 for fencing; 1 Rupee for planting. The expenditure by the accounts rendered was Rupees 243-13-6. The expenditure by accounts in former year was Rupees 184-7-4.

The total number of trees established in pits in the plantations on this reserve on 31st March 1874 was 7,050.

The incurred cost of operations from commencement to the same date, Rupees 445-2-10. The Maistry and Head Gardener of this reserve were dismissed for careless work during the year.

These foregoing three reserves form the northern division of Gingee Reserves.

Padepallum—Railway Fuel situated south of Mootacadoo and stretching some way into the plain country towards Villapooram was formed in 1869; the natural jungle is of a larger description than any of the three former, and being at a lower elevation is wetter; springs, swamps and ponds existing in many places; the block is much cut up by both wet and dry cultivation; it is the nearest of any of the reserves to the line of the railway. The planting operations which were commenced in 1872 have not proved so successful as at Mootacadoo or Siroovady. I attribute this to bad supervision by the Maistry (whom I found it necessary to dismiss later) quite as much as to want of water; not that the wells dried up, but because sufficient funds for upkeep were not available. The expenditure was almost entirely for upkeep of young trees planted; the works carried out in doing this were replacing casualties, watering, staking, fencing, keeping creepers down, collecting seed, and keeping channels to reservoirs open. Among the 11,373 trees existing in pits on 31st March 1873, 4,668 casualties occurred during the year. Of these, 2,818 were replaced with Koné and Katvalai in equal quantities. Casualties occurred most in Casuarina, which sort evidently won't answer in this land at all; too much cost being necessary for watering them; the supplies were put in rather late in the season and were not over-vigorous at the close of the year; 171 young Koné trees were planted out in last year's open pits, 2,359 trees of 1872 planting were staked, 788 yards of bush-fencing set, eighty yards of ditching cut to drain a piece of nursery land, and 1,915 trees cleared around, principally Velvalum and Nym, and nine measures of Tamarind seed were dibbled in, in different places in the reserve. The cost of these operations and conserving the natural jungles was Rupees 227-5-11 divided thus: for supervision, Rupees 58-8-0; for upkeep, Rupees 162-0-11; for fencing, Rupees 5-4-0; for planting, Rupees 1-9-0. The expenditure for this year by accounts rendered was Rupees 265-3-10, the difference caused by three months' arrears of last year's wages being paid in this. The expenditure by accounts for former year was Rupees 459-4-2.

The total number of trees remaining established in pits on 31st March 1874 was 9,694. The incurred cost of operations from commencement to same date was Rupees 838-14-6.

Periamoor—A Railway Reserve is situated westward of Padepallum Reserve, and extending to the base of the Pakkum Hills and to the so-called "Gungavarum" Reserve on the west and south sides, respectively; this is the largest reserve of the group, and is subject (so far as I can

for conservancy establishment engaged in protecting from fire, felling and trespass, Rupees 82-9-0; for upkeep, Rupees 53-7-6; and Rupees 6-8-0 for fencing. The expenditure by accounts was Rupees 218-6-9; arrears of 1872-73 being paid in and included in this year's returns; the expenditure for former year by accounts was Rupees 220-2-2. The total number of trees remaining (of those planted in pits) at the close of the year 1873-74 was 1,560 only. The total incurred cost on this reserve from commencement of work to 31st March 1874 was Rupees 451-8-11. There were no receipts in this year.

Chinnasamudrum—In classification exactly similar to Moodanai; soil more gravelly, not so much running water, but possessing a large stone-built reservoir called Ahmanney Colum, in which water was never known to dry up till it happened in the year under report, lies northwest of Chengum Depôt, six miles close to the base of the Javadi Hills; boundary was finally settled in 1872; it had been fenced with a broad ditch and embankment for four miles of boundary in 1871, at a cost, including demarcation, of Rupees 881-3-5, which was paid from Local Funds; this is the single item of cost on these so-called local reserves paid from Local Funds. A conservancy establishment of one Maistry has been entertained from November 1871, and a little planting was undertaken along one mile of the ditch boundary; the chief work during this year was upkeep, improvement, and protection of natural jungle as in Moodanai. Of the 14,942 plants remaining (in pits in the "Ahmanney Colum" section) on 31st March 1873, 6,300 casualties occurred; seventy Jack Trees were planted out in a fresh bit of land; 430 yards of sectional fencing raised, and about same quantity of field-fencing repaired. The cost of operations was Rupees 164-9-7, divided as follows: supervision and protection of jungle from fire and damage by felling, etc., Rupees 72; for upkeep of plantation, Rupees 88-7-11; for fencing, Rupees 4-1-8. The expenditure by accounts rendered was Rupees 295-8-5, difference caused by arrears of 1872-73 being paid in and charged in the accounts of 1873-74. The receipts during the year amounted to Rupees 6-14-0 derived from 440 maunds of Avarum Bark collected under contract. No receipts in former years. The expenditure by accounts for 1872-73 was Rupees 295-8-5. The total number of trees remaining in pits at close of 1873-74 was 8,710. The total cost of reserve, including demarcating and fencing operations, from commencement to 31st March 1874 was Rupees 1,630-2-4.

Peringalathoor—Classed with the two foregoing, situated in Trinomallay Taluq about eighteen miles southwest of the cusbah close to the Checkady (northern branch of the Kullacurchy Hills) Hills and near the boundary of Kullacurchy Taluq and Cooramba Gounden's Jaghire. The reserve boundary was finally settled in 1872; one watchman on 5 Rupees a-month was temporarily placed late in the same year to check the felling of Satinwood sapplings specially, and for general conservancy. Since that time no expenditure for planting has been incurred; but a watchman was entertained during the most urgent months of this year to protect the jungle from fire and felling, and the cost of this was Rupees 33-4-8. The expenditure by accounts was however Rupees 38-4-8, owing to wages of watchman for March 1873 being brought into them. The expenditure for former year was Rupees 5-4-0, and the total cost of the reserve from formation to 31st March 1874 was Rupees 48-8-8. No planting carried on, and no receipts accruing from.

Annandavady.—For this reserve the boundary was settled in the same year as the above, but from its position it is not needed for the supply of local demands for fuel, and from the nature of the jungle will never be fit for railway fuel; soil is very stony and poor and excessively dry, not a drop of water is to be found anywhere in it during eight months of the year. Satinwood and Karungali is the principal growth. There have been no charges on it. It lies south of the Chengum-Singarapet Road on the confines of the district about ten miles from Chengum; there is much jungle surrounding it, and I have recommended its being given up as a reserve from the commencement of 1874-75. The establishment entertained at the close of the year for the conservancy of the above three reserves (excluding Annandavady) in Trinomallay Taluq was one Maistry at 6 Rupees, two Rangers at 5 Rupees each, one Ranger at 4 Rupees, and two Gardeners at 4 Rupees each. The *Acacia* trees grown from seed sown in 1871 were nearly sixteen feet high in March; the plantations on them have not had a fair trial from scarcity of funds for upkeep, and are not in good order; the natural jungle has greatly improved.

SECTION II.

C. Plantations.—Of this class of work there existed only three supported from Imperial Funds.

1. The experimental plantation adjoining Chengum Timber-yard in which twenty-eight kinds of trees, forest, jungle and avenue, have been planted to observe their growth and to teach the forest subordinates the work of a plantation; it was formed in 1871. Of the 2,380 trees established on 31st March 1873, 550 casualties occurred; all were replaced; 860 new trees planted out, the nursery kept up, the fencing around the land was repaired for a length of 435 yards; most of the trees are healthy and the bamboo seed (Central Province) sown in 1872 has grown pretty well; the cost was Rupees 61-14-11, viz., Rupees 2-12-1 for fencing; Rupees 59-2-10 for upkeep. The expenditure by accounts was Rupees 82-13-3, and for the former year Rupees 159-8-9. Total of trees established on 31st March 1874 was 3,240. Total incurred cost from commencement to same date was Rupees 345-10-1; there is waste land adjoining suitable for extension of this experimental plantation.

2. The trees planted around the timber yard at Trinomallay in 1871, shade of some sort being requisite for the timber which was sometimes brought in only partially seasoned. Of the 246 trees established on 31st March 1873, ten casualties occurred and were again replaced; the well was deepened this year at a cost of Rupees 5-5-0. The expenditure this year by accounts was Rupees 10-3-6, for former year Rupees 17-2-0. Total of incurred cost from commencement to 31st March 1874 was Rupees 42-4-0. The few trees in this planting are very healthy and fine.

3. The small plantation at Chengum Anicut, three miles from the depôt, in extent thirteen acres, extending both sides of the river, for the most part good, red soil, and on which 2,160 Casuarina were planted in 1872; but owing to want of funds these were not kept up well, and of the 1,860 remaining on the 31st March 1873, only 600 remained at the close of the official year 1873-74; the fencing was kept in repair and the naturally-grown trees protected from damage by villagers or cattle; the cost of this work was Rupees 29-15-0; for fencing, Rupees 1-9-4; upkeep, Rupees 28-5-8 by one Gardener. The expenditure by accounts was Rupees 52-7-6 caused by arrears of 1872-73; in the former year it was Rupees 19-10-0. The total incurred cost from commencement to 31st March 1874 was Rupees 81-12-9. The land is worth retaining for a plantation of Pooarasoo (*Thespesia populnea*), though from last year's drought, and the want of funds combined, but few Casuarina trees remain, and those even not vigorous.

Besides these three petty plantations supported, as above stated, by Imperial (Forest) Funds, there are in this district, under the charge of the forest officer, thirteen fuel plantations of large size, thirty-six miles of channels and tank-bund, planting which were formed with, and are now supported entirely by Jungle Conservancy or Local Funds, and much of the forest officer's time and attention having been given to these operations, it may be as well here to mention briefly the results obtained and cost of them during the year; the detail of planting operations carried on with the Local Funds placed at my disposal by the Collector of the district is given in my Jungle Conservancy Report for 1873-74; 3,661½ acres of plantation land and 7,987 acres of jungle for reserves were taken over; nine new plantations were commenced, thirteen blocks containing 3,865 acres were surveyed and mapped, and one jungle reserve, partially so; the boundary line of this reserve was most intricate, as it was formed of many semi-detached blocks in twenty-two villages, and it took two months to survey 3,009½ acres of it with a length of fifty-seven miles of boundary.

There were 143,094 trees of all ages remaining on 31st March 1873 (after deducting 1,424 trees thinned out from the older Jungle Conservancy plantation prior to that date). Of this total,

109,760 were trees planted in the year 1872 ; and among these, during the year under report, 14,063 casualties took place, which were again planted up. From the older trees, 431 were thinned out and sold, 175,721 trees were planted out in new plantations and in extension of old ones, 12,226 old trees were taken under charge which were formerly under the Salt Department and Public Works, 12,000 trees were reclaimed from jungle growth and prickly-pears.

Of the new planting, about 4,000 Katvalai Trees were washed away or buried in the mud by a fresh down the river Pooniar late in October 1873, but were replanted later when water went down ; 2,309 occurred in another part of the same plantation (near Pooniar Anicut), but from the opposite cause, viz , the hot dry weather experienced early in October 1873, and these were replaced again. In the Kanarambut Plantation a good many casualties occurred by the same flood which kept the low-lying land so wet, the roots of the trees rotted away; these were all replaced as soon as weather permitted ; all the rest of the planting was very successful, scarcely one per cent. occurring ; the plantings of 1872 had to be kept up by hand-watering, and being weakly trees, had, after every gale, to be supported by stakes and ties ; 5,000 stakes were supplied from Cuddalore Plantation, and many more were obtained from the Gingee Hill-jungles ; nineteen new nurseries were formed, four of the old nurseries kept up, some six miles of fencing (exclusive of nursery fencing) of sorts made, withy bound, bush-fencing, plain thorns, or ditch and embankment. Four cawnies of land sown with Valum seed, 107 new wells (water holes) dug ; fifty-nine of the former year's wells kept in repair ; some of which had to be deepened considerably ; 44,387 pits were dug and earthed ready for planting of 1874 in addition to those planted up in 1873, and the following temporary buildings raised ; nine watchmen's and Maistrys' huts, one Plantation Manager's Office hut. There was also one wood-shed and timber-yard opened in Munjacoopum. One ferry-boat built ; half-mile of plantation road gravelled to a width of eight feet ; 863 yards of bund, two yards wide at top and four feet high, raised ; slopes turfed, and ground adjoining planted with Nanal grass.

The expenditure on the Jungle Conservancy Reserves and planting operations in the year by accounts rendered was Rupees 15,955-15-2 ; for former year was Rupees 5,233-15-1 ; the amount realized by sales of wood, nursery plants, etc., from Jungle Conservancy plantations during the year was Rupees 532-13-9. In the former year was Rupees 128-8-1.

The total number of trees established on 31st March 1874 in pits at distances of 8×8 feet and 12′×12′ for plantations, and twenty-four feet for channels and tank-bunds, were 342,610 including the 12,000 young trees reclaimed from prickly-pear and thorny jungle on channels and tanks in the year. These three and-a-half lacs are mostly Casuarina, with Katvalai, Valum, and other quick-growing jungle trees grown in much smaller quantity in those corners of ground more specially suited for them than for Casuarina. The seven cawnies of Valum grown from seed dibbled in are not included in these figures ; nor are the 60,000 Palmyra nuts which were planted around sections and boundaries of Mullatar Plantations.

The actual incurred cost of the above Jungle Conservancy operations in the year was Rupees 19,962-12-5, divided as follows : supervision by Managers, Maistries and Watchman, Rupees 2,298-2-5 ; upkeep, Rupees 14,250-3-6 ; felling and transport to Market, Rupees 329-11-3 ; fencing, Rupees 153-14-6 ; planting, Rupees 2,085-12-7 ; survey and demarcation, Rupees 411-9-0 ; tools, repairs to and extra petty charges, Rupees 433-7-2. This last includes cost of building ferry and repairs to large Government boat purchased by the Collector for plantation use.

The allotment for the year was Rupees 18,358 ; the difference between the charges incurred and the charges audited by accounts (Rupees 15,955-15-2) is to be explained by Rupees 2,420-9-8 of the allotment remaining undrawn under instructions from the Collector at close of the year, and the accounts for wages due for March 1874 (as in usual course) not being drawn up till the beginning of April, and thereby becoming a charge on the new year's allotment.

SECTION III.

Forests worked under License and Voucher System.—The Receipts for the year from seigniorage on licenses were Rupees 3,880-2-6, in last year they were Rupees 2,686-4-6 ; in 1871-72, they were Rupees 3,033-13-0. The increase is attributed to fewer free passes being granted and stricter conservancy of the open forests. The budget estimate for this item of receipts was Rupees 3,350, the regular estimate Rupees 3,000. There were no disbursements from working charges for the collection of this revenue. The establishment of peons entertained for checking the removals from forests on licenses or otherwise, being all permanent servants and paid from allotment for B. Salaries of establishment.

Results of License Removals.—As an entirely different class of wood is removed by licensed fellers or woodcutters than brought out by departmental agency, these cannot be well compared with the departmental felling ; but there is scarcely any doubt that the system of licensed felling pays better than departmental felling for the first few years before the forests get exhausted as they must do, if, as is now the rule, there is no restriction to the quantity of passes issued. In some districts where the system is still in force, every kind of tree is permitted to be felled at the pleasure of the license-holder. In this district, only jungle or white-wood, the inferior classes of timber in fact, are allowed to be felled by the public ; but it would be better in the end, I think, if this half and half-sort of system was stopped, and no licenses except for firewood and Avarum Bark (*Cassia Auriculata*) issued, and people required to purchase from the Government timber-yards junglewood and bamboos as they now do logs of the better classes of timber ; but it would be essentially requisite for the adjoining ranges to be worked on the same plan ; great difficulty is now and ever has been experienced in preventing parties cutting down 1st and 2nd-class trees in South Arcot Jungles under protection of licenses obtained in the next district. The articles of forest produce from which the seigniorage of Rupees 3,880-2-6 were realised are—1,557 bandy-loads of junglewood, eighteen bandy-loads of Satinwood (1st-class wood allowed to be felled on head-load permits for agricultural purposes only), 815 bandy-loads of Avarum Bark (much used in tanneries), thirteen bandy-loads of Velvalum Bark used in distilleries, about 231 bandy-loads of fuel (fifty of which was charcoal-burnt in the jungle and removed by basket or head-loads), and 1,673 bandy-loads of bamboos. The seigniorage derived from the fuel (including charcoal) removed in the year on licenses was Rupees 208-4-0, the value (at seigniorage rates) of the 218 bandy-loads of firewood removed on free passes in the year was Rupees 208-10-0, together the quantity thus removed would not be sufficient for more than ninety ordinary families for the year ; and as it is the custom to allow head-loads of junglewood or deadwood to be taken away free without pass or hindrance whatever, it is obvious free passes for fuel are not necessary and may be done away with, without distressing the people, and that the 1-Rupee rate of seigniorage on fuel, lately the subject of orders by the Government, however much it might have been felt by a few conscientious parties who considered it right to obtain passes before proceeding to fell firewood, could not have effected the body of the inhabitants of Trinomallay Taluq in the slightest degree. I am in a position to state that the free head-loads of firewood brought into the cusba town of Trinomallay are equal to seven bandy-loads of wood per diem or say three tons of fuel ; and I estimate the removals of fuel from the village jungles of the taluqs under Forest Conservancy for home consumption to be equal to 47,267 bandy-loads per annum, exclusive of fuel for the manufacture of iron, indigo, sugar, and arrack, etc. The seigniorage derived on the thirteen bandy-loads of Velvalum (*A. leucophlæa*) Bark removed on license does not show a tithe part of the actual removals from the Government jungles; the consumption of this bark in the distilleries in this district amounts to quite 500 bandy-loads per annum, and owing to the facility with which it can be obtained from the Trikalore, Villapooram, Kullacurchy and Virdachellum Taluqs without payment of the seigniorage of Rupees 2-8-0 per load placed on it in taluqs under Forest Conservancy and the good price it realizes, both tree* and the bark is becoming scarce in those taluqs not conserved. The remedy lies in bringing all taluqs under Conservancy Rules and enforcing the rules (whether

* Acacia leucophlæa.

forest or local it does not much matter) by the aid of other officials than village authorities. One of the new Jungle Conservancy Plantations (Valoor Plantation) has been commenced with the object of growing Velvalum for meeting in a small way the demand for this bark, as it is feared, unless conservancy is enforced, the natural jungles will not supply this article much longer. I included Kullacurchy with taluqs where this bark was brought from without payment of seigniorage, as the Subordinate Forest Conservancy establishment is not strong enough to allow of men being placed to guard the Government jungles in it; and owing to this and to their proximity to the Poligar's jungles, much produce is removed without payment of the seigniorage fees.

SECTION IV.

Yield of Forests.—The total yield in round numbers in the year was 34,975 cubic feet of timber, 1,699 bandy-loads of bamboos, 35,512½ maunds of minor produce, including 2,702½ maunds from reserves, and 413 tons of fuel, including 195 tons of deadwood from fuel reserves which was collected by contract under departmental supervision and sold at Pondicherry. In last year the yield was 21,944 cubic feet of timber, about three-fifths of the quantity removed and checked this year; 1,468 bandy-load of bamboos, about one-eighth less than this year; 375 tons of fuel (no deadwood or other fuel was sold from Gingee Fuel Reserves last year); 34,518 maunds of minor produce. In the two last items there has also been some increase. The above figures include the known removals by registers of confiscations, departmental fellings, free pass removals removed on licenses and tickets, collections of deadwood, etc., from Gingee Reserves. The removals of fuel by head-loads free without license or hindrance from village jungles, compared with which the registered removals do not amount to a hundredth part, and which are estimated to be over 20,000 tons for the annual home supply of the two taluqs under Conservancy, are not included.

SECTION V.

Financial Results.—The financial results for the year compared with the former years are improved, inasmuch as (Rupees 5,609-7-3) the receipts from the forests, including the value of timber supplied to Public Works Department, are proportionally greater for the expenditure (which was Rupees 2,017-5-6, excluding charges for plantations and reserves, the Executive Officer and his office establishment's pay and allowances, and office contingencies) by 61 per cent. than were receipts (Rupees 4,100-0-9) for last year in comparison to the outlay (Rupees 1,889-9-9, the charges for reserves, etc., being excluded in the same manner). The receipts from forests deducting revenue from reserves, Rupees 341-0-2 for the year, are quite 261 per cent. greater than the outlay on timber operations including the subordinate conservancy establishment; and it would appear from this the range is being worked at a considerable profit even taking into account the decrease in value of timber in hand at close of this year compared with that in hand at close of last year; though, if the total of receipts (*plus* value of timber supplied to Department Public Works) is compared with the total expenditure on both working charges and establishments, it shows a balance against the forests of Rupees 4,429-2-2 for the year. I do not include the charges for reserves and plantations when instituting a comparison between receipts and charges, as they are an extraordinary charge (not a forest operation) which will not become remunerative till some years have elapsed, and if the large expenditure on them is debited entirely to the forests, it would swamp them at once. In the same way the attention of the Forest Officer being given to Jungle Conservancy and Imperial Fuel Reserves and Plantations equally with Forest Conservancy and timber operations, it would not be fair to debit the forests with his whole salary and allowances.

The allotment for working charges was Rupees 3,700; there remained Rupees 77-1-6 unexpended at the close of the year, as contemplated timber operations were not fully carried out, owing to sickness of the establishment and changes of employés, and in consequence only about half of the allotment was expended. Considerable arrears on reserves of the former year had to be cleared off from this year's allotment, and a loan (Rupees 275) from Local Funds for reserves had also to be refunded (in July 1873); this brought the Rupees 2,000 (too little originally for the Gingee Reserves alone) very short, and the expenditure exceeded the allotment by Rupees 544-9-5. The available balance from timber operations and a portion of the allotment (Rupees 100) for communications being devoted to reserves, as their upkeep was essentially necessary. The proposal for their transfer to local works made in the former year was not accepted, and the whole charges on them were borne by Imperial Funds. On timber expenses in this year, Rupees 713 were expended against Rupees 509 in the former year. A few tools comprising ripping and cross-cut saws, axes, morticing chisels and augurs were purchased for Rupees 35 to facilitate felling and dragging operations. A small expenditure of Rupees 20-5-8 was incurred on forest improvement. In last year this charge amounted to Rupees 87-9-2, and a further sum of Rupees 29½ was expended on the collection of specimens of the indigenous forest trees; 6 Annas was the charge on this head last year. A few maunds of minor produce were collected departmentally at a cost of Rupees 5-1-0. The departmental collections under this head were of more importance in the former year and the charge was Rupees 49-1-0. On reserves and plantations this year, Rupees 2,544-9-5 were expended. In last year, Rupees 2,791-13-11. The incurred cost differs from these totals; it is given in detail in Section II.-B. of this report. A small return was obtained from reserves by clearing out and selling the deadwood by contract; this work could be extended with advantage were more funds provided.

SECTION VI.

General Remarks.—The item of Rupees 10 credited to fines was the sum deposited as security for fulfilment of a felling agreement which lapsed to Government. A sum of Rupees 129-8-11 was credited to forests under heading of Confiscations, while Rupees 171-9-2 was the sum actually paid into Treasury; but the difference, Rupees 42-0-3, was by oversight credited to Miscellaneous Receipts and observed too late to rectify. In the budget estimate, Rupees 150 was entered as receipts for confiscation; this was reduced to Rupees 100 in the regular estimate. In last year, the receipts credited under this head were Rupees 80-7-2; the increased receipts do not of necessity show an increase of smuggling, but rather that more cases were detected or brought to the notice of the department, though it is to be feared the late order prohibiting prosecutions by the Forest Department without previous sanction of the Collector will tend to the increase of smuggling from immediate action on detections or arrests not being possible. The number of forest offences detected in the year was forty-one. Of these, thirty-one were decided departmentally by confiscation of the timber, etc., felled in breach of rules; nine cases were prosecuted before the subordinate magistracy, and one case of cattle trespass was punished by the exclusion of the herd of cattle from the reserve for one month, and by pounding of some of the cattle. Of the nine cases prosecuted, six were for mischief (one of these by firing jungle), and three for theft. The result was two dismissals and seven convictions. In one case, the first defendant in it appealed to higher court when the original sentence (a fine of 35 Rupees) was annulled, and the fine levied ordered to be refunded; nineteen persons were prosecuted, five of whom were discharged; of the rest, the longest term of imprisonment was one month simple, the heaviest fine (excluding the fine of Rupees 35 remitted) was 10 Rupees. The total of fines levied amounted to Rupees 54½. One felling-contractor's agreement was cancelled for bad conduct and acting in disregard to conditions laid down. Another wood-contractor was prosecuted for an attempt at smuggling.

The health of the establishment was bad during the first-half of the year. The forester, K. Ramiah, was unable to do his duty owing to fever, which hung about him, till at last in June he had to take sick leave, but his death occurred in the second month of leave. A Pygust from the North Arcot Range was given the acting appointment temporarily, but he could not do much more than protect the forests and jungles from smuggling, not being acquainted with felling operations or the hill forests of this district. He was very energetic however in prosecuting smuggling, and has been since appointed Jungle Conservancy Manager of Plantations which was more in his line. A Magisterial Clerk was appointed forester on the 16th August 1873 from the Collector's Office, who, though a very intelligent person, was comparatively untrained and requir-

ed time before he could carry on the operations contemplated earlier in the year. When there is one forester only in a range, his sickness will always curtail timber operations sadly. The number of servants who obtained sick leave were five ; the aggregate of sick leave granted was 9 months and 25 days ; other leave 10 months and 15 days. The punishments inflicted were as follows: one Pygust was reduced to grade of Peon ; one Peon suspended for two months ; one Head Maistry suspended for two months ; one Reserve Maistry dismissed ; one Reserve Ranger dismissed ; two Peons' resignation accepted ; and the establishment fines for the year (temporary establishment also included) amounted to Rupees 31-11-0. Promotions and appointments, etc., were two Peons newly appointed ; one promoted from lower to senior grade ; one Pygust appointed ; one Peon transferred to be Depôt Gumastah ; two Head-quarter Office Clerks were appointed substantive *pro tem.* in lieu of the permanent incumbents who were transferred with Collector's approval to the Jungle Conservancy operations ; one as Manager of plantations, the other as Jungle Conservancy Clerk in my office, pending an increase of pay being sanctioned for Clerks.

The free felling on passes has been checked pretty effectively this year ; the issue of free passes having been trifling when compared with former years. One Peon having been told off to do this special duty. The free passes are printed in triplicate with the intention that one should be given to the party, one be immediately sent to the Forester's Office, and one be retained in the issuing or Tahsildar's Office ; and if this plan was carried out, the Forest Department would have no difficulty, provided the conservancy establishment was moderately strong to check the free felling. Some improvements in the administration were effected ; amongst them were, deputing one Peon for special duty, withdrawing the Peons (permanent establishment) from Kullacurchy Tannahs and placing them in charge of forests, altering the system of timber-felling which formerly was carried on through contractors, and now is by woodcutters engaged by the department and paid for their day's work under supervision of one or more of the conservancy establishment, and the hire of carts for transport upon agreement between the forester and the villagers direct instead of between a contractor and villagers. The results are shown by the better class of wood and larger logs that are brought to market ; better classification of logs after arrival to depôt ; the restriction of charcoal-burning to certain jungles ; the inclusion of more timber trees into the reserved list ; the slightly improved supervision of jungles and forests generally ; but the establishment is far too weak to patrol these as they ought to.

Fire has not occurred in three out of the four tracts of heavy forests in the Trinomallay Taluq. Free passes for firewood as before stated are scarcely requisite, except for special cases of destruction by fire, as, without taking into consideration the reduced rate of seigniorage now levied for a bandy-load, the privilege of removing head-loads free suffices for the household and agricultural wants of villagers (the comparison between the licensed removals and the free removals on head-loads instituted earlier in the report prove this), and free passes for fuel for manufacturing purposes should not be given, as the ryots invariably take the wood to mill-owners and manufacturers on a large scale, who make it their business, instead of manufacturing themselves.

The people now seem to look upon the Forest and Jungle Conservancy as a thing to be ; and I have heard of no complaints against the department or its working that have stood the test of investigation. Cattle-owners and graziers are the worst grumblers, and, though goats should be excluded entirely from young forests or reserves, yet as cattle themselves, I feel certain do not commit one-quarter the damage imputed to them, they might be admitted in times of scarcity of pasturage to all but the young plantations, if the herdsmen be bound under heavy penalties to keep to the rules laid down for their observance. Some instances of claims by Inamdars and Puttadars to land in Gingee Reserves occurred ; these were settled by giving up the land when it adjoined the boundaries and by giving other land in compensation when the land claimed lay well within the reserve. The Gingee Reserves and all others require to be surveyed and mapped, and boundaries distinctly marked ; it was contemplated to begin this necessary work with the year 1874-75. Owing to the unhealthiness of the Chengum Jungles, the Checkady Forests were most

worked this year, and the forester held his office mostly in Trinomallay. This town is more suited to be the forester's head-quarters than Chengumma, and, as there is no building of any sort in the depôt, it is contemplated to erect a store-shed and office combined, and extend the depôt by purchasing a small building-lot adjoining its southern wall. The pay of the two Forest Office Clerks (12 Rupees per month each) is very low, and the G. O. of 27th May 1873, enabling Clerks to draw batta when travelling with the forest officer, was felt to be a great boon.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) H. L. WOOLDRIDGE,
Deputy-Conservator.

TRICHINOPOLY COLLECTOR'S OFFICE,
22nd September 1874.

No. 234.

From

J. B. PENNINGTON, ESQ.,
Acting Collector and Conservator of Forests.

To

J. GROSE, ESQ.,
Secretary to the Board of Revenue.

SIR,—I have the honor to report on the administration of the Forest Conservancy in this district for the Official year 1873-74.

2. The detailed report and its accompaniments furnished by the Assistant Conservator are herewith, forwarded, and I shall here confine myself to noticing the principal features of the administration.

3. The receipts of the year amounted to Rupees 1,179 against the Budget Estimate of Rupees 8,000 and actual collections last year amounting to Rupees 489.

4. The annexed abstract gives the particulars :—

Items.	CURRENT YEAR'S RECEIPTS AS COMPARED WITH THE BUDGET ALLOTMENT.				CURRENT YEAR'S RECEIPTS AS COMPARED WITH THOSE OF THE PRECEDING YEAR.			
	Budget Allotment.	Receipts.	Increase.	Decrease.	Last year.	Current year.	Increase.	Decrease.
I. Sale of Timber and Sandalwood brought to Depôt, by Government Agency	6,000	...	...	6,000	...	...	...	...
II. Sale of Timber, Firewood, Bamboos and Charcoal removed from the Forests by purchasers including seigniorage	...	1,079	1,079	...	394	1,079	685	...
VI. Sale of Fruits, Babool pods, and other minor Forest produce...	...	9	9	...	21	9	...	12
IX. Miscellaneous receipts, value of timber supplied to Public Works Department	2,000	91	...	1,909	74	91	17	...
Total ...	8,000	1,179	1,088	7,909	489	1,179	702	12

5. At the time of the preparation of the Budget, the sum of Rupees 8,000 seems to have been roughly calculated upon from the sale proceeds of the clearings of Forest lands, but land not having been taken up to the extent expected, the actual collections fell considerably short of the estimates.

6. Compared with the figures given in the Statement that accompanied the Board's Proceedings, Forest No. 4, dated the 27th January last, the receipts and charges as particularized in the report forwarded with my letter No. 94, dated the 28th May 1873, differ as shown below, and I have not been able to trace the cause of the difference, but I have, in comparing the results of the year

under report with those of the year immediately preceding it, deemed it expedient to adopt the figures as given in the Assistant Conservator's report forwarded with my letter No. 94.

Receipts of 1872-73.			Charges of 1872-73.		
Items.	As per Board's Proceedings.	As per Assistant Conservator's Report.	Items.	As per Board's Proceedings.	As per Assistant Conservator's Report.
				Rs.	Rs
Sale of Timber and Firewood, etc.	573	394	Conservancy and Working Timber expenses for felling	10	10
Sale of Fruits, etc., etc. ...	32	21	Purchase of Cattle, etc. ...	25	88
Miscellaneous Receipts ...	68	74	Plantations	8,360	8,607
			Commissions and Buildings Amount refunded into the Treasury	177 28	30 ...
			Total ...	8,600	8,735
			Establishment.		
			Executive Officers	4,147	4,105
			Office Establishment ...	540	540
			Travelling allowances of Executive Officers	*2,571	1,360
			Do. of Subordinate Establishment...	135	135
			Sundries	90	66
Total ...	673	489	Total ...	7,483	6,206

7. The Forest Revenue of the year amounted to Rupees 2,021, of which Rupees 1,179 was realized during the year, and Rupees 480 has since been collected. There is still an outstanding balance of Rupees 362, and this sum will shortly be recovered. The annexed abstract gives the particulars.

Names.	Collected in 1873-74.	Collected up to date.	Balance outstanding.	Total.	Remarks.
Elamanore...	107	52	.....	159	
Kulitalai	6	20	.....	26	
Lalapettei	679	36	351*	1,066	* Due by the Railway Company.
Chithalavai	139	64	.....	203	
Sekkanam	225	308	.....	533	
Kutlai	20	.....	11†	31	† Will shortly be recovered.
Refund	3	.....	.....	3	
Total ...	1,179	480	362	2,021	

8. The expenditure on works amounted to Rupees 6,769 falling short of the Budget Allotment by Rupees 1,233 and of the last year's expenditure by Rupees 1,967. This is partly accounted for by the fact that the original Budget allotment was only Rupees 6,000, and the Supplemental allotment of Rupees 2,000 came too late to be economically utilized.

9. The annexed abstract gives the particulars of expenditure :—

Items.	Current Year's Expenditure as compared with the Budget Allotment.				Current Year's Expenditure as compared with that of the preceding year.			
	Budget Allotment.	Expenditure.	Increase.	Decrease.	Last Year.	Current Year.	Increase.	Decrease.
	Rs	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
I. Timber expenses for felling, cutting, clearing, sawing, and the transport of Engine firewood by land or water to Depôt, also charges for storing, securing, watching, felling, and arrangements for selling, etc.	...	276	276	...	10	276	266	...
II. Purchase of Elephants, Cattle, Dead stock, Tools and Plants ...	1,000	121	...	879	89	121	32	...
VI. Plantation	6,000	6,356	354	...	8,607	6,356	...	2,251
X. Communication, Building and minor works, Fences, Boundary pillars and posts, and boundary paths...	1,000	16	...	984	30	16	...	14
Total ...	8,000	6,769	630	1,863	8,736	6,769	298	2,265

10. The cost of plantations exceeded the Budget provision by Rupees 354, and this excess was met from the savings under the allotments mentioned in the margin, which have not been fully utilized during the year.

For the purchase of cattle and dead stock, etc.	276
For communication, buildings, and minor works, etc	78

11. The Forest Reserves and Plantations in this district were as follows :—

1. Lalapetei (Reserve.)
2. Tenemalai (Reserve.)
3. Elamanore.
4. Kulitalei.
5. Chithalavai.
6. Kutlai.
* 7. Sekkanam.

12. The income derived from each plantation and the expenditure incurred thereon, are exhibited in the annexed comparative abstract.

Names.	Receipts.		Expenditure.		Remarks.
	1872-73.	1873-74.	1872-73.	1873-74.	
	Rs.	Rs.	Rs.	Rs.	
Lalapetei	.....	1,067	842	740	
Tenemalai	.....	.....	539	90	
Elamanore	341	159	2,401	1,654	
Kulitalai	138	26	1,745	1,456	
Chithalavai	10	203	1,032	1,339	
Kutlai	.....	31	1,094	884	
Sekkanam	.....	532	.....	.....	
Refund	.....	3	.....	.....	
Total ...	489	2,021*	7,653	6,163	* Including the outstanding sum of Rupees 841.
			1,082	606	Pay, etc., of Overseer, Writer, and Peon.
			8,735	6,769	

* This was taken up during the yea.

13. The operations connected with each plantation are fully detailed in Mr. Hadfield's report, and the work executed consisted chiefly in clearing brushwood and prickly-pear, extending and improving plantations and nurseries, sinking new wells and repairing old ones, digging pits and planting, weeding and pruning plants, fencing, re-placing casualties, watering plants, collecting seeds, and felling trees.

14. The annexed comparative abstract shows the expenditure incurred on account of the Forest Establishment in this district.

Items.	Current Year's Expenditure as compared with the Budget Allotment.				Current Year's Expenditure as compared with that of the preceding year.			
	Budget Allotment.	Expenditure.	Increase.	Decrease.	Last year.	Current year.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
2. Pay of Executive Officer	3,000	1,753	...	1,247	4,105	1,753	...	2,352
3. Do. of Office Establishment ...	288	...	...	288	...	...	...	...
4. Do. of Forest Conservancy Establishment	3,720	...	...	3,720	540	...	...	540
2. Travelling allowance of Executive Officer...	1,800	1,201	...	599	1,360	1,201	...	159
3. Do. of Subordinate Establishment	540	...	...	540	135	...	...	135
1. Stationery...	...	1	1	...	...	1	1	...
2. Office-rent, Carriages of tents, and Office Records	...	14	14	...	...	14	14	...
4. Sundries	252	27	...	225	66	27	...	39
Total ...	9,600	2,996	15	6,619	6,206	2,996	15	3,225

15. There were no cases of theft in the tracts under the Forest Conservancy administration, and the list sent in with my letter to Government, No. 11, dated 17th April 1874, was of what are called "Poramboke thefts" or thefts of trees from Government waste land not specially reserved for Forest operations.

16. I have visited the plantation from time to time, but kept no memo. of the number of visits paid.

17. "Permit Fees," "Removal of Fuel Free of Payment," and the "License System," adverted to in paragraphs 17, 25 and 27 of the Board's Proceedings, Forest No. 4, above quoted, have no application to the Forest Department, etc., in this district, all our jungles away from the lines of Railway being under Jungle Conservancy Rules and reported on separately.

Enclosure No. 1.

Elamanore, 30*th April* 1874.

ANNUAL REPORT.

From

G. HADFIELD, Esq.,
Assistant Conservator of Forests.

To

J. B. PENNINGTON, Esq.
Acting Assistant Collector and Conservator of Forests.

I have the honor to submit the Annual Administration Report for the Trichinopoly Plantations with the usual Accounts accompanying for the official year 1873-74.

(*b.*) Inspection tours of Range Officers.

I took charge of the district on the 29th May 1873 and was absent from Head-quarters on inspection for a period of eight months. During my stay at Head-quarters, the Elamanore Plantation, and during the former period, the other four plantations of Kulitalai, were constantly visited, the Vettuvoithalei padugai twice, to shoot wild cattle, the Putchamullays twice, the first time to inspect certain disputed land, as requested by the Conservator in company with him, the second to ascertain the Forest products as required by Proceedings of Government; the Udaiyarpalaiyam plantations thrice, and the Manaparia Division and the Coleroon north and south banks once each.

SECTION II.—Reserves.

A.—Reserved Forests.—None.

B.—Fuel Reserves.

2. *Lalapetei.*—50 square yards of prickly-pear were cut and burnt, and 3,740 square yards of land were cleared of brushwood, 22,370 pits were dig into which were put 13,470 *Acacia Arabica* seeds, 100 *Albizzia Lebbek* seeds, and 8,800 *Acacia Arabica*, plants; 7,360 casualties were replaced with *Acacia Arabica* seeds—4,409 plants were pruned, and 20,650 plants were weeded. Three wells were sunk, and old wells were repaired. Fifty lineal yards of temporary fence were formed, and 150 square yards of land were dug, and fourteen beds were formed and sown with Casuarina seeds, 669 measures of seeds were collected, of which only nine were *Azaderachta Indica*, and the remainder *Acacia Arabica*—324 cubic yards and 22½ feet of *Acacia Arabica* trees were felled by this department, and 77 tons and 987 pounds of the said trees by a contractor. Plants average one foot in height. The receipts of this year amount to Rupees 1,066-11-9, and the expenditure to Rupees 739-9-1, of which Rupees 114-8-10 were spent on establishments, against Rupees 841-14-4 last year. There was no felling last year, hence the increase in receipts (Rupees 1,066.)

3. *Tanimalay.*—In this reserve there was neither planting nor felling; it is simply preserved by a peon on a monthly salary of Rupees 6 for the future requirements of the Southern Extension of G. S. I. Railway. The expenditure of the year amounts to Rupees 90 against Rupees 539-10-6 last year. The falling off in the expenditure of this year is accounted for by no work having been carried on in the reserve, and no establishment having been kept up, except the peon in charge.

C. Plantations.

Elamanore.—147 acres and 1,210 square yards of land were cleared of brush-wood. 213 beds were formed and sown as follows; viz., forty with Casuarina, forty-eight with *Cassia florida*, seven with Bastard Teak, seventy-four with *Acacia Arabica*, thirty-six with *Acacia Leucophlæa*, four with Banian, and four with Peepul seeds. 23,540 pits were dug and 29,400 plants of *Acacia Arabica* were put out, 15,540 Casualties were replaced, of which 540 with *Inga dulcis*, 1,800 with Casuarina, and 6,600 with *Acacia Arabica* plants, and 6,600 with *Acacia Arabica* seeds. 832 Plants of different sorts, such as, Banian, Bastard Teak, *Inga dulcis*, *Cassia florida*, Peepul, etc, placed in baskets were supplied to the Central Jail and the Trichinopoly Municipality. 285,000 pits were cleared—12,665 plants of *Acacia Arabica* and *Inga dulcis* were pruned, and 6 acres were brought under picottah watering. One well was sunk, and old wells were repaired, forty measures of *Cassia florida*, and 166 of *Inga dulcis* seeds were collected. Nursery beds were weeded, 45 cubic yards and 9 feet of *Glabra* and *Cassia florida* trees by the department, and one ton and 1,893 pounds of *Cassia florida* trees by a contractor were felled. The plants measure from 8 to 24 inches in height. The revenues and charges of this year amount to Rupees 159-1-1 and Rupees 1,654-2-4, of which Rupees 142 were spent on establishments, against receipts and expenditure of Rupees 340-10-0 and Rupees 2,400-13-8 respectively last year. The difference between the receipts and expenditure of the past and present years is

accounted for as follows: a large amount was spent in clearing brushwood, and the proceeds credited.

Kulitalai.—Forty-five acres and 1,701 square yards of land were re-cleared of brushwood, 111 beds were formed and sown, of which, ninety-nine with Casuarina, ten with *Acacia Arabica*, and two with *Inga dulcis*. 106,446 pits were dug, of which, 103,356 were sown with *Acacia Arabica* seeds, and 3,870 with Casuarina plants. 9,906 casualties were re-placed, of those, 800 with *Acacia Leucophlœa*, 1,740 with *Inga dulcis*, 1,600 with *Acacia Arabica*, and 2,936 with Casuarina plants, and 2,830 with *Acacia Arabica* seeds. 2 Acres and 660 square yards of land were dug and earth loosened for Casuarina. 9,150 Plants of *Acacia Arabica* and *Inga dulcis* were pruned, and 19,345 pits were weeded; 6 Acres and 1,520 square yards of land were brought under picottah watering, 885 lineal yards of permanent and temporary fences were formed, and 590 yards of permanent and temporary fences were repaired; twenty temporary wells were sunk, and old wells were repaired; 278 measures of seeds were collected, of which, 174½ measures were *Acacia Arabica*, 53 *Acacia Leucophlaea*, 4 *Albizzia Lebbek*, 120 *Pongamia Glabra*, 9 *Kadambei*, 16 *Azadirachta Indica*, and 1½ *Eluppei*, for the Mauritius Government. The plants measure from 8 to 24 inches. The receipts and disbursements of the year come to Rupees 26-4-0 and Rupees 1,456-7-0 (inclusive of Rupees 158-4-2 for establishments); while those of the previous year are Rupees 138-8-0 and Rupees 1,745-10-11 respectively. With regard to the differences—*vide* explanation given to Elamanore plantation:—

Chithalavai.—Forty-five acres were cleared of brushwood and 3,475 square yards of prickly-pear were cut and burnt. 142 beds were formed and sown, of which 104 with Casuarina, thirty-three with *Acacia Arabica*, two with *Azadirachta Indica*, and 3 with *Cassia florida*, 87,846 pits were dug; of these 75,681 were filled with *Acacia Arabica*, and 2,500 with *Acacia Leucophlœa* plants, and 550 with *Acacia Leucophlœa*, 8,525 with *Acacia Arabica*, and 590 with *Albizzia Lebbek* seeds. 141 lineal yards of permanent fence were constructed, and 343 measures of *Acacia Arabica* seeds were collected; 5,220 pits were weeded, and 43 cubic yards of *Pongamia Glabra* trees were felled. Plants average in height 1½ feet. The receipts of this year are Rupees 202-11-9 and expenditure Rupees 1,338-13-2, of which Rupees 135-15-11 were paid as salaries; whereas the amounts of last year are Rupees 10, and Rupees 1,031-12-5 respectively. The increase in both the items of this year is due to the clearing of the padugai and to the proceeds being credited to this year.

Kutlai—8,445 Square yards of prickly-pear were cut and burnt, and 128 measures of seeds were collected, of which 37 *Azadirachta Indica*, and the remainder *Acacia Arabica*—175 beds were formed and sown, viz., thirty-two with Casuarina, 131 with *Acacia Arabica*, eight with *Azadirachta Indica*, and 4 with *Emblica Officianalis*. 16,000 pits were dug and planted with 9,230 *Acacia Arabica*, 1,160 *Albizzia Lebbek*, 660 *Cassia florida*, and 1,400 with *Acacia Arabica* seeds. 14,910 casualties were re-placed, of which, 11,010 with *Acacia Arabica*, 200 with *Albizzia Lebbek*, 2,600 with *Acacia Leucophlœa*, 1,000 with Covaly, and 100 with *Cassia florida* seeds. 31,700 Pits were weeded, and 2,700 plants of *Acacia Arabica* were pruned. 1,875 lineal yards of permanent fence were constructed, six wells were sunk, and old wells were repaired. The plants range from 7 to 15 inches. The receipts and expenditure of the year under report including Rupees 63 for establishments, are Rupees 31, and Rupees 883-12-9 against an expenditure of Rupees 1,093-12-8 during the last year. The short expenditure in this year is due to less being paid as salaries, as the plantation was in charge of a head cooly during the current year.

Udaiyarpalaiyam Plantations.—These are situated on the banks of the Coleroon and some other channels, and their cost is defrayed out of the Jungle Conservancy Fund, but they are supervised by this department—100,391 pits were dug, of which 7,886 were filled with *Tamarindus Indicus* seeds, 89,834 with Palmyrah nuts, 400 with Tamarind plants, 1,467 with Bamboo, 335 with Mango, 112 with Casuarina, and 357 with Eluppei plants. Almost all these pits were provided with bunds to hold water and protected by fencing. The expenditure on account of working charges is Rupees 3,726-11-5, that of establishment Rupees 632-1-7, and Miscellaneous Rupees 331-7-11 aggregating to Rupees 4,690-4-11.

SECTION III.

Forests worked under License and Voucher system.

Putchamullays.—This is worked by the Revenue Department and the proceeds credited to the Jungle Conservancy Fund.

SECTION IV.

Yield of Forests.

469 Tons and 2,155 pounds of *Acacia Arabica* and *Leucophlœa Pongamia Glabra*, and *Cassia florida* trees were felled by this department and the Contractor together in this year.

SECTION V.

Financial Result.

The total receipts of the year from the sale of firewood above said at Checkonum, besides the places already named, and from the renting of grass and nanul, etc., amount to Rs. 2,021-5-10 (against Rupees 489-2-0 last year) of which Rupees 1,179-10-8 is accounted for in Form A accompanying, as having been realized, and the balance Rupees 841-11-2 remains outstanding. The total expenditure under different heads as per Registers B and C accompanying amounts to Rupees 9,762-3-7, viz.,

	Rs.	A.	P.
Working charges of different Forest Plantations and Reserves.	5,459	0	2
Pay of Maistries, etc., under Do. do.	703	12	11
Pay and Railway Fare of Overseer, Writer and Peon under Reserve	387	10	0
Miscellaneous	215	6	6
Pay and Travelling allowance of the Officer in charge	2,953	13	11
Contingencies...	42	8	1
Total ...	9,762	3	7

against Rupees 15,041-11-7, in the previous year. Deducting the revenue, there is still a deficit of Rupees 7,740-13-9 against the year; but of this amount, a sum of Rupees 150-15-6, being the pay of the Acting Forest Overseer from the date on which he was detached to supervise the Jungle Conservancy Fund Works, paid out of Forest Funds, has been debited to the former item; it should be recovered from the same and refunded to the latter—consequently the amount deficient is only Rupees 7,589-14-3. The increase in receipts during the current year is due to the felling operations carried on both at Lalapettai and Cheekonum, and the decrease in expenditure is accounted for thus: the pay of the permanent officer Mr. Morgan during the past year was charged to this district for the time he was on leave and while he was detached on special duty to Nilambore; and further the mileage for the Acting Overseer was disallowed in this year. Hence is the difference.

SECTION VI.

General Remarks.—The above plantations were watered throughout the year except during the rainy season. Even the plants of two years standing required to be watered owing to the unusually hot season, and the excessive number of casualties is accounted for in the same manner. The plants average two feet in height, and they are in good condition. A Notice published in the District Gazette by the Conservator as the District Magistrate, requiring the destruction of wild cattle found in Government plantations, has altogether put a stop to the

serious nuisance of cattle trespass often complained bitterly of. The want of an Overseer and a Writer as reported by my predecessor in last year's report is much felt. The Inspector of Forests was at the Elamanore Plantation towards the close of the year, and remarked that the planting was not carried on there as he originally proposed. Consequently, I intend selecting another block in which to carry out his wishes. Health of the establishments was good: a Maistry in Udaiyarpalaiyam Plantations died of Dysentery. Conduct of the subordinates on the whole good, except that of a maistry and watcher removed from the service. I presume that there have been no breaches of Forest rules, as I received no Returns from the Magistrates. The system of allowing "Free passes" is, I hear, carried on in the Putchamullays and Udaiyarpalaiyam Jungles through the Revenue Department. Two hills close to the southern extension of Great Southern India Railway, an open plain of 200 Acres near Trichinopoly, the Cauveri padugai measuring about 63 acres at Kristnarayapuram, two breached tanks about two miles from the same measuring about 122 acres, and the padugais on the northern bank of the Coleroon in Udaiyarpalaiyam Taluq measuring about 1,800 acres were recently made over to this department on the requisition of the undersigned.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) G. HADFIELD,
Assistant Conservator of Forests.

(True Copy.)

(Signed) J. B. PENNINGTON,
Acting Collector and Conservator.

No. 193*a*.

From

BUTLAGUNDU, *6th July* 1874.

W. McQUHAE, Esq.,
Collector of Madura,

To

J. GROSE, Esq.,
Secretary to the Board of Revenue, Madras.

I HAVE the honor to submit the Report of the Deputy Conservator of Forests on the Administration of the Madura Forests during 1873-74, with ten statements as per accompanying list.

2. The receipts for the year, *plus* increase in stock, amounted to Rs. 18,877-5-4½, and the expenditure to Rs. 20,678-2-7. There is an increase of Rs. 2,210 in the cash receipts of the year as compared with that of the preceding year; but in consequence of a falling off in the increase of stock, the total income is less by Rs. 1,127. The above increase occurs in the item "sale of Timber at Depôts."

	Rs.	A.	P.
Receipts... ...	...18,220	4	6
Increase in stock... ...	657	0	10½
	18,877	5	4½

3. The expenditure of the year, viz., Rs. 20,678 exceeds that of the preceding year by Rs. 503, and this increase is mainly due to the inclusion in the accounts of a sum of Rs. 656, the value of instruments supplied to the Forest Department.

4. The expenditure under the items "Timber felling" and "Transferring" is less, while it is greater under "Securing and Watching" and "Plantations," showing increased operations during the year.

5. With reference to the latter part of paragraph 27 of the Board's Proceedings, dated 27th January 1874, No. 133 (Forest No. 4), I beg to call the attention of the Board to paragraph 17 of the Deputy Conservator's report explaining the impossibility of making a trustworthy comparison of the profits derived by working departmentally and under the license system respectively, until the two systems are tried separately.

6. The sowing of railway fuel reserves in the open country has been commenced, and we have also three small plantations. One of these at Kodikanel on the Pulney Hills is not worth extending, the soil being evidently unsuitable for the quick growth of eucalyptus and acacia trees. I think it would be a good plan to maintain a nursery there and to sell young trees in pots to private individuals, allowing the Hill Deputy Tahsildar to have as many young trees as he could plant out for Government. Australian trees have not been spread over the hills, though they are very abundant at Kodikanel. They should be introduced into every hill village.

7. I beg to call attention to paragraph 27 of the Deputy Conservator's report. The burning of hills for the sake of the young grass is undoubtedly the thing that chiefly prevents growth of forest. Such fires cannot be entirely prohibited, because in many places the grass is more valuable than any trees that are likely to grow, but I would mark off tracts of hill in which the burning should be prohibited. Such tracts cannot, however, be fenced in on account of the expense, and the Collector should have power to punish summarily cattle owners when fires occur. It will never be possible to convict the cow boy who actually lighted the fire.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed.) W. McQUHAE,
Collector.

ENCLOSURE No. 1.

MADURA, 17th June 1874.

From

R. WILLIAMS, Esq.,
Deputy Conservator of Forests,

To

W. McQUHAE, Esq.,
Collector and Conservator of Madura.

I HAVE the honor to submit the Administration Report of the Madura Forests for the official year 1873-74.

SECTION I-B.

2. *Inspection tours of the Range Officer.*—During the year I was on circuit within my range for a period of 159 days in the aggregate as particularized below.

3. In the Pereacolum Taluq I spent 110 days on 6 different occasions, 8 days in Palani Taluq, 16 days in Dindigul on 2 different occasions, 11 days in Tiroomungalum on 3 different times, and 14 days in Madura

4. I spent 151 days at Head-Quarters, Madura, in attending to the office work, etc., I did not hold office for a period of 13 days from 22nd December 1873 to 3rd January 1874, being holidays. I was on privilege leave from 15th February to the end of March 1874, during which time the Deputy Collector in charge of Madura Treasury conducted the correspondence, etc., on forest matters.

SECTION II.

Reserves.

5. (*A*) *Reserved Forests and contemplated operations.*—Of the 6 forests in the Madura District, 2, viz., Pereacolum and Palani, only are worked departmentally through contractors who fell timber marked by the Forest Officers and deliver it at the nearest depôts.

6. (*B*) *Fuel Reserves.*—The Punjenthanghy Mallai, which lies partly in Madura and partly in Trichinopoly Districts, measures about 1,000 acres, and its fencing was almost completed during the year 1872-73. The growth of the fuel wood here is very dense. A cost of Rs. 427 was incurred during the year 1873-74 on account of pay of establishment for watching this reserve and the Meenakaradoo Hills in Trichinopoly District, whereas a sum of Rs. 858 were spent during the year 1872-73 on account of the pay of establishment and cost of fencing, etc. Receipts, nil.

7. A large portion of Sirumallai, of which area is not known, owing to the disputes between Government and Ammayanaikenur Zemindar, has been kept an open reserve. This is very well stocked with wood about 6 years of old, and it has been watched by the establishment who are appointed to check the tickets, etc., issued for removing firewood, etc., from the other portion of the hill; hence no expenditure has been incurred during the year. Receipts, nil.

8. A tract of about 16 square miles in Allagery Covil Mallai has been kept as an open reserve, and it consists of fuel woods growing thickly. The care of this tract has been undertaken by the Forest Establishment employed for protecting the adjacent hills; hence no expenditure incurred on account of the reserve during the year. Receipts, nil.

9. Shengadagavandan Mallai, that measures about 6 square miles, was fenced in all round prior to its transfer to this department from the Revenue authorites. This has only young plants of Oosul, etc., not more than a year old. No expenditure has been incurred during the year. Receipt, nil.

10. Out of 230 gulies of land selected at Sathungoody in Tiroomungalum Taluq for the formation of a railway fuel plantation, 55¾ gulies only have been cultivated with babool, etc. seed since October 1873, owing to want of rain, etc. The greatest height of the plants is about 1 foot, but that of the self-sown plants of Karoovel is about 5 feet.

11. (*C*) *Plantations and contemplated operations—Plantation No. I., Vunnathiparai.*—In this plantation 1,060 teak seedlings were transplanted during the year. There were 3,255 teak trees at the end of last year planted from 1869-70 to 1872-73, and altogether 4,315 teak trees are now existing in good condition. The greatest height of the trees is 33 feet and the greatest girth is 14 inches. The extent of this plantation is 5½ acres of land not fenced in, as there is no necessity to do so. The expenditure incurred during the year is Rs. 186, being the pay of a watcher and daily coolies employed in pitting, watering, etc.

12. *Plantation No. II., Kodikanel.*—In this 643 acacia and 302 eucalyptus seedlings have been transplanted during the year. There are 3,418 acacia and 4,557 eucalyptus trees planted from 1870-71 to 1872-73. The greatest height of the acacia trees is 12 feet, and the greatest girth 8 inches, and the eucalyptus trees are 30 feet in height and 15 inches in girth. The acacia plantation measures 17$\frac{8}{16}$ gulies of land fenced all round, and the eucalyptus plantation measures 19$\frac{1}{16}$ gulies of land fenced in two sides and drained in the other two sides. A sum of Rs. 461 has been incurred during the year on account of the pay of a maistry and watcher, as well as the daily coolies for pitting, watering, etc., whereas a sum of Rs. 555 has been spent during the last official year. Receipt, nil.

13. *Plantation No. III., Palani.*—This plantation measures 2$\frac{3}{4}$ acres of land not fenced in. There are now 2,112 teak trees planted from 1870-71 to 1872-73. No fresh plants have been planted during the year. The teak seed collected in this district does not germinate freely, but Mr. Douglas, the Deputy Conservator of Anamallas, has now supplied a quantity of seed, and it will be tried during the coming season. The greatest height of the trees in the plantation is 3 feet and the girth is 12½ inches. A sum of Rs. 137 has been incurred during the year on account of the pay of a watcher, etc.

SECTION III.

14. *License and Voucher Forests and comtemplated operations.*—Under this system 41,635 cubic feet of reserved and unreserved timbers have been sold for Rs. 2,867; a quantity of 308,242 maunds of firewood sold for Rs. 6,410, 83,558 maunds of bamboos sold for Rs. 2,528, 16,642 maunds of charcoal sold for Rs. 492, 28 maunds of rattan sold for Rs. 1-5-0, and under the heads of sale of "confiscated timber" and "miscellaneous" Rs. 478 were realized. Of the total of the above-mentioned sums of Rs. 12,299, Rs. 1,095 were paid to the Nattamgars, etc., being commission at 10 per cent. for the amount of collection made by them. This leaves a net revenue of Rs. 11,204 in favor of the year, whereas the cost incurred for maintaining the jungles amounts to Rs. 3,454. This shows a profit of Rs. 7,750 in favor of Government.

15. A quantity of 803-6-0 cubic feet of teak wood has been cut from Cumbum Valley by Lieutenant Greer, the Executive Engineer in charge of the special duty, Madura District, for the construction of certain bridges on the Goodalore Ghaut Road, and the amount of seigniorage Rs. 301-5-0 at As. 6 per cubic foot has not been included in the account of the year 1873-74, as the voucher for the sum did not reach the office of Deputy Conservator until the Forest accounts for March 1874 were closed and despatched; so this sum will be exhibited in the accounts of the year 1874-75.

16. It will be seen that the revenue under license and voucher system has decreased by Rs. 208 since last year. This I believe to be owing to the reduction of the rate of seigniorage on firewood made as per G. O., dated 31st October 1873, No. 1,225. The revenue from seigniorage on firewood alone has hitherto been more than one-third of the total Forest Revenue of this district.

17. *Results of the forests worked departmentally and under license and voucher system.*—No trustworthy comparison can be made of these two systems until they are tried on separate ground (at present licenses and vouchers are granted for forests which are at the same time being worked departmentally), and until the forests have been surveyed, and a fairly accurate estimate of the quantities and descriptions of wood in them arrived at.

SECTION IV.

18. *Yield of Forests.*—6,214 cubic feet of timber of different descriptions were cut and delivered by the contractors at the depôts of the Pereacolum Range, and 202 cubic feet of Marootha wood were felled departmentally on the Munja Mallais in Madura Taluq and brought to the Madura Depôt.

19. Altogether the yield of the forest worked departmentally is less by 1,299 cubic feet of timber than that of last year. I have to point out that about 6,000 cubic feet of timber felled by contractors during the latter part of the year were not brought to account for want of funds for paying the contractors (*vide* the Proceedings of the Board, dated 15th January 1874, Forest Miscellaneous No. 5-245.)

20. The total of the timber felled in the year amounts to cubic feet 6,416 (*vide* statement B herewith appended.) In addition to this there are 14,891 cubic feet remaining on hand at the end of the official year 1872-73. Of this, 4,955 cubic feet were sold during the year 1873-74 as shown in statement C appended, and 67 cubic feet of timber felled some six years ago were destroyed by white-ants, etc. A balance of 16,285 cubic feet remains on hand as shown in statement D appended.

21. 1,847 cubic feet of timber have been sold this year more than were sold during the year 1872-73, and this increase would have been much larger had I had funds for transferring timber from the various Forest Depôts to the Madura Market Depôt where a fairly quick sale is generally going on.

SECTION V.

22 *Financial Results.*—A sum of Rs. 11 0:9 was drawn during the year from the Madura Treasury on account of conservancy and working charges. Of this, Rs. 9,696 were expended for timber felling, etc., as shown in statement A appended, and Rs. 1,323 remained unaccounted for on the 31st March 1874. This sum was advanced to a contractor for felling a certain quantity of timber. The contractor felled, but chiselled none of the logs for want of money due to him. As the whole of the Budget allotment of the year was exhausted, the arrears due to the contractor were not paid in time to enable him to complete the work before the close of the year.

23. The Financial results of the year 1873-74 are as follow :—

	Rs.	A.	P.	Rs.	A.	P.
EXPENDITURE.						
Pay of establishment...	6,351	2	0			
Allowance of establishment	2,219	8	0			
Office contingencies	430	13	10			
Working charges	11,676	10	9			
				20,678	2	7
RECEIPTS.						
Sale of timber from Government Depôt ...	6,536	3	0			
Seigniorage	11,204	14	0			
Sale of confiscated timber	118	13	10			
Miscellaneous	360	5	8			
Add value of timber in stock	657	0	10½			
				18,877	5	4½
Balance against Government				1,800	13	2½
Value of timber in hand on the 31st March 1873...	15,858	14	8½			
Add value of timber felled during the year 1873-74	5,757	11	3			
Add on account of excess rate realized on the sale of timber	1,509	10	6			
				23,126	4	5½
Deduct the value of timber sold in 1873-74.	6,536	3	0			
Do. of do. decreased in the re-measurement and that destroyed by white-ants, etc.	74	1	10½			
				6,610	4	10½
Balance in stock on the 31st March 1874				16,515	15	7

24. The expenditure on the Forest Establishment and working charges during the year 1873-74 amounted to Rs. 20,678, whereas that of the year 1872-73 has been Rs. 20,175. The difference of Rs. 503 in excess is owing to the value of surveying instruments supplied through the Board for the use of this district (*vide* Proceedings of the Board, dated 7th November 1873, No. 923, Forest Miscellaneous No. 246-7,592.)

25. The total receipts of the year 1873-74 amount to Rs. 18,877, whereas a sum of Rs. 20,008 has been realized during the year 1872-73. The difference of Rs. 1,131 is owing to a large quantity of timber felled by the contractors and not accounted for during the year 1873-74 for want of money to pay felling charges not appearing as "value of timber in stock."

26. Of the sum of Rs. 1,475 being the advance made during the year 1872-73, but not accounted for up to 31st March 1873, Rs. 534 were accounted for up to the end of 1873-74 by submission of bills and the balance of Rs. 941 remaining unadjusted up to 31st March 1874. Of this sum, Rs. 841 stands against the Ayagudy Zemin Forests worked by this department, and it is to be adjusted after the recovery of money due to Government by Messrs. Campbell and Co. (*vide* the Board's Proceedings, dated 28th April 1873, No. 666.) The remaining sum of Rs. 100 advanced on account of sundry works, etc., was not adjusted within the year, as the works were not completed and examined by the Deputy Conservator, but this will be accounted for during the first half of the year 1874-75.

SECTION VI.

27. *General Remarks.*—No change of the existing Forest Conservancy Rules is required at present, except measures to prevent the firing of jungles which does more harm than all the robbery and legitimate felling put together. With this exception the system now in force seems satisfactory. The conduct and health of the establishment are on the whole good.

28. Up to the end of March 1874 little had been done in the establishment of fuel plantations, but that little was experimental, and will, I hope, enable me to effectually extend this sort of thing at a small cost. I see in the Officiating Inspector's report on fuel reserve plantations that I am said to have gone the right way to work, and I would here state that I am indebted for the hint to Mr. W. S. Whiteside of the Madras Civil Service who got it from a friend in Bengal.

29. *Forest Offence.*—Forty-six men were charged before Magistracy with theft under Section 379 of Indian Penal Code. Of these, 37 were convicted and fined in the collective amount of Rs. 410, and 9 were acquitted for want of legal proof. Twenty men were prosecuted under Section 426 of Indian Penal Code, convicted and fined in the collective sum of Rs. 141. 588 persons were prosecuted before the different Village Munsifs under the Regulation No. 11 of 1816, and were punished by simple imprisonment.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) R. WILLIAMS,
Deputy Conservator of Forests.

TINNEVELLY COLLECTOR'S CIRCUIT CUTCHERRY,
COURTALAM, 19th August 1874.

No. 411.

From

R. K. PUCKLE, Esq.,
Collector of Tinnevelly.

To

J. GROSE, Esq.,
Secretary to the Board of Revenue, Madras.

SIR,—I have the honor to report on the Forest Administration of this district for 1873-74.

2. The Executive Staff consisted of a Deputy Conservator, one 1st Class and one 3rd Class Forester, five Sub-Overseers, and twenty-nine Peons, this staff was employed in conserving the forests along 100 miles of Ghaut Mountain, and in attending to a considerable area of thorn jungle along the line of rail in the plains.

3. The preservation of the forest that clothes the heads of the streams that drain the hills between Courtallam and Papanassam, is of such great importance to the prosperity of the district, that the Deputy Conservator at my request desisted from felling in this particular forest, and afforded me considerable assistance in laying out a path and fence, dividing this conserved forests from the grazing grounds and firewood jungles granted free of charge to the villagers on the lower

slopes and spurs of the hill, the grant of these tracts free of charge was much appreciated by the villagers concerned, and as the ticket system for cutting firewood was then abolished in ten or twelve villages, a considerable number of forest peons were available for employment in other localities, the Tahsildars of the taluqs concerned have the immediate control of these grazing grounds, and one or more watchmen in each village patrol the path, and by keeping cattle and wood-cutters within bounds, effectually preserve the forest above. The success of this system of conservancy is undoubted, and though the Deputy Conservator would have preferred to employ his peons instead of the villagers, I thought it better to engage the villagers in watching their own common lands and so enlisting the powerful aid of the Village and Taluq officials. The path is not yet complete throughout its entire length, but when completed, it will render that forest accessible at almost any point, and will afford an excellent base line both for watchmen and inspecting officers to patrol. The system of dividing the conserved forest above from the free grazing grounds and firewood jungles below, was approved by the Board, in Proceedings, No. 52, dated 14th January 1874, the hill forests both north and south of this particular reservation, are used for felling, and the ticket system for firewood cutting is still in force in them.

4. The thorn jungles along the railway require so little attention, as the trees spring up in thousands when cattle are kept off, that the active forester (Mr. Forester Theobald) who superintended these was able to assist me very materially in superintending Jungle Conservancy also. During my absence in England, however, he was transferred to Annamalei, and his successor who has poor health and no local experience as yet, finds sufficient employment in attending to the Fuel Reserves ; these reserves are now being extended, and ere long I hope to have a large area under Babul for the use of the Railway.

5. The area now occupied consists principally of the beds of tanks in the black cotton soil where the Babul springs up spontaneously and grows extremely quickly. Five years' growth is sufficient to give a Babul stem of an average of six inches diameter, the proper size for Railway billets, and two such trees will fill a cart. Our Satistics show that we have 4,470 Acres under Babul containing 1,00,000 ripe trees and 80,000 that will be fit to cut in from two to three years, besides millions of seedlings that will be ready to cut in from five to six years more, and by the time that the railway is open, we shall have largely increased our stock of ripe trees on lands now being taken up ; at Tuticorin itself, I have just added a square mile of country thickly covered with the Umbrella Thorn which makes as good fuel as Babul, and during the settlement now in progress, I anticipate by the exchange of waste lands, etc., being able to acquire several other similar tracts.

6. The definition of the Saptur Zemindar's forest boundary is very urgently needed, the favourable issue of his suit in Madura has given him a pretext to rightly or wrongly annex an enormous tract of mountain forest in this district, and as he wisely abstains from showing the boundary he claims, he avoids a settlement of the question, and is enabled to exercise rights and make profit in a territory that undoubtedly belongs to this district. The Zemindar lives in Madura, and I cannot enforce his attendance to show his boundary, neither can the one or two forest peons deputed to that locality prevent the Zemindar's underlings from despoiling the border forest.

7. The Deputy Conservator remarks that the forest produce of the Singampatti Zemindari was sold for a period of three years by the Sub-Collector in charge of the Estate. The failure to communicate the particulars of this sale to the Deputy Conservator was of course an oversight which will be promptly remedied.

8. The prosecutions for infringement of forest laws were numerous, but these are unavoidable where the forest is an unprotected property lying open to trespass, where it is protected by the path described above, and the villagers have all that they ask for and even more in the way of free grazing and firewood cutting ; no cases have occurred of petty theft.

9. The storing of timber at depôts at a distance from the foot of the hills is a failure. The sale hardly pays the expenses, and the Natives prefer green to seasoned wood. I advocate departmental felling in preference to the License and Voucher system, but the former should be regulated by the demand from month to month, free passes for cutting agricultural implements and firewood would be no longer needed could we divide the hill side into free jungles and reserved forests along the whole length of our hills, the people would then be at liberty to do what they like with their own, and the Forest Overseers and Peons would be employed on their legitimate work of patrolling well defined and comparatively accessible tracts.

I have the honor to be,
Sir,
Your most obedient servant.
(Signed) R. K. PUCKLE,
Collector.

ENCLOSURE No. 1.

COURTALAM, 18*th May* 1874.

No. 1,025.

From

W. C. HAYNE, ESQ.,
Deputy-Conservator of Forests, Tinnevelly,

To

R. K. PUCKLE, ESQ.,
Acting Collector of Tinnevelly.

SIR,—I have the honor to submit my Annual Accounts and Administration Report of the Tinnevelly Forests and Railway Fuel Reserves for the Official year 1873-74.

SECTION I.

2. *Inspection tours.*—All the forests of this range have been visited by me with the exception of the Streevaliputtoor forests, which I was about to visit, when I was required to accompany the Collector on a tour along the foot of the hills, to receive his instructions with regard to the localities to which the ryots were to be limited for the free removal of firewood, and for the grazing of their cattle. The laying out and construction of a portion, and the supervision of the whole of this bridle path has occupied much of my time, being some 25 miles in length. The boundary path or free felling and grazing limits is only being carried out in the Tampurapurny range, which block, as I stated in my last report, was excluded from the direct management of the Forest Officers and placed under the management of the two Tahsildars, in whose taluqs that portion of the hills lay, with two Maistries and twenty-two Kavalgars or Watchers, of the Murava caste, under their command to patrol along the foot and prevent people entering the hills. They are paid at the rate of Rupees 2½ a month, which is periodically increased in a lump sum to a salary equivalent to Rupees 5 per mensem, if they performed their work well and efficiently. From what I have seen of the system, it does not work at all well. The Kavalgars are dissatisfied with the system of payment, and I seldom find them at their posts, nor do they keep up the fences which is part of their work. What check or supervision the Tahsildars have given these men will be best known by a perusal of their diaries. I doubt if it would be found that they had visited the whole length as often as twice throughout the year. I have found the Kavalgars very independent, and far less obedient than my Forest Peons. As these Kavalgars do not, and are not

supposed to, proceed to the black forest, or even beyond the foot of the hills, there is no knowing what clandestine felling or other frauds may not be taking place.

3. The Railway Fuel Reserves were inspected by me two or three times during the year, and the Singamputty Forests were also visited by me.

4. I was eight months on tour, three at Head-quarters, and one month on leave.

SECTION II.

5. A. Reserved Forests—*Reserves.*—All the Forests are reserved under certain restrictions. A little felling has taken place in the Vasudevanellore forests, to meet a demand from the Public Works Department, as the timber in the depôts was not of the scantling required by that department.

6. B. Fuel Reserves.—The work on, and the supervision of, these have not been satisfactory, and consequently I am unable to report the progress I had hoped to have achieved in my last report. This is owing to the devotion of Mr. Theobald's time, interest, and attention almost entirely to Jungle Conservancy works, which are under the control and inspection of the Collector, while the Fuel Reserves were considered by him to be a matter of secondary importance. These anomalous proceedings were about to terminate by the separation of the Jungle Conservancy and Forest management, when the year closed. Fourteen tank-beds have been added, making an area of 2,700 Acres, which when added to those taken up last year, makes a total of twenty-five Reserves, equivalent to an area of 4,470 Acres; but a deduction of about 25 per cent. of the acreage should be made for standing water, to give an approximate idea of the area that might be planted up, which would reduce it to 3,363 Acres. Seed has been strewn over all the newly added Reserves, but as it has been a very dry season, they have failed to germinate.

7. A sum of Rupees 1,204-4-4 has been spent on the Conservancy of the Reserves including the Office Establishment, but if the Forester's pay be included, the amount is increased to Rupees 1,814-4-4 as will be seen from the enclosed Statement. A small sum of Rupees 103-11-3 has been realized by the local sales of wood, trimmings, etc.

8. C. Plantations.—There are no plantations.

SECTION III.

9. *Forests worked under License and Voucher System.*—It will be seen from Statement E, that the license and voucher system exists only for the removal of jungle and firewood, it having been discontinued for Reserved woods since 1871. I see no reason why it should not be discontinued for Jungle-wood also, which could be cut and supplied departmentally in the same manner as the reserved timber, which would keep the depôt employés more fully occupied.

Statement showing the cost and receipt of the Fuel Reserves for the official year 1873-74, Tinnevelly District.

Name of the Reserve.	Year in which the Reserve was formed.	Area.	Description of trees.	Number of trees.			Cost.		Receipt.	
				1st Class or ripe.	2nd Class or medium.	Total.	During the year.	Up to the end of the year	During the year.	Up to the end of the year.
							Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Kaliavoor Tank	1st August 1872	665	Babul.	15,000	6,000	21,000				
Kaliavoor Block	Do.	200	Do.	50,000	1,000	51,000				
Rajoncolam	Do.	120	Do.	5,500	11,500	17,000				
Mutturcolam	Do.	240	Do.	2,000	20,000	22,000				
Kuttukalcolam	Do.	130	Do.	.....	.....	.....				
Odaiarkolam	Do.	1	Do.	.....	.....	.....				
Naraiginaru Tank	1st December 1873	130	Do.	.....	.....	.....				
Agilandapuram	1st August 1872	125	Do.	15,000	10,000	25,000				
Kutticolam	Do.	20	Do.	2,500	5,000	7,500				
Parachicolam	Do.	105	Do.	1,250	5,000	6,250				
Sengalamudiarcolam	Do.	45	Do.	3,000	7,000	10,000				
Karisalcolam	Do.	120	Do.	1,750	12,000	13,750				
Manurcolam	1st September 1873	1,180	Do.	3,500	.....	3,500	1,204 4 4	3,192 0 3	103 11 3	103 11 3
Rustacolam	1st August 1873	20	Do.	200	.....	200				
Ramasamipuram	1st September 1873	20	Do.	200	.....	200				
Sirucolam	Do.	5	Do.	100	.....	100				
Kalakudicolam	Do.	130	Do.	300	.....	300				
Puducolam	Do.	100	Do.	300	.....	300				
Seedakurichicolam	Do.	55	Do.	80	.....	80				
Nenmenicolam	16th Do.	485	Do.	.....	.....	.....				
Muditha'ai	20th October 1873	200	Do.	5,895	.....	5,895				
Periaperali	9th December 1873	110	Do.	.....	.....	.....				
Ondipulinaikanur	11th Do.	105	Do.	.....	.....	.....				
Puducolam	20th October 1873	245	Do.	.....	.....	.....				
Sinnaperali	9th December 1873	40	Do.	.....	.....	.....				
				Cost of the sanctioned Establishment ...			610 0 0	3,066 9 9	....	....
						Total..	1,814 4 4	6,258 10 0	103 11 3	103 11 3

Palamcottah,
15th August 1874.

(Signed) W. C. HAYNE,
Deputy-Conservator of Forests.

SECTION IV.

10. *Yield of Forests.*—Statements B and C show that 281-2-6 cubic feet of timber have been brought down to the depôts, and 1,441-4-5 cubic feet disposed of; 759-0-5 cubic feet were sold by depôt agency, and 682-4-0 cubic feet by auction, the latter at a loss. One of the depôt writers Peramanoyagam Pillay, embezzled 74-0-7 cubic feet, for which he was sentenced by the Sessions Judge to one year's rigorous imprisonment, and a fine of Rupees 75.

SECTION V.

11. *Financial results.*—The financial results of the year (Statement A) show a surplus of Rupees 5,781-0-9, being Rupees 2,389-10-6 in excess of the preceding year. The receipt amounts to Rupees 18,977-14-8, and the expenditure to Rupees 13,196-13-11. The results are satisfactory, as the seignorage collection from a large and prolific block of hills. (The Tambrapurny Range,) has been stopped, and the Conservancy of the Railway Fuel Reserve still remains a source of expense.

12. The proceeds from timber sales have been very poor, and will remain so, until the whole of the timber in hand is sold off; for natives, contrary to Europeans, prefer purchasing green to seasoned timber, of which circumstance, I was not aware on my arrival in this district.

13. Forest produce have proved a prosperous source of revenue, nearly Rupees 7,000 having been realized.

SECTION VI.

14. General Remarks.—*Administration of the Tambrapurny Range.*—I am not satisfied with the new Forest Administration arrangements which were introduced, on the re-organization of the department in October 1872, in the Tambrapurny Range, and which have now been working for a year and-a-half. I feel confident that forest peons would protect the forest much more effectually than Kavalgars appointed on the result system, drawing a monthly salary of Rupees 2½ only, or Kavalgars of any nature, whether on full or half pay; I find them an independent, discontented, disobedient, and useless set of men, and their labors are not confined entirely to forest work, but are employed on village works also. I regret I cannot hold the same high opinion of these Murava Kavalgars, and their utility, as Mr. Puckle.

15. On the Tambrapurny Range being placed under the charge of the Tahsildars, the Forest Peons therein employed were transferred and distributed over the other ranges, which has resulted, I think, in the increase of revenue under Head II., and the detection of a greater number of Criminal Cases.

16. *Demarcation of the south-eastern boundary of the Saptur Zemindari.*—I noted in my report of last year, that the boundary dispute between the Saptur Zemindar and Government had been settled in Court, and strongly recommended the boundaries being demarcated at once, to prevent subsequent encroachments. Though the disputes have been settled in Court and the boundaries given on paper, yet, in reality, it is still under dispute, and will only be settled when the boundary is actually demarcated, and the Government arrow cut on immoveable rocks.

17. *Forest offences.*—An abstract of forest offences is appended in a tabular form, which shows that the detection of crime is still on the increase. No less than 252 cases, comprising 1,236 individuals have been tried and punished.

A Timber Yard Writer was sentenced to one year's rigorous imprisonment, and a fine of Rupees 75 for embezzling wood.

18 *Free Pass.*—Passes for forty-nine cart loads of Jungle-wood, for agricultural and other purposes, and eighty-seven cart-loads of firewood have been issued.

19. As Government called for the estimate of the free consumption of firewood just at the close of the year under review, I am only able to give an approximate idea of the amount thus removed without passes which is about 8,300 cart-loads, equivalent to 1,33,333 cooly loads, and representing some 400,000 bundles. This is rather under than over the mark.

20. *The working of the Free Pass system and the general feelings of the ryots.*—The system of allowing free passes to the ryots appears to have worked satisfactorily, and as far as my knowledge goes, the ryots seem generally satisfied with the forest administration.

21. *Health and conduct.*—The health of the Forest and Fuel Reserves Establishment have been good on the whole, and their conduct fair. Three peons were dismissed.

22. Forester Mr. Theobold was promoted as 2nd Class Forester at the beginning of the year to the vacancy occasioned by the death of A. Appavoo Pillay, former Overseer of this Range. Forester Mr. Johnston was found physically disqualified for forest employment by the Zillah Surgeon in August, and consequently had to quit the department. My Writer was promoted as Acting 3rd Class Forester in charge of the forest, in which capacity he has given me satisfaction

SINGAMPUTTY FORESTS.

These forests, coming within the Tambrapurny Range, have been reserved on the same principle. No felling has taken place, and consequently there have been no timber sales. Grazing of cattle and the free removal of firewood within prescribed limits are permitted. The forest produce were leased for a period of three years, by the Acting Sub-Collector (Mr. Happell), without my knowledge or assent. The amount for which it was farmed has never been communicated to me.

I have the honor to be,
Sir,
Your most obedient servant.

(Signed) W. C. HAYNE,
Deputy Conservator of Forests.

Coimbatore Collector's Office,
18*th July* 1874.

No. 169.

From

A. WEDDERBURN, Esq.,
Collector of Coimbatore.

To

J. GROSE, Esq.,
Secretary to the Board of Revenue, Madras.

I have the honor to submit the annual report of the forests of this district for 1873-74, accompanied by the prescribed statements, in conformity with the instructions of the Board in Official Memorandum No. 22/222 of 20th February 1874.

SECTION I.

2. *Inspection Tours.*—I made a tour of inspection of Sattiamungalum and Collegal Forests and of the boundary between Collegal and Mysore, in June-July 1873, lasting one month. My next inspection was after I returned from my leave in September 1873, when I proceeded to Metoopolliem and Coonoor to inspect and report upon the slopes then annexed to the Coimbatore jurisdiction; this tour lasted twenty-eight days. My third visit was to Bolamputty Forests, which took me fourteen days to inspect on two occasions in November 1873. My next inspection was in December, when I spent five days in going over the Kurudimallay or Lampton's Peak Range, on which Mr. Ross submitted a report, *vide* Revenue Board's Proceedings, No. 16/401 of 23rd February 1874. The total period I was absent on forest inspection aggregated two months and seventeen days during the year under report.

3. I observe that in his annual report for 1871-72, Major Beddome, then Conservator of Forests, remarked, with reference to the order of the Supreme Government sanctioning the reorganization of the department and the subordination of the forest establishment to the Collector, that "it is impossible that Collectors can visit all the forests in their ranges or even attempt the supervision of them in some cases." With the exception of the Higher Anamallay Ranges, which are, at present, inaccessible, I have been over the whole of the forests in this district, and submitted reports on all under Conservancy.

SECTION II.

4. *Reserves.*—Of the forests of this district, only two are reserved tracts; the rest are open to license holders, though the superior timber is reserved for felling by departmental agency. In his annual report Mr. Ross states that even Sholakarray is open to licensed felling. As the Board require that the receipts and disbursements under each head* should be compared with those of the previous year, the same forest ranges will appear twice over, once under Reserves, and again under License and Voucher Forests. As the permanent establishment is employed on ranges of forests and not on each description of operations separately, the cost thereof cannot be distributed over these different heads without rates of distribution being prescribed to ensure uniformity. The disbursements, therefore, appearing under each head are exclusive of the cost of establishment, which latter will be taken into account in reviewing the financial results of the forest ranges in Section V of this report.

* Reserved Forests.
Fuel Reserves.
Plantations.
License and Voucher Forests.

5. *A.—Reserved Forests.*—This head comprises all departmental operations in felling, removing and disposing of timber from the several forests of the district, whether reserved by tracts, or only as regards trees. The subjoined abstract shows the aggregate transactions, viz:—

—	Receipts.			Disbursements.		
	1872-73.	1873-74.	Variations.	1872-73.	1873-74.	Variations.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Anamallay Reserved Forest	8,341	63,820	+ 55,479	29,031	21,739	— 7,292
Sholakarray Reserved Forest in Bolamputty Range.	....	2,339	....	....	519	....
Metoopolliem	....	....	....	100*	....	— 100
Sattiamungalum	14,896	10,125	— 4,771	3,605	3,367	— 238
Collegal	17,149	15,529	— 1,620	5,994	4,125	— 1,869
Bhowany	23,488	15,109	— 8,379	17,025	15,166	— 1,859
Total ..	63,874	1,06,922	....	55,755	44,916	....

6. *Anamallay.*—The increase in receipts is due to the adjustment of accounts by the Bombay Marine to the extent of Rupees 32,972, and to the disposal of rosewood to the Madras Gun Carriage Factory, amounting to Rupees 23,733.

Mr. Douglas seems to have carried out his programme of work for the year in the collection of, and bringing to, depôt a large outlying stock of cut timber.

The saving in the expenditure is accounted for by a decrease in carting operations; 1,700 logs of timber were carted during the year against upwards of 3,500 in the previous year. The charges include an outlay of Rupees 1,169 for survey of the leased forest and boundary of the district by the Survey Department. The leased forests is estimated to be 30 square miles in extent; and the Government teak forest 50 square miles.

* Advanced during the previous year for fuel supplied by the Contractor during the year under report.

7. *Sholakarray.*—The receipts and disbursements of these forests for the previous year are not given, as they were amalgamated with the Palghaut Forests in that year's accounts. No felling took place in Sholakarray during 1873-74; so the receipts in this year were by sale of stock.

Mettoopolliem.—No operations were carried on by the departmental agency except 33⅓ tons of firewood officiously stacked for the Railway at Mettoopolliem, but not indented for by that department. It will be sold this year.

8. *Sattiamungalum.*—As already mentioned, this forest, which is about 500 square miles in extent, is open to licensed felling, though Colonel Morgan alludes to it as a reserved forest. The wild sandalwood in it is worked departmentally, the cost has not varied much, while the receipts are less; which is explained by the stock that remained unsold in the beginning of the previous year having been credited to that year's accounts. I hardly think that sandalwood and roots should be entered as "Timber," but the sales from this source aggregated Rupees 10,000, out of Rupees 10,124 "Timber of all descriptions."

9. *Collegal*, like Sattiamungalum, is about 500 square miles in extent, and is worked under the license and voucher system, except as regards reserved trees.

There seems but little teak in Collegal, where I remark these are estimated to be 5,000 trees. None, at any rate, appears to have been cut or sold of this supposed quantity.

We certainly do nothing for these forests, except work the wild sandal departmentally, and plant it in view of future requirements.

The decrease in receipts here is attributable to the same cause as in Sattiamungalum Forest, viz., larger sales of stock in the previous year. The disbursements also decreased owing to less carting operations, which enabled a transfer of Rupees 1,500 to Bhowany to meet the cost of floating operations there. There is no demand, except a limited one, by Department Public Works for departmental timber.

10. *Bhowany*, about 400 square miles in extent, is also a forest of the same description as the above.

The operations in the Bhowany Taluq are of an important nature, comprising the collection and stacking of sandalwood, and the supply of fuel to the Railway.

The financial results, however, were not satisfactory, owing to operations having been hampered for want of funds, which were Rupees 1,000 less than budgeted for, and from the defective floating operations. The floating Overseer was dismissed, and a new arrangement proposed by Colonel Morgan, and submitted to the Board, whereby Mr. Grant will be relieved of his overwork which partially led to the defect noticed.

But for the above causes, there would have been a financial success.

Heavy former charges were apparently paid in this year, viz., Rupees 1,922 for rock boring in the Cauvery, and there was a delay in payment of fuel by the Railway; the formerly noticed mismanagement regarding the delivery of fuel caused a less quantity to be delivered to the Railway, being only a quarter of that indented for. I should at once have acted on Colonel Morgan's suggestion in re-distributing the supervision of this department, but the question had to be referred by the Board for the opinion of the Inspector of Forests: and hence delay.

It seems a good trade for Government selling firewood at Rupees 6 a ton, which costs less than half that sum to produce; and I cannot help congratulating myself on having, in 1871, refused an offer, supported by the Deputy-Conservator, for cowle of 4,000 acres of these scrub jungles for nominal cultivation, but really for wood speculation.

The most important matter for the future is to sanction the proposed re-arrangement of duties in the fuel-supply department, whereby the Overseer will be relieved of overwork, and fuel adequately supplied to the Great Southern India Railway, a measure both profitable to the State, and advantageous to the Rail.

11. *B.—Fuel Reserves.*—There are four in this district, three in Metoopolliem, and one in Bolamputty Range. The receipts were *nil*, except in the Walliar Reserve, where Rupees 20 were realized. The expenditure was as shown below:—

——	1872-73.	1873-74.	Variations.
	RS.	RS.	RS.
Metoopolliem { H Reserve	352	291	— 61
Metoopolliem { K do.	..	6	+ 6
Metoopolliem { M do.	1,406	6	— 1,400
Walliar do.	1,714	753	— 961
Total..	3,472	1,056	— 2,416

The H and M Reserves at Metoopolliem, and the Walliar Reserve in Bolamputty Range, have been fenced in. The K Reserve has not yet been fenced. The boundaries of the Metoopolliem Reserves having been fixed by Government, after a report from the Assistant Commissioner of the Nilgiris without further reference to the Board of Revenue, or Collector of Coimbatore, will have to be revised, in order to release private and communal lands included within the authorized limits. The extent and other information regarding the four reserves are given in the following table:—

Name of the Reserve.	Year in which the Reserve was formed.	Area.	Charges. During the year.	Charges. Up to the year.	Receipts. During the year.	Receipts. Up to the year.	Remarks.
			RS.	RS.	RS.	RS.	
H Reserve	1872	8 sq. miles	291	643	..	..	
K do.	,,	6 do.	6	6	..	..	
M do.	,,	5 do.	6	1,412	..	..	
Walliar do.	1868	1½ do.	753	10,976	20	* —	* Information not available.
		Total..	1,056	13,037	20	—	

† Revenue Board's Proceedings, No. 2,009, of 14th October 1872, and No. 1,353, of 10th July 1873.

12. There is another tract sanctioned,† on my recommendation, to be enclosed as a fuel reserve near the Anamallays, which will be referred to under "General Remarks."

13. There are no "fuel reserves," nor are any required in the extensively wooded taluq of Sattiamungalum, whose northern part is hill and jungle. The same remark is applicable to Collegal and Bhowany.

14. *C.—Plantations.*—None of the plantations of this district are as yet yielding; so the receipts are *nil*. The expenditure contrasted with that of the previous year is shown below:—

——	1872-73.	1873-74.	Variations.
	RS.	RS.	RS.
Talamalay, Sattiamungalum Range	4,238	1,633	— 2,605
Byloor, Collegal Range	4,694	2,975	— 1,719
Experimental { In Bhowany Range	94	234	+ 140
Experimental { Moody, Anamallay Range	718	809	+ 91
Experimental { Toonacadavoo do.	133	867	+ 734
Total..	9,877	6,518	— 3,359

The expenditure on the first two plantations was less in 1873-74, and the operations were also proportionately less. The number of plants put during the two years was as follows:—

——	1872-73.	1873-74.
Byloor	23,000	9,000
Talamalay	16,900	8,900

except 2,600 in the latter, which are Anatti plants, all the rest are sandalwood. In addition to the above operations, ten acres were prepared and pitted for planting at each of the above plantations. I have not seen the plantations during the year of report, but last year they were thriving. No receipts of course can be expected from this source for some years to come, but there seems no doubt of the future value of the plantations.

15. The experimental Bhowany Plantation is reported to be progressing favorably; the increase of expenditure was caused by the construction of a well to provide against scarcity of water in the dry season. Mr. Douglas reports that the teak plantation at Moody is also improving; the Toonacadavoo one was established in 1873; the casualties in both the latter were heavy, attributed to the distance from which the plants have to be carried, viz., from the nursery at the foot of the ghaut. But Mr. Douglas anticipates better results.

16. The number of trees established, and other particulars regarding all the plantations noticed, are given in the following table:—

Name of the Plantation.	Year in which the Plantation was formed.	Area in acres.	Description of the trees.	No. of trees.	Cost. During the year.	Cost. Up to the year.	Receipts. During the year.	Receipts. Up to the year.	Remarks.
					RS. A. P.	RS. A. P.	RS.	RS.	
Talamalay ...	1863	65	Sandalwood.	61,800	1,633 1 9	10,796 14 7	.....	.....	
Do.	1873		Anatti.	2,600					
Byloor	1870	56	Sandalwood.	38,000	2,975 7 3	11,509 0 6	.....	.....	
Bhowany ...	1871	64 sq. yds.	Firewood.	.....	238 10 0	608 5 10	.....	.....	Experimental Plantations
Moody	1870	8	Teak.	8,439	808 10 0	1,618 9 11	.....	.....	
Toonacadavoo.	1873	8	Do.	8,680	866 12 0	999 12 0	.....	.....	

17. In paragraph 15 of his report for Sattiamungalum, Colonel Morgan remarks that the experimental sandalwood plantation of that range promises well. No details, however, of a separate experimental plantation in the range have been furnished.

SECTION III.

18. *License and Voucher Forests.*—The Anamallay slopes and the five other ranges of the district are, as already mentioned, all open to licensed felling. The collections under this head are either made through the village Monigars, who issue licenses or lease to contractors. The expenditure shown is chiefly the commission paid to the village officers who collect the money. The expenditure against the Metoopolliem Voucher Forest includes the cost of the office establishment under the Deputy-Conservator, as separate sanction has not been received. Colonel Morgan has

shown the collections by contract under "IV. Permit Fees," and those through Monigars under "II. Timber removed by Purchasers." As both these items, however, are proceeds of the license and voucher forests, they are accordingly shown as receipts in the following abstract, viz:—

	Receipts.			Disbursements.		
	1872-73.	1873-74.	Variations.	1872-73.	1873-74.	Variations.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Anamallay	3,308	3,876	+ 568	173	184	+ 11
Bolamputty	3,556	2,239	—1,317	435	445	+ 10
Metoopolliem	807	2,409	+1,602	500	422	— 78
Sattiamungalum	2,357	5,767	+3,410	..	..	..
Collegal	1,212	2,052	+ 840	..	..	..
Bhowany	3,198	3,500	+ 302	..	..	..
Total	14,438	19,843	+5,405	1,108	1,051	— 57

19. *License and Voucher Forest, Anamallay.*—The increase of receipts on the Anamallay Voucher Forest is not large, and may be owing to the gradual development of the system and the natural increase of demand. Mr. Ross has not accounted for the large falling off in receipts in Bolamputty. His successor's attention will be called to this matter. The increase of receipts in Metoopolliem is due to the addition of the Nilgiri slopes to this range during 1873-74. The increase in the Sattiamungalum, Collegal, and Bhowany Ranges, is attributed by Colonel Morgan to additional demand for wood, which he believes will always continue, especially at Sattiamungalum.

20. *License and Departmental Systems compared.*—As regards the comparative merits of the license and voucher revenue, and that from departmental agency, the first only is suitable, or indeed possible, to the general condition of our forest ranges, and the last, to a compact and fenced reserved forest.

21. *Anamallay License. Forest continued.*—Mr. Douglas does not think that the license and voucher system is abused, and its administration is certainly cheap, being only 5 per cent. to the Monigars for the issue of licenses and record of the collection; their commission being in almost all instances a trifling amount (total Rupees 270 on the Anamallays) they were allowed to deduct it when forwarding the collections to the Treasury to save trouble and delay in their payment of commission.

21. (*a.*) This item of receipt should properly be credited to Jungle Conservancy and not to Forest Revenue. I proposed this in May 1873, but it was not approved of. There are no other but these village jungles to conserve, and no other receipts from this source.

Vide Revenue Board's Miscellaneous No. 102-3,063 of 20th May 1,873.

21. (*b.*) *Departmental* versus *License and Voucher.*—As regards my own observation of the systems, there is a very apposite case in point in another range. Another Deputy-Conservator entered into a contract to supply fuel to the Madras Railway at Metoopolliem. I may observe that the contract was with a forest contractor, and not with the Railway, who apparently were not consulted, nor was I. The fuel was cut, stacked, and found locally unsaleable at cost price; fortunately there was very little of it.

22. *License and Voucher Forest, Sattiamungalum.*—The right of collecting seigniorage on firewood, bamboos, charcoal, etc,. on the license and voucher system in Sattiamungalum Forest is leased out, and I hope that communal rights are respected.

The receipts under the license and voucher system (there are no charges) have increased nearly four-fold, and this is I think a gratifying proof that the people have had their wants supplied to a more adequate extent.

	Rs.
Receipts on account of timber removed on the License System in 1872-73	1,032
Do do. 1873-74	3,985

22. (*a.*) Colonel Morgan, however, thinks that there is "apparently an enormous loss to Government, and damage to the jungles, under the license and voucher system," and thinks that if the whole system could be suppressed, and departmental working introduced, and a sufficient depôt kept at Sattiamungalum Town, that the reveuue would be increased and economy be the result.

22. (*b.*) These wide tracts are however, in my mind, not suitable for this system. Hill forests with a base of nearly 40 miles do not appear to me to be workable on this system; the carriage to the depôt is a large item, and the ryot would have to pay the carriage back, perhaps over the same road; and I am credibly informed that the departmental rates are too high for the people to pay, and the wood at the depôt was not much in request; any increased profit to Government would, therefore, be at the expense of the people. Departmental working and the suppression of the license and voucher system would be attended in the first place with a greatly increased expense of establishment to watch so great an expanse of country; an additional temptation to smuggling, and increase of forest offences, would result, and, I think, widespread dissatisfaction. It is a very different matter with a small compact Government reserved forest, such as the up-to-lately reserved teak forest on the Anamallays, which is worked departmentally.

23. *License and Voucher Forests, Collegal.*—The license and voucher system in the jungle taluq of Collegal is alone possible, with requirements for agricultural and domestic wood, and shows a slight increase in financial results.

23. (*a.*) The increase of about 9 per cent. in the receipts under "License and Voucher" in Bhowany Forest shows that wants are more adequately supplied. As this, however, occurred under departmental agency, it is of course so far an argument in favor of this system being continued.

24. *License and Voucher Forests, Bhowany.*—The Bhowany Taluq is more favorably circumstanced as regards the introduction of departmental agency than the Sattiamnugalum Taluq. It has a much smaller base, where the hills meet the plains, the supplies coming down only three passes, and the river at our command for floatation.

SECTION IV.

25. *Yield of Forests.*—The yield of the different forests is summarized in the subjoined table:—

Ranges.	Timber.					Firewood for Railway and other purposes.		Bamboos.		Charcoal.	Canes.	Forest Produce.
	Departmentally.		On License.		Free.	On License and departmentally.	Free.	On License.	Free.			
	C. Ft.	Mds.	C. Ft.	Mds.	C. Ft.	Tons.	Tons.	Cart loads.	Cart loads.	Tons.	No.	Mds.
Anamallay	24,346	...	192	...	2,368	382	28	3,994	467	16	1,200	...
Bolamputty	.....	...	3,700	...	.....	1,077	36	756	86	42	...	...
Metoopolliem	.....	...	2,880	...	540 C.L. 27	59	3	161	36	½	...	..
Sattiamungalum	14	4,360	25,062	...	200	1	Not furnished.	.....	Not furnished.	...	...	520
Collegal	.....	4,158	4,400	...	1,120	.....	81	.....	200	...	...	...
Bhowany	120	2,710	14,260	...	3,960	1,414	6	1,055	69	...	...	120
Total	24,480	11,228	50,494	...	8,188 C.L. 27	2,933	154	5,966	858	58½	1,200	640

SECTION V.

26. *Financial Results.*—The aggregate receipts and expenditure of all the forests in the district are shown in the subjoined abstract, arranged under the several heads, viz :—

Item.	Receipts.	Amount.	Item.	Charges.	Amount.
		Rs.			Rs.
I.	Sale of timber etc., removed by Government agency ..	1,06,718	I.	Expense for felling timber, etc	27,145
II.	Sale of timber removed on license	14,841	II.	Purchase of tools, etc	268
III.	Duty on foreign timber ..	....	III.	Feed and keep of cattle	8,364
IV.	Permit fees, etc.	4,792	IV.	Rent of leased forests	....
V.	Grazing dues	12	V.	Charges connected with the collection of forest produce	324
VI.	Sale of fruits, babul, pod, etc.	33	VI.	Plantations	7,345
VII.	Sale of confiscated timber ..	179	VII.	Forest work, viz., cutting of creepers, etc	1,604
VIII.	Fines and forfeitures	....	VIII.	Forest Survey	1,169
IX.	Miscellaneous receipts	210	IX.	Experiments to test the value of timber	21
			X.	Communications, etc	7,301
					53,541
				2. Establishment and Office contingencies	27,152
	Total ..	1,26,785		Total ..	80,693

Forests.	Receipts	Disbursements including cost of establishment.
	Rs.	Rs.
Anamallay	63,820	34,009
Bolamputty	*2,359	1,396
Metoopolliem	....	5,232
Sattiamungalum	10,125	6,445
Collegal	15,529	8,888
Bhowany	15,109	17,970
Total ...	1,06,942	73,940

* Inclusive of Rupees 20, being receipts on account of the Walliar Reserve.

Forests.	Receipts.	Disbursements including proportion of cost of establishment.
	Rs.	Rs.
Anamallay	3,876	1,872
Bolamputty	2,239	1,313
Metoopolliem	2,409	1,634
Sattiamungalum	5,767	482
Collegal	2,952	526
Bhowany	3,500	856
Total ..	19,343	6,753

Items 1, 6, and Rupees 190 out of No. 9 aggregating Rupees 1,06,942, represent the receipts from reserved forests and departmental operations in the district, the working charges of which including plantations and fuel reserves were Rupees 52,490, and the proportion of the cost of the establishment Rupees 21,450, giving an aggregate of Rupees 73,940, which leaves a profit of Rupees 33,002 during the year. The receipts from the license and voucher forests were Rupees 19,843; the charges were Rupees 1,051 under Conservancy, and Rupees 5,702 under Establishment; total Rupees 6,753, giving a clear profit of Rupees 13,090. The profit under Reserves is 44·6 per cent. on expenditure, and under License Forests 193·8 per cent. But the departmental working and the license system cannot be compared with each other, unless the two systems are tried over two similar tracts of equal dimensions which is out of the question.

27. The true results of each forest are given in the following table :—

Ranges.	Expenditure.	Receipts.	Difference between Columns 2 and 3.	Value of timber in depôt.	Increase of stock during the year.	Decrease of stock during the year.	True results of the year calculated on Columns 4, 6, and 7.
1	2	3	4	5	6	7	8
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Anamallay	35,881	67,696	+31,815	1,42,929	....	19,332	+12,483
Bolamputty	2,709	4,598	+ 1,889	2,661	....	1,938	— 49
Metoopolliem	6,866	2,409	— 4,457	400	100	....	— 4,357
Sattiamungalum ..	6,927	15,892	+ 8,965	2,478	1,996	....	+10,961
Collegal	9,484	17,581	+ 8,097	2,664	....	417	+ 7,680
Bhowany	18,826	18,609	— 217	6,989	584	....	+ 367
Total ..	80,693	1,26,785	+46,092	1,58,121	2,680	21,687	+27,085

The stock in hand at the beginning of the year amounted to Rupees 1,77,128, that at the end of the year to Rupees 1,58,121, showing a net decrease of Rupees 19,007. Deducting this sum from the excess* of receipts over the expenditure, leaves Rupees 27,085 as the true result of the year under report.

	Rs.
Aggregate Receipts	1,26,785
Do. Expenditure	80,693
*Excess of Receipts ...	46,092

SECTION VI.

28. *General Remarks, Anamally.*—Mr. Douglas has contributed a long and interesting report on the operations of the past year.

A large quantity of timber cut in former years, apparently in excess of the demand, has been discovered and brought out for sale. This I noticed in my former inspection of this forest, but further search seems to have brought to light greater quantities.

29. The Government elephants seem to have worked well, and much care is taken of them by the Deputy-Conservator; their labor is cheaper than that of hired elephants, which, however, have to be engaged in addition, to get through the work in the season.

30. The carting establishment work chiefly above ghaut; below, it is cheaper to hire; and, unfortunately, in past years, the heaviest loss was from employment and exposure of the bullocks in carting below ghaut to the river depôt.

31. A very important feature in the forest operations on the Anamallays was the demarcation and survey of the boundaries with Malabar, and partially of the Numboody's leased forest. I can certify to the difficulty of the work from personal inspection, and its success reflects credit on the cordial co-operation of the Deputy-Conservator with Mr. Baber, in the material assistance given by the jungle tribes in clearing the line and putting the party.

32. It will be obvious that considerable confidence should be placed in a forest officer, whose, I may say, protectorate of the hill-tribes has led to such valuable results.

33. Mr. Baber too deserves much credit for the energy with which his work was done in a dense unhealthy forest twenty miles from the nearest village, whence supplies could be procured.

34. I pressed on Mr. Douglas the necessity of better quarters for his Overseers, and am glad to observe that he has made a considerable improvement in this respect by comfortable hutting, instead of going to the expense of pukka buildings, which would have entailed an incommensurate expense. The Local Fund Board, at my suggestion, have improved the road leading to the ghaut depôt.

35. As regards the future sale of timber, some will be sent to Bombay to be sold by auction, and sales will be tried in different places, whereby alone the best market can be ascertained. A depôt for seasoned wood for departmental purposes might be useful, but the Department Public Works find, generally, that contractors supply their demands to more exact specification than is possible in wholesale transactions. By having a depôt of all sorts of scantlings this deficiency may be, in future, obviated.

36. As regards planting, I am not so sanguine ; there is a natural reproduction going on, which conservancy will preserve. We have not the rich soil of the steamy plains of Malabar, where the Nelamboor Teak is produced by the acre. Whether this forced and rapid growth will produce as durable timber as the natural teak of the Anamallays remains yet to be tested. It seemed to me that the clearance of parasitical creepers was one of the most urgent of works, and this will be doubtless attended to.

37. As regards "Fuel Reserves," we have fortunately got one in this range. It may be imagined that when 30,000 additional acres were cleared of forest in thirty years round the village of Anamallay, not much would be left, and such was the case ; but there had been an outstanding boundary dispute with a proprietor of Malabar. This, though settled by a commission and a map, about twenty-four years ago, had never been demarcated on the ground, and continually cropped up again. The boundary was settled on the ground by the Collector of Malabar and myself, and adjudged to Coimbatore, and it then occurred to me, that this was the place for a fuel reserve, in fact, the only wood left on the plains. It has been demarcated, and will be made into an open reserve.

38. It is most fortunate we have this as a reserve for the future good of the people ; whereas, if a fuel plantation were attempted, it would be all expense and no return, like the Walliar one, which was once a dense jungle, and is now altered in climate and forest productiveness.

39. It also occurred to me that as the subject of fuel reserves for the people will soon become of permanent importance, it is better to reserve waste lands bordering on hills, etc., than to grant them for cultivation, and then buy them back again, to plant, and so I reserved the right of granting applications for such lands to myself.

40. *Free Passes.*—With reference to free licenses for communal and other purposes, no complaints have reached me that any undue restriction was placed on their issue in the Anamallay Range.

The remarkable case of abuse which I brought last year to notice arose from the Deputy-Conservator of another range leasing out to contractor the seigniorage of whole taluqs without consulting me, inviting sealed tenders, etc. ; the result was that the Revenue Department knew nothing about the matter, and that the leases to collect seigniorage were sublet, and the people fleeced in the remote highlands of Bhowany, and probably elsewhere.

41. "Free passes" are said by the Deputy-Conservator not to work well in Sattiamungalum Forests, but no detail is given.

42. The *free* passes seem very moderate in the large agricultural taluq of Collegal ; passes for only 180 cart-loads of firewood, about two to each village, which it is to be hoped were not restricted to that quantity or they could not have cooked their meals ; the greater number of the villages are situated in the midst of jungles. Also 200 cart-loads of bamboos seem but a small number for the repair of huts and fences, when all fields in the jungles must be fenced against the wild animals.

What actual amount of bamboos and firewood was consumed is not ascertainable ; but the seigniorage on them was given on contract, and with velam bark and charcoal, realized Rupees 1,320.

43. Colonel Morgan (paragraph 33) writes that free passes are abused in Bhowany Forests, but gives no specific instances which, if brought to notice, would have been duly disposed of.

I have already in former correspondence given my opinion that for the greater part of this taluq, and indeed for all above ghaut, where mostly the jungle exists, free passes are unnecessary, as the ryots have a right to supply their simple agricultural and domestic wants without being troubled by any one.

The abuse was in the other direction, and I found the seigniorage contractors levying black mail from the hill cultivators, not to trouble them when fencing their fields or roofing their houses with the surrounding bamboos.

These people had been unmolested for generations till a man appeared with some assumed authority to tax them ; and had I not gone over the hills among them, they would have been paying an alleged cess to this day.

A better arrangement has been introduced in the license and voucher system ; the receipts are collected in Tannahs properly distributed, instead of allowing the contractors to levy rates all over the taluq.

44. *Forest Offences.*—With regard to forest offences, they seem rare in Mr. Douglas' range. I should have no hesitation in giving him *carte blanche* to prosecute, having entire confidence in his discretion ; but am still of opinion, that the Collector should have the controlling power in this respect. Indeed no prosecutions, civil suits, or the like should be entered into without his sanction. A Forest Overseer lately brought a complaint of "breach of contract" Act XIII of 1859, before the Metoopolliem Sub-Magistrate, which had not a leg to stand on.

45. I do not know to what Colonel Morgan alludes in his report on Sattiamungalum Forests, when he writes that "criminal prosecutions are a failure as there is no forest law." There is the law of theft, as defined in the Penal Code, and this is worked as in other ranges. There seems to have been only one prosecution in the Sattiamungalum Range, and that was followed by a conviction.

46. The single forest offence reported in Collegal is the possession of certain timber supposed to be cut without license, an inquiry into which has been ordered.

47. *Reserved Forest and Hill Tribes, Anamallay.*—The only other subject is that of maintaining* our reserved forest of twenty-five years standing. There are no communal rights there. Here is a small compact teak forest, above ghaut, on the hills, and the question is, is it to remain so, or be open to the public, who may wish to cut timber, or graze cattle therein, having cleared away all the communal low country forest and made it into fields.

* Reference here is made to Proceedings, Madras Government, No. 634, of 26th May 1874, Revenue Department on an extract from "Native Public Opinion" forwarded to me for report.

48. It is a very curious fact that though the hill-tribes were emancipated twenty years ago from all external influence, they are precisely in the same condition now.

49. The Chetty who was alleged to drive the poor hill-man to collect products in the monsoon (which is cardamom harvest-time), now visits him in his hut with his deleterious arrack and formidable statement of balance due to the account, carries off the produce on his

Still under subjection to the Chetties.

return bullocks, and will be prepared to produce an account showing either a wonderful confidence in the solvency of an apparently impecunious hill-man, or something wrong with the balance.*

* Rupees 5,000 ! !

I do not think that the forest should be open to these men when the establishment is withdrawn, and the locality liable to uncontrollable fires.

50. It is to be hoped that allotment of former Kumery Forest-land to the jungle tribes will prevent further destruction of forest. There is no doubt that intercourse with these people by European officers is likely to be productive of permanent good.

I have the honor to be,
Sir,
Your most obedient servant.

(Signed) A. WEDDERBURN,
Collector.

ENCLOSURES.

1. Anamallay Forest Report, dated 1st June 1874, with seven statements.
2. Mettoopolliem and Bolamputty Forest Report, dated 14th May 1874, with twenty enclosures.
3. Sattiamungalum Forest Report, dated 30th May 1874, with seven enclosures.
4. Collegal Forest Report, dated ditto ditto.
5. Bhowany Forest Report, dated 3rd June 1874, with seven enclosures.

Note.—Stock Register E of the three latter forests, and statement of criminal prosecutions for Bhowany, will follow.

(Signed) A. WEDDERBURN,
Collector.

OFFICE OF DEPUTY-CONSERVATOR OF FORESTS,
ANAMALAI RANGE, COIMBATORE,
14*th May* 1874.

No. 219.

From

C. G. DOUGLAS, ESQ.,
Deputy-Conservator of Forests, Anamalai Range,

To

A. WEDDERBURN, ESQ.,
Collector and Conservator of Coimbatore.

SIR,—I have the honor to submit my Administration Report on the Anamalai forests for 1873-74.

SECTION I.

Inspection Tours of the Officer in charge.—I was absent from headquarters 187 days in all performing six different tours, the longest of which lasted from the 12th of August to the 22nd December and included numerous minor inspections, varying from two days to a fortnight's duration, to parts of the forest more or less distant from Toonacadavoo.

SECTION II.—RESERVES.

1. A, RESERVED FORESTS.—The subjoined table shows the extent to which felling and trimming has been carried on, with cost per cubic foot including all charges; the total outlay will be found to correspond with the total value exhibited in Appendix B.

Description of Timber.	Number of Trees felled.	Outturn in Pieces.	Outturn in Cubic Feet.	Details of Storage.	Cost per Cubic Foot. Dragging.	Supervision and Sundries.	Carting.	Slipping.	Carting.	Total Cost per Cubic Foot.	Stump Fee.	Felling or Trimming.	Total Valuation.
1	2	3	4	5	8	9	10	11	12	13	6	7	14
					Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Rosewood ...	270	553	10,800 4 5	Forest depôts.....	0 1 2	0 10 6	.....	.....	.....	1 0 3	0 2 4	0 2 2	1,597 13 0
				Top of ghaut	0 1 2	0 10 6	0 3 5	0 2 0	.....	1 8 8	0 2 4	0 2 2	1,129 15 5
				Adivarum	0 1 2	0 10 6	0 3 5	0 2 0	0 1 0	1 5 8	0 2 4	0 2 2	1,408 2 9
				Settumadai	0 1 2	0 10 6	0 3 5	0 2 0	0 1 6	1 6 8	0 2 4	0 2 2	122 15 11
				Anamalai.....	0 1 2	0 10 6	0 3 5	0 2 0	0 5 0	1 8 2	0 2 4	0 2 2	2,169 4 10
				Coimbatore.....	0 0 4	0 10 6	.....	.....	.....	0 12 6	0 0 8	0 1 1	10,472 8 1
Teak wood...	67	723	13,748 0 0	Forest depôts.....	0 0 4	0 10 6	0 2 0	0 1 6	0 0 6	1 0 6	0 0 8	0 1 1	8,108 15 3
				Top of ghaut	0 0 4	0 10 6	0 2 0	0 1 6	0 2 0	1 2 0	0 0 8	0 1 1	2,313 0 10
				Adivarum	0 0 4	0 10 6	0 2 0	.....	.....	0 14 6	0 0 8	0 1 1	468 9 0
				Settumadai	0 0 4	0 10 6	0 1 0	.....	.....	1 0 6	0 0 8	0 1 1	121 14 3
Vengay ...	3	5+16=21	424 2 4	Anamalai	0 0 4	0 10 6	0 2 0	0 1 6	.....	1 2 0	.....	0 1 1	258 3 0
				Forest depôts.....	0 6 10	.....	.....	.....	.....	0 8 0	.....	0 1 1	80 6 0
				Top of ghaut	0 6 10	.....	0 1 0	.....	.....	0 8 0	.....	0 1 1	170 2 10
Karamardoo.	3	6+ 8=14	299 4 8	Adivarum	0 6 10	.....	.....	.....	.....	0 9 0	.....	0 1 1	13 0 0
				Top of ghaut	0 6 10	.....	.....	.....	.....	0 8 0	.....	0 1 1	131 2 8
Velvagai ...	4	6	162 2 6	Adivarum	.....	.....	.....	0 1 0	.....	0 2 0	.....	0 2 2	20 13 6
Karuvagai ...	5	7	135 3 8	Beypore	.....	.....	.....	.....	0 7 0	0 9 0	.....	0 2 2	91 3 11
				Do.	.....	.....	.....	.....	.....	0 9 0	.....	0 2 1	72 13 8
				Adivarum	.....	.....	.....	0 1 0	.....	0 9 0	.....	.....	3 4 1
				Total...	.....	.....	.....	.....	.....	.....	.....	.....	28,704 5 0

2. The Rosewood was felled to complete an indent for the Madras Gun Carriage Factory.

3. The Teak, Vengay, and Karamardoo, is the product of girdled, dead, stunted, or wind-blown trees and of logs which had been abandoned or overlooked by working parties in former years. The labor of searching for and collecting wood thus scattered over the forest is severe, and, of course, in a batch of timber so obtained there are many inferior pieces, but the results are satisfactory; there is a considerable predominance of serviceable timber, some of which is really magnificent; a large and valuable addition to stock has thus been effected at a moderate outlay, and systematic operations should be continued to save that which must otherwise perish.

4. By far the most valuable portion of the Teak was obtained from trees abandoned after being cut and in many instances partially logged. This fact serves to show the necessity of maintaining careful supervision over axemen in these forests. In a busy season hundreds will be at work in small parties, and there is great difficulty in watching them; they fall sick, run short of supplies, or want to attend some festival, and when the spirit moves them they march without beat of drum,—too often not to return,—and it is a mere chance whether another party completes their work or not; if not, the timber lies,—unless discovered by some of the forest establishment,—until it rots or is burnt; in the dense undergrowth a log may lie unseen, though people pass within a yard of it.

5. The Vagai timber (*Acacia speciosa* and *Acacia odoratissima*) was a specimen consignment to Bombay, whence the Agent for Gun Carriages had applied to me for timber suitable for wheel-spokes, etc; five logs, containing 110 cubic feet of junglewood, not shown above, were cut and squared for cart-repairs at a cost of 1¼ Annas per cubic foot.

6. *Elephant Labor.*—The work performed by elephants,—both Government and hired,—is given below, with the number and description of logs dragged or slipped by each:—

—	Number of Rosewood.		Number of Teak.		Number of Vengay.		Number of Karamardoo.		Other Logs.		Total.	
	Dragged.	Slipped.	Dragged.	Slipped.	Dragged.	Slipped.	Dragged.	Slipped.	Dragged.	Slipped.	Dragged.	Slipped.
1	2		3		4		5		6		7	
Government elephants	628	470	783	701	24	16	16	10	20	...	1,471	1,197
Hired elephants ...	114	97	....	382	...	2	...	...	...	...	114	481
Total...	...	...	...	...	...	...	...	...	...	...	1,585	1,678

7. *Carting above Ghaut.*—Details are given in the following table of work performed by Government agency and contract:—

Description of Timber.	Forest Depots to top of Ghaut.		Remarks.
	By Government Carts.	By Contractor's Carts.	
Rosewood	125	130	
Teak	52	70	
Vengay	13	...	
Karamardoo	12	...	
Total...	202	200	

8. *Carting below Ghaut*—As follows:—

Description of Timber.	From Adivarum to Anamalai.		From Adivarum to Settumadai.		From Adivarum to Coimbatore.		From Settumadai to Anamalai.		From Settumadai to Coimbatore.		From Anamalai to Coimbatore.		From Anamalai to Oodumalpettah.		From Takeady to Anamalai.	
	By Government Carts.	By Contractor's Carts.	By Government Carts.	By Contractor's Carts.	By Government Carts.	By Contractor's Carts.	By Government Carts.	By Contractor's Carts.	By Government Carts.	By Contractor's Carts.	By Government Carts.	By Contractor's Carts.	By Government Carts.	By Contractor's Carts.	By Government Carts.	By Contractor's Carts.
Rosewood	187	...	17	...	87	256	14	...	...	...	16	...	...	...	...	...
Teak	550	...	15	...	11	...	20	...	18	...	92	...	5	...	8	...
Vengay	...	...	...	...	...	...	...	...	...	...	2	...	...	8	...	...
Velvagai	...	...	...	...	...	...	...	...	1	...	11	...	...	...	...	...
Other woods	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total...	757	...	32	...	98	256	34	...	19	...	121	...	5	...	8	...

9. *The Government Elephant Establishment* has as usual proved a success. The value of work performed, calculated at Rupees 7 per diem, amounts to Rupees 6,377 0 0

	Rs.	A.	P.
Deduct—			
1st.—Feed and keep	1,751	2	9
2nd.—Pay of establishment	710	4	3
3rd.—Arrears paid for 1872-73 ...	404	4	4
	2,865	11	4
Saving effected...	3,511	4	8

This is an improvement on last year of Rupees 625-6-4. The annexed table shows value of work performed by Government elephants compared with the results obtained by hiring animals:—

——	Number of Logs dragged.	Cost while so employed.	Rate per Log.	Number of Logs slipped.	Cost while so employed.	Rate per Log.
1	2	3	4	5	6	7
		Rs. A. P.	Rs. A. P.		Rs. A. P.	Rs. A. P.
By Government elephants	1,471	1,698 13 6	1 2 6	1,197	1,166 13 0	0 15 8
By hired do. ...	114	493 12 0	3 12 6	481	1,206 8 0	2 10 1
Total...	1,585	2,192 9 6	.....	1,678	2,373 5 0	.....

10. *The Government Cart Establishment.*—The value of work performed, calculated at rates payable to contractors, exceeds the cost of maintenance by Rupees 65-0-6,—an insignificant surplus, but a decided improvement on the last two years; and it is only fair to remark that the establishment has accomplished the removal of much timber which nothing would induce contractors to attempt. During the year four bullocks have died, and one was killed by a tiger; fifty-one head of cattle remain. The particulars of work are shown below:—

From	To	Number of Logs carted.	Description of Timber.	Cubical Contents.	Rate per Cubic Foot.	Rate per Log.	Amount.	Total.	Remarks.
					Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Adivarum ...	Settumadai ...	17	Rosewood ...	299 11 10	0 1 0	.....	18 11 11		
		15	Teak wood ...	326 10 3	0 1 0	.....	20 6 10		
Settumadai ...	Anamalai ...	20	Do.	584 1 4	.....	1 0 0	20 0 0	39 2 9	
		14	Rosewood ...	263 6 6	.....	1 0 0	14 0 0		
Do. ...	Coimbatore ...	17	Teak wood ...	375 3 1	.....	5 0 0	85 0 0	34 0 0	
		1	Do.	19 14 5	.....	5 8 0	5 8 0		
		1	Velvagai ...	17 0 2	.....	5 8 0	5 8 0		
Adivarum ...	Do. ...	87	Rosewood ...	2,438 6 6	0 8 0	.....	1,219 4 *4	96 0 0	* Removed on sling carts. The cubic contents show close measurement not real bulk of timber; the cost is debited to sound wood only.
		11	Teak wood ...	249 9 0	0 4 0	.....	62 7 0		
		81	Bandy-loads of fire-wood at Rs. 4 per bandy.	.....	.....	.....	324 0 0		
Do. ...	Anamalai ...	115	Rosewood ...	.....	.....	1 4 0	143 12 0	1,605 11 4	
		72	Do.	1,335 4 11	.....	1 0 0	72 0 0		
		517	Teak wood ...	.....	.....	1 4 0	646 4 0		
		139	Do.	.....	.....	1 0 0	139 0 0		
		161	Do.	4,105 10 1	.....	1 0 0	161 0 0		
		5	Velvagai ...	145 7 8	.....	1 0 0	5 0 0		
		2	Vengay	72 0 3	.....	1 0 0	2 0 0		
		6	Karamardoo ...	130 10 4	.....	1 0 0	6 0 0		
		3	Nunjacadumba.	.....	.....	1 0 0	3 0 0		
		1	Karuvagai ...	.....	.....	1 0 0	1 0 0		
		3	Vagai	.....	.....	1 0 0	3 0 0		
Anamalai ...	Coimbatore ...	2	Teak	79 0 2	.....	6 0 0	12 0 0	1,182 0 0	
		65	Do.	.....	.....	6 0 0	390 0 0		
		59	Do.	1,143 5 5	.....	5 0 0	295 0 0		
		16	Rosewood ...	259 1 5	.....	5 0 0	80 0 0		
		2	Vengay	72 0 3	.....	6 0 0	12 0 0		
		11	Velvagai ...	275 6 0	.....	5 0 0	55 0 0		
								844 0 0	

From	To	Number of Logs carted.	Description of Timber.	Cubical contents.	Rate per Cubic Foot.	Rate per Log.	Amount.	Total.	Remarks.
					RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	
Anamalai ...	Oodamulpettah.	5	Teakwood ...	75 0 0	.....	5 0 0	25 0 0	25 0 0	
Takeady	Anamalai ...	8	Vagai	.....	.....	1 4 0	10 0 0	10 0 0	
Forest depôts...	Top of ghaut...	125	Rosewood ...	3,480 0 4	0 4 0	.....	870 0 1		
		52	Teak wood ...	850 8 6	0 3 6	.....	186 1 6		
		25	Junglewood ...	474 9 1	0 2 0	.....	59 5 6		
								1,115 7 1	
							Total...	4,951 5 2	

11. *Demarcation and Survey.*—I am indebted to Mr. Baber, Assistant Superintendent in charge of Polachy Taluq, for the information on which the following remarks on survey operations are chiefly based.

12. The work taken in hand was (1) the demarcation and survey of part of the district boundary line between Coimbatore and Malabar, and (2) the demarcation and survey of the leased forest which lies in Malabar to the west of Toonacadavoo.

13. The district boundary line, starting from the source of the river Meengarai, runs to Coochmullai Peak; thence, crossing a deep valley, it reaches Pundaramullai and continues due south to Vengolimullai, the trijunction of Cochin, Malabar, and Coimbatore.

14. The leased forest is situated immediately to the west of this line, bounded on the south by a ridge of hills running west from Vengoli, and on the west and north by a river and stream, respectively. The area of this tract is estimated at 30 square miles; it is covered with heavy bamboo jungle interspersed with dense ever-green sholas, and abounds in Teak, Rosewood, Vengy, Karamardoo, and other timber-trees.

15. The work was carried out under the superintendence of Mr. Baber, who, although he had to conduct the regular work of his department on the plains, and was consequently unable to remain in the forest, managed to pay occasional visits of inspection, and it is to his method and energy that results are mainly due.

16. The task of supplying the necessary labor for clearing lines and other demarcation purposes devolved on the Forest Department. It is satisfactory to observe that the loss by non-attendance was but small; during the four months' operations only three days' delay occurred out of a total of 345 working days.

17. The following statement shows the nature and quantity of work performed :—

Line.	No. of linear miles of Jungle cleared.	No. of Marks set up.			No. of Stations surveyed.	No. of linear miles demarcated.	No. of linear miles surveyed.	Remarks.
		Station Stones.	Off sets.	Total.				
District boundary.	6½	47	...	47	47	8¾	8¾	Three miles remain to be surveyed.
Leased forest.	19¼	415	30	445	364	22	19	
Total...	26	462	30	492	411	30¾	27¾	

18. Rough stone was used for demarcation, except on parts of the district boundary, where it was necessary to use stones of the quality and dimension prescribed by Demarcation Rules. Wherever practicable large rocks were used for station-marks. On the stones along the district boundary the Government broad arrow and a Z were cut; along the leased forest lines a Z only was cut. The country south and west of this line is claimed by Cochin, but no settlement of boundaries has taken place.

19. The six and-a-half miles of jungle clearing on the district boundary, shown in the statement above, is almost a due north and south line, averaging twenty feet in breadth. Along the boundaries of the leased forest such lines only were cut as were absolutely necessary for survey; this proved sufficiently heavy work owing to the density of the jungle through which the whole line runs.

20. The total cost of the outturn for the season was as follows:—

		RS.	A.	P.
Pay and batta of Survey and Demarcation Establishment includes 20 per cent. for supervision		865	9	7
Charges for hire of coolies employed in cutting lines.	Expended by Survey Department	400	0	0
	Do. by Forest do.	1,168	12	8
		2,434	6	3

This gives an average of Rupees 79-2-8 per linear mile and of Rupees 81-2-4 and Rs. 0-2-3 per square mile and acre, respectively.

21. Excluding all charges for supervision, the outlay on demarcation is Rupees 1,568-12-8, giving the following averages:—

	RS.	A.	P.
Per linear mile cleared and demarcated	51	0	3
Per square mile demarcated	52	4	8
Per square acre do.	0	1	3

22. These rates bear comparison with those for similar work performed in the Burmah, Mysore, and Coorg forests, where, as shown in the several Administration Reports from 1868-69 to 1871-72, the cost varied from Rupees 15-4-0 to Rupees 53-7-0 in the first and from Rs. 36-9-9 to Rupees 52-9-0 in the second. In the Nagar range, where this work was done by contract, it cost Rupees 60 per mile.

23. The charge for survey and supervision is heavy, because it was absolutely necessary to employ subordinates on high rates of pay.

24. Operations commenced in September and continued till the middle of December. The season was, on the whole, favorable; only eleven days were lost by rain and sickness. It proved quite impossible to carry on work beyond the middle of December,—a time when these forests become extremely unhealthy; a little survey remains, therefore, to be completed this year.

25. Considering that the scene of operations was remote and unhealthy, the season limited, labor (with the exception of Kaders) nonresident and expensive, and that supplies had to be brought from a distance of twenty miles, the results are satisfactory, especially for a first attempt. The cost upon the whole may be regarded as moderate when compared with the demarcation and survey of waste lands in Wynaad where the average is 8 Annas per acre.

26. Other operations, such as clearing of brushwood, fire-tracing, repairs to roads and bridges, etc., call for no special remark.

27. The expenditure on departmental operations is less by Rupees 7,291-4-3 than that incurred the year before as shown in the following table, compiled from Appendix A, excluding the cost of "*Plantations*" and other charges not strictly pertaining to this Section:—

Year.	I., Timber Expenses.	II., Purchase of Tools.	III., Feed and keep of Cattle.	VII., Conservancy.	VIII., Survey.	X., Roads and Buildings.
	RS A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1872-73 ...	15,431 5 9	57 13 0	8,296 4 4	1,248 3 0	*Nil.*	3,996 12 1
1873-74 ...	8,752 2 3	*Nil.*	6,474 2 6	1,298 5 11	1,168 12 8	4,045 10 7

28. The saving has been effected chiefly under heading No. I., "*Timber Expenses*," in consequence of a decrease of Rupees 8,324-1-0 in the expenditure on transport of stock by contract as compared with the out-goings of the year preceding, which amounted to Rupees 11,580-6-0. Works of utility have not been allowed to suffer; conservancy, roads, and buildings have all been duly provided for, while a new item of Rupees 1,168-12-8 occurs under heading VIII., "Survey."

29. The revenue derived from the reserved forest exceeds that of the previous year (when only Rupees 8,280-11-6 were realised) by Rupees 55,539-7-9. This increase is partly ascribable to the sale of Rosewood to the Madras Gun Carriage Factory, amounting to Rupees 23,732-11-0,—a larger transaction than we have accomplished with that department for many years,—and partly to the adjustment of an outstanding account of Rupees 32,972-3-3 due by the Bombay Marine.

30. The other sales do not call for special mention.

31. Before treating of the contemplated operations for 1874-75, it will be convenient to refer to those described for 1873-74 in the last Administration Report, and observe to what extent they have been successfully carried out; the chief features of the programme were—

(*A.*) *To deliver at Pothanore for the Madras Gun Carriage Factory 8,000 cubic feet of Rosewood (Dalbergia latifolia) and 5,000 cubic feet of Teak.*—Of the Rosewood 7,910-10-9 cubic feet were delivered at Rupees 3 per cubic foot, and the price, amounting to Rupees 23,732-11-0, brought to account within the year. Of the Teak only 550-0-3 cubic feet were supplied, realising Rupees 1,375-0-10 at Rupees 2½ per cubic foot. The sum of Rupees 25,107-11-10 has, therefore, been secured out of Rupees 36,500, the aggregate selling value of the whole indent. It is merely necessary to explain that Teak *planking*, split or sawn, was required and not logs; no fresh Teak was felled, as there is a large stock on hand, out of which most of the planking has been sent to the coast depôts, and was, therefore, not available. Other unexpected sales have, however, been effected, amounting to Rupees 5,537-4-2, to the Central Jails at Salem and Vellore, to the Department of Public Works, and Madras Railway Company, etc.

(*B.*) *To fell and square as many old girdled Teak as possible, and to trim up and store all waste Timber.*—Considerable progress has been made in this important work. Eighty-seven trees are felled, which, together with the yield of other waste Teak, produced 13,748 cubic feet, the whole of which has been stored in roadside depôts, besides 723-7-0 cubic feet of Vengay and Karamardoo.

(*C.*) *To convey the balance of Stock in roadside Depôts to top of Ghaut.*—The balance of stock at the close of last year was 478 logs as stated in paragraph 5 under Section V., and during the past year 402 logs have been removed; this, as it happened, was mostly new timber and not that specially referred to; but the proposed amount of work has been nearly accomplished.

(*D.*) *To slip from top of Ghaut to Adivarum as much as possible of the Timber brought from forest Depôts in* 1872-73.—The number of logs slipped is 1,678, of which 1,083 are logs brought in from forest depôts in 1872-73; the whole of the timber will be slipped before the end of June.

(*E.*) *To convey to Anamalai a portion of the Stock in Depôt at foot of Ghaut.*—Government carts have removed 757 logs to Anamalai; other removals have also been effected by contract as well as by Government agency. The whole of the timber at foot of ghaut will be conveyed to Anamalai by the end of June.

(*F.*) *To erect suitable quarters for Overseers at Anamalai.*—This has not been accomplished, but good and inexpensive building have been constructed at a distance of 6 miles from Anamalai, 2 from foot of ghaut, and about 10 from Toonacadavoo, which will greatly facilitate supervision during the nonworking season and save the long march to and from Anamalai, which has hitherto been a heavy addition to a day's labor.

(*G.*) *To help the improvement of the Road between Anamalai and the Depôt at Adivarum.*—The department has as yet performed no portion of this work, but a sum of money was allotted from Local Funds and nearly two-thirds of the distance has been put in order.

(*H.*) *To prosecute Demarcation and Survey Operations.*—The boundaries of the leased forest have been demarcated and the survey is nearly complete. The northern limit of the Government forest below ghaut has been settled from the Meengarai river to Adivarum,—a distance of over 7 miles, along which boundary stones have been fixed.

32. *Contemplated Operations.*—During the past year inquiry has been directed to the best means of disposing of the large stock of timber still on hand, most of which, owing to the extensive carting operations of 1872-73, has now been stored in accessible localities. The main object, therefore, will be to turn to good account the labors of the past two years. The manner in which this may be effected has been explained to the Board of Revenue who have approved the general plan of operations suggested, and the question is now before Government. If early orders are passed, arrangements will be made, first, for selling by auction or otherwise, should opportunity be favorable, at Bombay an annual consignment of the best Teak and Rosewood; second, for establishing a local market for Anamalai timber by a judicious system of depôts, sales, and advertisements. A reserve of timber will be maintained in order to meet the requirements of the Public Works and Ordnance Departments as well as of the railway. A certain portion of the stock will be sawn up. Much depends upon the result of these operations, the prospects of the range will be largely influenced thereby, and, in order to ascertain the most remunerative method, it will be necessary for the Deputy-Conservator to devote much of his time to this special branch of work.

33. The Madras Railway Company have applied for 800 bridge-sleepers 12″×12″×6″ and 200 crossing-sleepers 16′×12″×6,″ or in all 6,421 cubic feet. This indent may lead to others if successfully met; there is, in fact, as I am informed by an officer of the Company, the prospect of an annual demand.

34. A small trial consignment of Teak will be sent to England for the use of Her Majesty's Dockyard, the price being regulated by the current market-rate for Burmah timber of the same stamp. It will, I fear, be no easy matter to obtain a footing in the home market where, it would appear, Burmah wood has long been established, and where an opinion adverse to the Malabar article seems to prevail amongst authorities.

35. About 3 acres of Teak will be planted, and, as an experiment, partial clearance *only* will be adopted, all large trees being left standing. The site will be quite away from the present openings.

36. The conservancy of natural forests by clearing young trees of brushwood, eradicating creepers, and fire-tracing promising blocks of young timber before the dry season, will be attended to as much as possible, but the establishment is barely equal to the occasion.

37. Demarcation will, it is expected, continue; every effort will be made to help the Survey Department.

38. Comfortable quarters for European Overseers at Anamalai are greatly required; they need not cost much; accommodation has hitherto proved wretchedly inadequate, although the majority of the establishment have been natives who were able to secure lodgings in the village.

B. Fuel-reserves.—The demarcation and survey of the tract mentioned in my last report, has progressed during the year, but there are several matters connected with its strict reservation to which attention must be devoted ere it is finally closed to the public. The land lies between two chains of hills running nearly due east and west; it is thus on its north and south sides naturally enclosed, but open at the ends, one of which (the east) abuts on a public road, the other on the forest property of the Nambudri of Colungode, the main line of export from which cuts the reserve in half. If people and cattle are to be rigidly excluded, the reserve must either be fenced on the east and west, which involves the question of a right of way, or a fence must be constructed round three sides of the two blocks, into which it is divided by the route to the private forest aforesaid, and this involves considerable outlay. Heretofore every petty obstruction has caused a divergence, and the road in consequence occupies much more space than it ought; indeed, for a portion of the distance there are two or three distinct lines; this, of course

is most destructive to the forest, and if traffic cannot be stopped altogether it must at least be confined to one line. If a right of way be established, the choice rests between two plans: one of fencing the forest on each side the road and the total exclusion of trespassers; the other of endeavoring to restrict the traffic to one line, and within the forest to close from time to time only such parts as threaten to degenerate, while in the barer spaces fuel and bamboos might be propagated by broad-cast sowing.

2. The broad-cast sowing of bamboo and fuel-seeds is well worth trial, as, if at all successful, it is by far the best means of restoring impoverished tracts. An attempt will this year be made to rear bamboos and Babool at the foot of ghaut in some land recently acquired by the department. Some useful hints and facts may, it is hoped, be derived from this experiment for future guidance in more extended operations should such be authorised.

3. To secure land easy of access and of sufficient extent would be of great benefit if devoted to the cultivation of fuel and worked on a regular system.

4. In Oodamulpettah Taluq an area of between 9,000 and 10,000 acres of waste land is at present unoccupied. For much of this durkhasts have been made; it is, therefore, under reference to the department, and will be inspected and reported on during the ensuing season.

C. Plantations.—The following statement furnishes the particulars called for in Revenue Board's Proceedings, dated 27th January 1874, No. 133:—

Name of Plantation.	Year in which formed.	Area.	Description of Trees.	No. of Trees.	Cost. During the Year.	Cost. Up to the Year.
					Rs. A. P.	Rs. A. P.
1. Moodi	1870	8	Teak.	8,439	788 10 0	1,598 9 11
2. Toonacadavoo ...	1873	8	,,	3,680	866 12 0	999 12 0

2. Both these plantations are experimental: in that of 1870, 2,261 casualties have occurred, and will be replaced next season; in that of 1873, 4,661 casualties have occurred which will also be replaced; only the actual number of plants established at the time of writing this report are given above. The plantation of 1870 has improved; growth is slow as compared with Nellambore, but better results than those hitherto recorded are, I believe, obtainable. The large number of casualties are attributable in great measure, I think, to the distance we have had to convey plants.

SECTION III.

License and Voucher Forests.—When this system was introduced in 1867-68 the Deputy-Conservator appears to have expected that it would develop sufficiently to form the staple source of revenue of the range, and by covering cost of establishment and working obviate deficits, leaving all sales of Teak, Rosewood, etc., a clear profit to Government.* Results have, however, fallen short of this standard, which, considering that the system is only applied to the lower slopes and less valuable forests of the Anamalais is rather a high one,—higher, I fancy, than we are ever likely to attain. During the seven years of its existence the license system has yielded a total revenue of Rupees 17,007-1-8, while the total charges of the range amount to Rupees 2,67,717. At the same time, receipts are increasing, and are, I think, capable of further augmentation.

* *Vide* paragraph 4 (b) of Administration Report for 1867-68.

2. The receipts for the year amount to Rupees 3,963-13-9, the highest sum yet realised, and Rupees 656-2-6 more than that collected in 1872-73. Since November last the commission payable to Monegars and others collecting seigniorage has been deducted from the moneys passing through their hands, instead of as heretofore being disbursed by cheque. The result is that

Rupees 87-10-1 is not shown in the accounts as revenue, though collected as such, it having been paid as commission; it is, however, as well as the sums realised by sale of confiscated timber, etc., belonging to these forests, included in the amount specified above.

3. The expenditure for the year, which consists of the pay of Overseer, Peons, commission, etc., and one-twelfth of the range officer's salary amounts to Rupees 1,892-2-0. There is no material difference in expenditure to record, except that arising from the addition of a share of the Deputy-Conservator's salary not hitherto imposed, except for the purposes of calculation in paragraph 10 *et seq.*

4. The subjoined table shows in such detail as the records enable me to furnish the annual removal of various kinds of produce since the introduction of the system :—

Year.	Timber.	Fire-wood.	Bamboos.	Charcoal.	Canes.	Gall-nuts.	Valum Bark.	Remarks.
	C. FT.	TONS.	BANDIES.	MDS.		MDS.	BANDY.	
1867-68 ...	1,800	1,352½	1,497¼	162⅔	...	...	...	
1868-69 ...	...	...	...	...	...	...	...	Quantities not given for 1868-69.
1869-70 ...	1,100	499	1,512 5/12	284⅓	...	...	...	
1870-71 ...	...	...	...	...	...	...	...	Not obtainable, as the Oodamulpettah Tahsildar did not give particulars of the quantity of timber, etc., issued.
1871-72 ...	404¼	344 1/2 2 9/20	1,948 1/2	768	800	380½	..	
1872-73 ...	322	330 10/20 5/20	2,987 5/4	1,306⅔	600	...	1	
1873-74	192	346 3/4 1/20 3/20	3,993 1/2	1,457⅓	1,200	...	..	

Major Beddome calculates one bandy-load of timber at 20 cubic feet; but in this Office 16 cubic feet per bandy-load is taken, 1,000 lbs. of fire-wood = bandy-load.

5. The Board desire information as to which is the cheapest and most economical system,—the departmental or the license and voucher. A reliable comparison appears possible only in cases where the two plans have been carefully watched for a sufficient number of years, and unless ranges can be selected where operations have been conducted on a suitable scale in pursuance of some such inquiry, it will, I think, prove exceedingly difficult to elicit a sound opinion.

6. Considering the limited scale on which the license system has hitherto been carried out in this Range, my views on the subject must necessarily be imperfect. It seems to me, however, that the license system will very generally prove the cheapest, though not so frequently the most economical.

7. Neither system is capable of universal successful application. As Government observe in reviewing the operations of the department for 1871-72, there are two classes of forests, to one of which,—the most valuable,—the departmental, and to the other,—the ordinary jungles of the country,—the license system will, on the whole, be found the most suitable. This, I imagine, is a tolerably accurate summary of the facts of the case. The introduction of rigid departmental management in tracts which before the existence of a Forest Department were accessible to all, and which subsequently have been placed under the license system would often produce inconvenience and discontent. But, of course, emergent cases would require special treatment and where the most stringent measures of conservancy are required the best results are obtainable under departmental working.

8. In this range the license system is in an undeveloped state and susceptible of considerable improvement; but it is applied to tracts inferior to, and totally different from, the reserved forests. On the one hand, is a remnant of jungle which, in the interests of the community, it is absolutely necessary to protect from the further encroachments of cultivation, with the advance of which the demand for agricultural implements, fuel, and building material, must increase, while the principal source of supply is diminishing; for example, the area of cultivation in Anamalai village alone has increased from 9,194 acres to 39,000 in a period of less than thirty years; on the other hand, are extensive and valuable timber forests, eminently unhealthy, remote from the villages of the plains, and uninhabited, except by a few wandering jungle-tribes.

9. The license system will probably, in ordinary cases, be found to suffice for the conservancy of 2nd-class forests. It may not be so remunerative in mere cash-receipts as heretofore, owing to the strengthening of establishments which the effectual administration of suitable regulations will render indispensable. Where revenue is a secondary consideration however, and the object is rather to prevent waste and provide for communal requirements, without entirely closing forests of general resort, the issue of licenses may with advantage be restricted and a system of depôts introduced where the selling rate should be as low as the actual outlay on storage, etc., may permit.

10. The annual results of the two methods since the commencement of the license system in 1867-68 are given below :—

Year.	Revenue.		Charges.		Results.	
	Reserved Forests.	License Forests.	Reserved Forests.	License Forests.*	Reserved Forests.	License Forests.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1867-68	57,980 11 6	978 4 6	32,461 1 7	748 14 5	+25,519 9 11	+ 229 6 1
1868-69	27,809 4 9	2,679 11 3	28,783 0 3	2,261 15 9	— 973 11 6	+ 417 11 6
1869-70	86,764 9 6	2,150 6 6	36,500 7 8	2,115 8 4	+50,264 1 10	+ 34 14 2
1870-71	16,036 4 0	1,479 12 0	46,685 0 2	1,521 15 10	—30,648 12 2	— 42 3 10
1871-72	54,369 9 7	2,447 6 5	36,469 10 1	1,670 5 11	+17,899 15 6	+ 777 0 6
1872-73	8,341 4 9	3,307 11 3	40,765 9 10	1,853 6 2	—32,424 5 1	+ 1,184 5 1
1873-74	63,820 3 3	3,963 13 9	33,977 10 6	1,903 2 0	+29,842 8 9	+ 2,060 11 9
Total...	3,15,121 15 4	17,007 1 8	2,55,642 8 1	12,075 4 5	+59,479 2 6	+ 4,661 13 3

* A share of 1½th of range officer's salary is charged to the license system, though not formally exhibited in accounts.

11. It would thus appear that the average expenditure on the departmental system is Rupees 36,520-5-8, while on the license system it is Rupees 1,725-0-7, resulting in an average surplus of Rs. 8,409-0-6 in the former and of Rupees 665-15-7 in the latter.

12. It may also be useful to compare the transactions of the departmental system during the eleven years preceding the adoption of the license system with those of the seven subsequent thereto :—

Period.	Revenue.	Charges.	Surplus.	Average Revenue.	Average Charges.	Average Surplus.
1	2	3	4	5	6	7
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1856-57—1866-67	5,81,165 0 0	3,55,171 0 0	2,25,994 0 0	52,833 2 11	32,288 4 4	20,544 14 7
1867-68—1873-74	3,15,081 14 10	2,55,653 8 1	59,428 6 9	45,011 11 3	36,521 14 10	8,489 12 4

13. The value of stock is not included in these calculations, but it will answer all purposes if to the total surplus in column 4 is added the value of stock on 31st March 1874, viz., Rupees 1,42,928. The result is Rupees 4,28,404 which gives a real average profit for the eighteen years of Rupees 23,800-3-6 against an average expenditure of Rupees 33,931-11-3.

14. The difference in the average surplus of revenue for the periods is remarkable, and indicates the difficulty of instituting a trustworthy comparison between the two systems under notice. As stated in my last Administration Report the revenue has been as high as Rupees

2,65,953 and as low as Rupees 75. It may be well, however, to observe that the difference in average is not ascribable to a loss by the transfer of forests from the departmental to the license and voucher system; the reserved forest has in no way been encroached upon. The increased price of labor accounts, in great measure, for the increase in the annual outlay since 1866-67. Transport of wood also becomes more expensive as necessity arises for working the remoter tracts.

Contemplated Operations.—In the absence of better and fuller regulations little or nothing can be done in real conservancy; systematic operations must remain in abeyance until a well digested Code is placed in every officer's hands. Upwards of two years ago the republication of certain old rules was suggested, the reorganisation of the department intervened, and at the request of the Conservator (Collector) an amended set was compiled. It is hoped that this may before long be issued; it contains little that is new, nothing oppressive, and embraces most of the best rules which, from time to time, have been introduced; it will at least serve to check irregularities.

2. The coming season will be best employed in collecting information as to extent and resources and in watching the operation of the system now in force and in repressing the abuses to which it has been subjected.

SECTION IV.

Yield of Forests.—The quantity of timber removed and sold departmentally on licenses and granted free is given below:—

Timber.			Fire-wood.			Bamboos.		Charcoal on paid Licenses.	Canes on paid Licenses.	Remarks.
Departmentally.	On paid Licenses.	On free Passes.	Departmentally.	On paid Licenses.	On free Passes.	On paid Licenses.	On free Passes.			
C. FT.	C. FT.	C. FT.	TONS.	TONS.	TONS.	BANDIES.	BANDIES.	BDS.	NO.	
34,345 2 3	192 0 0	2,368	36 1/2	346 1/4 1/4	28 1/2	3,993 1/2	467	1,457 1/2	1,200	

SECTION V.

Financial Results are an improvement on last year, when a deficit of *Rupees* 6,310 had to be recorded. Appendix D gives details of stock at the close of the year, amounting to Rupees 1,42,929 against Rupees 1,62,261 for the year previous.

Receipts.	Expenditure.	Difference.	Increase or Decrease in Stock.	Net Results.
RS. 67,696	RS. 35,880	RS. +31,816	RS. —19,332	RS. +12,484

The estimated amount of revenue was Rupees 60,000, which has been exceeded by Rupees 7,696.

SECTION VI.

General Remarks.—During the last three years the number of forest-offences reported is fourteen; two were not prosecuted, and of the rest three were dismissed, and nine proven. Five cases of assault on peons while in the execution of their duty are also said to have occurred.

Complaints have, from time to time, been made by the License Overseer that the infliction of fines by the magistracy has but little deterrent effect, and he laments the rarity of sentences of imprisonment. So far, however, as facts enable one to judge the punishments awarded have been effectual, or, if not, the small number of cases brought to notice is indicative of a lack of vigilance on the part of the Forest establishment.

2. Had certain information reached my Office in time, I might have supplied more ample and valuable statistics relating to the important question of free passes for timber, fuel, etc.

3. I submit a statement of the issue of free passes since their introduction in 1870, and beg to observe that the particulars of each year's distribution have been duly recorded in the several Administration Reports:—

Year.	Timber.	Fire-wood.	Bamboos.	Remarks.
	C. FT.	TONS.	BANDIES.	
1869-70...	4,711	211	239 7/8	
1870-71...	1,840	295	638	
1871-72...	7,033	197 3/4	1,124	
1872-73...	4,368	148 3/4 7/8	347 7/2 4	
1873-74...	2,368	28 1/2	467	
Total ...	20,320	879 1/2 2 1/5 0	2,816 1/8	

4. I regret my inability to estimate, even approximately, the actual quantity of material consumed free in the range. Peons, etc., could doubtless, if they would, throw some light on the matter. From the number of Permits issued, it appears that the authorities to whom the trust is confided have not acted without discrimination. A very large quantity of fuel bamboos, timber, etc., finds its way to the local markets of Polachy and Oodamulpettah from private forests. The Numbûdri of Colungode works his forests on contract to merchants who resell to the public. Considerable tracts of forest are held on putta. Many ryots retain patches of jungle in their holdings: thus, though the consumption in the range was proved to be, as it doubtlessly is, far in excess of the quantities obtained from Government forests on Passes, free or paid, the difference would be no reliable guide to clandestine removals owing to the large supplies obtainable from other sources. If the matter is considered of sufficient importance in this range, the best way possibly would be to post Peons on the main lines of traffic on the different market-days to count the number of cart-loads, etc., brought in. This, compared with the number of licenses issued by Government, might render a rough estimate feasible.

5. At present, I can only furnish an outline of the manner in which the privilege has been exercised in the Anamalai Division of the Polachy Taluq, reserving fuller details for another occasion. The total number of villages in the division is 30, the population 53,707, and the kist paid Rupees 72,199-2-5.

6. The following table shows among what villages and to how many puttadars free Passes have been granted, the amount of kist paid by them, and the quantity of material granted:—

Village Number.	Names of Villages.	Number of Puttadars to whom free Passes were granted.	Assessment paid by Puttadars.	Number of Bandy-loads.				Value				Total.	Remarks.
				Timber.	Ploughs, etc.	Fuel.	Bamboos.	Fuel.		Bamboos.			
			Rs. A. P.					Rs. A. P.		Rs. A. P.		Rs. A. P.	
96	Anamalai	17	2,776 0 8	...	18	7	35	7 0 0		26 4 0		69 4 0	The value of the grants is about $\frac{1}{12}$th of the assessment paid by grantees, $\frac{1}{13}$th of the whole amount collected from the thirty villages, and is equivalent to $\frac{1}{9}$th of the revenue derived from the license forests.
102	Sungumpollium...	4	116 2 0	...	4	2	4	2 0 0		3 0 0		13 0 0	
128	Odayacolum ...	16	450 2 7	...	7	5	18	5 0 0		13 8 0		32 8 0	
131	Kaleyapooram ...	20	1,447 12 7	...	15	3	25	3 0 0		18 12 0		51 12 0	
130	Vattacarumpudore.	131	3,080 7 6	...	84	22	110	22 0 0		82 8 0		272 8 0	
112	Kottore	32	2,222 13 10	...	20	23	33	23 0 0		24 12 0		87 12 0	
100	Somundorai ...	1	51 4 0	...	1	1	1	1 0 0		0 12 0		3 12 0	
115	Arthanaripollium.	1	.....	...	1	...	1	.....		0 12 0		2 12 0	
17	Marchinaicken-pollium... ...	1	38 0 0	...	1	...	...	.....		.....		2 0 0	
				Head-loads.									
							20	.....		0 10 0		0 10 0	
	Total...	223	10,182 11 2	...	151	63	227	63 0 0		170 14 0		535 14 0	

Plough, etc.	
Rs.	A. P.
36	0 0
8	0 0
14	0 0
30	0 0
168	0 0
40	0 0
2	0 0
2	0 0
2	0 0
.....	
302	0 0

7. The value of the grants compared with the amount of kist paid by the recipients is low and the quantity moderate ; moreover, considering the population and the amount collected from the 30 villages of the division, it may be reasonably inferred that some care has been employed in the selection of individuals from amongst numerous applicants.

8. The order excluding strangers from the reserved forest has been enforced during the year, but not so thoroughly as it might have been or as in time it will be. As was to be expected the traders in forest-produce petitioned the Board of Revenue making out a very hard case ; the matter was referred to the Collector who called on the Deputy-Conservator for reports. I have invited all traders to send in details of their claims against the Kaders and a most formidable array of documents has resulted ; the Board have directed that traders should be admitted under certain regulations and to such extent only as is consistent with the safety of Government property. The people most concerned are the Kaders, from whom no complaints have emanated, who are perfectly satisfied with the working of the order, and of whom twenty enrolled themselves last December on Government service, and executed an agreement for one year. It remains to be seen what can be done with this gang. I have long been contemplating some such arrangement, and from the admirable way in which they worked for us last season in demarcating and survey I entertain hopes of success. But for the Kaders survey operations must have come to a standstill, and, as the work progresses and the southern limit of the district on the Cochin and Travancore frontiers has to be determined, their services will be simply invaluable. Equally important will their aid be in regular forest-work as guides and hutters in the clearing and pruning of young trees, cutting creepers, and in taking precautions against fires. That they might be usefully and profitably employed in the collection of forest-produce is evident ; but as no special sanction has been received, I have rigidly abstained from any attempts in that direction. Their position in the reserved forest has been thoroughly explained to them. Pains have been taken to assure them that their cherished rights to wild produce shall in no way suffer or be interfered with, that they and Government are co-proprietors, and that no one else has any right of entry. They have been told to come and go as they choose, and to sell or barter as suits them. I have declined to purchase cardamoms, etc., when solicited to do so. So far, then, as the order affects the aborigines, there is nothing to complain of. As to its influence on the people of the neighboring plains, it can hardly be oppressive, for the limits of the reserve are miles beyond the most outlying hamlet, besides which forest conservancy has been a recognised institution here since at least 1848, and considering the area of the Anamalais, their remoteness, and the few inhabitants, amongst whom neither cultivation nor cattle-breeding obtains, a more appropriate reserve could hardly be found.

9. Shortly after the reorganisation of the department, the Collector, in his capacity of Conservator, notified in the Gazette that under the new régime the orders of the range officer in all forest-matters were to receive that respect from Tahsildars, Revenue Inspectors, and others to which as coming from the Collector's Assistant they were entitled. This has been productive of much good ; for, though the revenue authorities have never displayed a reluctance to co-operation, it has tended to impress the scope of the amalgamation of departments more thoroughly on district officials and rendered the influence of the Deputy-Conservator more effectual.

10. Another most important order was promulgated in 1872, strictly prohibiting the alienation of jungle land for cultivation or other purpose without consultation of the special department through the Conservator of the district. The purport of the Board's order, dated 17th August 1869, No. 151-6, is much the same, but evasions which, under various pretexts, were not uncommon, have ceased to occur.

11. A set of brief plain rules has been compiled regarding land formerly Kumari, and the future exercise of this cultivation by jungle-tribes. Under these rules, it is proposed to confine the tribes to such land as has once been subjected to the process. A tract will be granted on cowle to each family after inspection and demarcation ; its area will be regulated by circumstances ; the idea is to afford each family sufficient space for cultivating on the rotation most adapted to climate.

soil, aspect, etc., by yearly allowing three-fourths, five-sixths or nine-tenths of each grant to remain fallow. By this means it is hoped to suppress the further extension of Kumari to virgin forest, and to provide for the wants of the jungle-people whose well-being is of such great importance to the district. This is a most interesting experiment, and, if successful, will remove a grave difficulty. Before any land is assigned it must be inspected by a Forest Overseer, and, if need be, by the Deputy-Conservator. These rules do not concern the reserved forest, but will be of wide application in the Ponachy, Poondi, and Thalunji forests.

12. In consequence of frequent changes, owing to sickness and other causes, the establishment has not been so useful as it ought. Fortunately, having no other range to occupy my attention, I was able to devote myself to reserved forest-work and contrived to get through operations with tolerable success.

13. The health of subordinates was much as usual : good while the southwest moonscon lasted, indifferent as the cold weather approached, and bad as soon as the forest was left for the season. Two new Overseers who have since left (one resigned and the other has been transferred) were constantly ill. No deaths occurred. The Survey establishment enjoyed good health while in the forest, but not a man escaped fever on leaving and one Head Surveyor died.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) C. G. DOUGLAS,
Deputy-Conservator of Forests

OFFICE OF DEPUTY CONSERVATOR OF FORESTS
COIMBATORE, 14*th May* 1874.

From

G. J. S. ROSS, Esq.,
Deputy Conservator of Forests, Coimbatore.

To

A. WEDDERBURN, Esq.,
Collector and Conservator, etc., etc., etc., Coimbatore.

SIR,—I have the honor herewith to submit my Administration Report for the official year 1873-74 of the Mettapolliem and Bolumputty Ranges.

SECTION I.

1. I have the honor to state that I took charge of the Mettapolliem Range on the 6th June 1873 from Overseer Muthusawmy Pillay.

2. I received the records of the Bolumputty Range from the Deputy Conservator Mr. Douglas on the 4th August 1873.

3. During the ten months in which the forests were under my control I have made twenty-two tours of inspection, and have been absent from head-quarters in all 143 days.

4. After I had inspected the Copenary Forests thoroughly I was greatly disappointed in the result of my inspection, both as regards the extent of the forests and the description of timber growing in them.

5. I have very little hesitation in saying that the forests in the neighbourhood of Copenary are almost valueless until properly opened up.

6. No bandy can enter the forest. The only road that exists, leading from Mongherry, is in some places more a rocky water-course than anything else, and I believe that in some parts it is even impassable for elephants in its present condition. I was unable to ride up a great part of it.

7. To repair this ghaut, and to keep it in condition, would cost Government much money, as in many places it passes through a ravine, and is exposed in the rainy season to torrents of water running down from both sides

8. A further drawback is that, should Government repair and keep in order this ghaut, it would simply be opening up the means of communication between the Rajah Aracorrachy Nair's forest and the Coimbatore merchants, as the ghaut can almost be taken as a boundary line in some places between the Rajah's and Government Forests ; these forests are much richer than the Government ones, and the Rajah sells at one-fifth the Government seigniorage.

9. The Sholacaray Forests were, before they were put under the supervision of Imperial Foresters, too rudely handled and they require rest now.

10. There are, however, some matured teak trees in these jungles, and they will be felled this year.

11. The Bolumputty jungles require to be opened up by the means of roads, etc., in many places. There is some very valuable timber, but it is impossible to bring it down, even by elephants, to the plains. The money allotted for working charges is so small that it is impossible for me even to repair a road to any extent.

SECTION II.

(*a*). *Reserved Forests—Sholacaray Forests.—Vide* Sections 9 and 10.

2. (*b*). *Fuel Reserves.*—Reserve M has a superficial area of five square miles. It is fenced in, on three sides, *viz.*, on the eastern, southern, and western sides ; the northern boundary being the hills.

3. The H Reserve is also fenced in on three sides ; the northern boundary is formed by the river Bhowany. Area eight square miles.

4. The K Reserve is not yet fenced in, but it will be enclosed by the end of this year. Area six square miles.

5. I cannot report on the increased growth of the trees. Vhey have been preserved for too short a time to allow of any report being satisfactorily made, or their increase being satisfactorily noted.

6. Experiments will be made, however, this year for the purpose of fixing the increase of growth.

7. (*c.*) There is one so-called plantation in my range named Walliar Plantation.

8. It is composed partly of indigenous trees and partly of small plantations.

9. Bamboos are to be found in the plantation in large clumps, and it is most probable that many of the fires which occur in the plantation are due to the rubbing together of the bamboos. They will, therefore, be gradually removed and the spaces sown with babul, tamarind, etc.

10. There was at one time a stream of water which flowed past the plantation ; an anicut was then made in order to irrigate the ground.

11. Had this succeeded there is no doubt but that the plantation would have been a successful one.

12. Unfortunately, however, as soon as the anicut was made the stream dried up without apparent cause, and has since remained dry.

13. I think it but right to state that I do not think this plantation will ever remunerate the Government for the money laid out ; the casualties are about three-fourths of the plants transplanted.

14. I think it, therefore, advisable to stop any large operation in the way of planting and to confine ourselves more to wounding the ground and sowing broad-cost.

15. Under this head I have no receipts to show.

SECTION III.

Forest work under License and Voucher system.—I have the honor to remark that the Bolumputty Forests have hitherto and are still being worked under the License and Voucher system. I am, however, desirous of working them departmentally as far as timber is concerned; but, as before stated, this will require a net-work of roads being made before felling operations can be undertaken successfully.

2. Sholacaray Forests have hitherto been worked partly on licenses and vouchers, and partly departmentally.

3. The receipts of both ranges under my charge for the year under review has been Rupees 7,007, the disbursements Rupees 9,574, and the value of stock of timber on hand at the close of the year Rupees 3,061, and the financial result in favor of the forests Rupees 494.

4. The Mettapolliem Forests were let out on contract; the contractor was bound to pay Rupees 75 per month into treasury and to collect seigniorage at the regulated price for fuel, bamboos, etc.

5. Licenses for timber were issued by the department.

SECTION IV.

Yield of Forests.—Sold from depôt cubic feet of timber=4,676 cubic feet, and 917 bandy-loads of bamboos were removed by purchasers on license; 2,544 bandy-loads of fuel and 12 bandy-loads of Velum bark were removed on license.

25 Bandy-loads of grass.
64 Bandy-loads of charcoal.
329 Timber trees of various sorts.

Removed on Free Licenses.

27 Timber trees (jungle wood.)
87 Bandy-loads of fuel.
122 Bandy-loads of bamboos.

SECTION. V.

Financial Results.

Expenditure.

	Rs.	A.	P.
Working charges	2,441	8	3
Establishment	7,132	11	10
	9,574	4	1
Receipts	7,007	1	4
Deficit	2,567	2	9
Value of stock in hand at reserved price	3,061	2	11

SECTION VI.

As regards the conduct of the out-door establishment I regret that I cannot speak highly of it.

2. I was forced to suspend one Overseer for incompetency and insolence.

3. I trust, however, that the new Overseer will, by his example, infuse a healthier tone into the establishment.

4. The health of the Bolumputty establishment I regret to say has been bad.

5. I have lost during the last year from Walliar fever one permanent and one temporary Peon. The Overseer has also suffered for four months from the same sickness so as to be almost unable to render me any service whatever during that time.

6. The health of the Mettapolliem establishment has in all been fair; minor cases of sickness have occurred, but these can in no way be attributed to climatic influence, except in the case of one temporary Peon who died from Burliar fever.

7. Criminal prosecutions for offences committed against the Forest rules were brought before Magistrates, and the results are shown in the Appendices Nos. 15 and 16.

8. As far as I am aware, especially in the Mettapolliem range, the people see themselves the necessity of the forest being preserved. I have spoken to one or two of the leading inhabitants of Mettapolliem and they informed me that they considered the seigniorage charged by Government of one Rupee per 1,000 lbs. of fuel was in their estimation fair.

9. The charge for Bolumputty has always been less, as the people are of a poorer class, and the forests more inaccessible.

10. Although I have kept down the working charges as much as I could under the budget allotment the expenditure exceeds the receipts. I trust, however, that next year the revenue will be considerably larger.

I have the honor to be,
Sir,
Your most Obedient Servant,
(Signed) G. J. S. ROSS,
Deputy Conservator of Forests.

SATHIAMANGALUM FOREST.

Annual Administration Report of the Sathiamangalum Forest for the official year 1873-74.

The subject is treated as usual under the following sections:—

Section I.—Inspection tours of the Deputy Conservator.
Section II.—Reserves.
A.—Reserved forest and contemplated operations.
B.—Fuel reserves and contemplated operations.
C.—Plantations and contemplated operations.
Section III.—License and Voucher forests.
Section IV.—Yield of forests.
Section V.—Financial results.
Section VI.—General remarks.

SECTION I.

1. *Inspection Tours of the Deputy Conservator.*—In April, the sandalwood plantation, the carting operations, and the sawing in Seegur Forest were inspected; the plantations at Benni, and carting operations in Mudumallai Forest. Again, at the end of the month the sandalwood plantation in Seegur Forest was inspected.

In May, the sandalwood plantation in Seegur was again inspected, and the boundary of Ballyrungum's with the Collector of Coimbatore.

In June, the carting operations at Tippicadoo; the sandalwood plantation and sawing operations in the Seegur Forest; the plantations and forest work at Mudumallai.

In July, the floating operations at Neringapett, Bhowani, and Erode.

In August, the forest operations at Mudumallai and the plantations at Benni; the sawing and sandal planting operations in Seegur.

In September, the work in Mudumallai and Seegur Forests was inspected.

In October, the sandal plantations at Tullimulli and Vyloor in Collegal and the adjacent forests; the carting at Tippicadoo.

In November, the forest work at Mudumallai; the sandalwood planting in Seegur; and the floating operations at Neringapett, Bhowani, and Erode.

In December, the timber yard at Mysore; the forest operations in Mudumallai; the sandal planting in Seegur, and sawing work was inspected.

In January, the sandalwood plantations and sawing work in Seegur Forest.

In February, the carting and other forest operations at Mudumallai, and the floating operations at Neringapett, Bhowani, and Erode.

In March, the work in Mudumallai Forest; the sandal plantations of Tullamallai in Sathiamangalum; those of Vyloor in Collegal, and the forests generally.

SECTION II.

2. *A.* RESERVES—*Reserved Forest and Contemplated Operations.*—This forest belonging to Government contains an area of 500 square miles, and the valuable trees are hereunder mentioned:—

Trees.	Estimated No.
Sandalwood (*Santalum album*)	Not ascertainable.
Teak (*Tectona grandis*)	
Vengay (*Pterocarpus marsupium*)	
Blackwood (*Dalbergia latifolia*)	
Achawood (*Hardwickia binata*)	
Sal (*Vatica laccifera*)	
Mutti (*Terminalia tomentosa*)	
Satinwood (*Chloroxylon Swietenia*	

3. OPERATIONS—*Felling.*—2,779 maunds of sandalwood, and 1,581 of sandalwood roots, have been felled and dug respectively in the Tullamalai jungles, and a very small quantity of 13¾ cubic feet of Acha and Blackwood has been felled in the Gazulty and Hassanore jungles at a cost of Rupees 1,712-4-2.

4. *Carting.*—The abovesaid quantity of sandalwood and roots and other timber, viz.,* 406¼ cubic feet, have been brought to the depôts at Tullamalai and Sathiamangalum, respectively, a distance of 30 miles to the former and 20 miles to the latter, from the jungles at a cost of Rupees 1,035-14-3.

* Blackwood	78¾
Vengay	159
Junglewood	168¼
Total...	406¼

5. *Preparing Sandalwood and Roots.*—The abovesaid quantity of sandalwood and roots were prepared by carpenters, *i. e.*, cleaning the sapwood and stacked in the depôt at Tullamalai at a cost of Rupees 323-1-1.

	1872-73. Rs. A. P.	1873-74. Rs. A. P.
Receipts	14,896 1 6	10,124 8 0
Disbursements	3,605 3 8	3,366 14 3

6. The receipts and disbursements of the current year compared with those of the previous year are as per margin.

7. The reason of the current year's receipts being considerably less than the previous year's is attributable to the fact that first the budget estimate of the former, under Item No. 1, is less by 2,000 Rupees than that of the latter; and, secondly, some 1,300 maunds of sandalwood remained in stock at the commencement of the previous year, and some 1,300 cubic feet of teakwood belonging to the depôt of the Seegur Forest (then amalgamated with this forest, and separated from the beginning of the current year) were sold, and the value about 5,000 Rupees, the difference, credited in that year's account.

8. The disbursement of the past year being greater than those of the current year by Rupees 238-5-8 is owing to about 1,000 cubic feet of teak, etc., wood having been felled in that year.

9. Had it not been for the curtailment of the budget grant in the current year's estimate the disbursement would have been considerably more, consequent on about 1,460 maunds of sandalwood having been prepared in excess of last year's. The payment of charges for this excess were kept in abeyance till the close of the year for want of funds.

10. *Contemplated Operations.*—To fell 1,200 maunds of sandalwood and 500 cubic feet of Teak and Vengay, to supply the market depôt at Sathiamangalum.

11. *B. Fuel reserves and contemplated operations.*—None.

12. *C. Plantation and contemplated operations.*—None.

(1.) *Fuel plantation.*—None.

(2.) *Timber plantation.*—During the year under report 6,300 sandalwood plants and 2,600 Anatti plants were planted at Tullamalai; the number of the former planted up to last year was 55,500, and the total up to 31st March 1874 is 61,800. Ten acres have been ploughed and pitted for planting. The trees are progressing satisfactorily. The cost during the year has been Rs. 1,633-1-9, including the pruning and weeding of the old plantation up to last year Rs. 9,163-12-10, total up to the end of March 1874 is Rs. 10,796-14-7, or 2¾ Annas a plant. Ten acres have been cleared and nurseries formed for this year's planting.

13. The receipts and disbursements of this and past years are indicated in the margin, the former needs no explanation as there is no income from the plantation yet, and the latter in 1872-73 being considerably greater than in 1873-74 is owing to 8,000 sandalwood plants having been put out in excess in that year, or more than double the quantity planted in 1873-74.

	1872-73. Rs. A. P.	1873-74. Rs. A. P.
Receipts	... ...	... ...
Disbursements	4,238 6 5	1,633 1 9

14. The subjoined is the statement of cost, etc., of the plantation:—

Name of the Plantation.	Year in which the Plantation was formed.	Area in Acres.	Description of the Trees.	Number of Trees.	Cost. During the year.	Cost. Up to the year.	Receipts. During the year.	Receipts. Up to the year.
					Rs. A. P.	Rs. A. P.	Rs.	Rs.
Tullamalai ...	1863	65	Sandalwood.	61,800	1,633 1 9	10,796 14 7	.....	.....
Do.	1873		Anatti.	2,600				

15. (3.) *Experimental Plantation.*—The experimental sandalwood plantation promises well.

16. *Contemplated Operations.*—To clear ten acres of land, and to plant 8,000 Sandalwood and Anatti plants this year.

SECTION III.

17. *Forest worked under the License and Voucher system.*—Statement E shows the collections and quantity removed of each description of wood. The receipts and disbursements of this and past years are shown in the margin, exclusive of the sum realized on contract of firewood, bamboos, valum bark, and charcoal, which is exhibited under "Permit fees and Rent of Jungles

	1872-73. Rs. A. P.	1873-74. Rs. A. P.
Receipts	1,032 10 0	3,985 8 0
Disbursements	... ...	... ...

and privileges." As there were considerable demands in the current year for teak, sal, and other junglewood used as timber, the receipts have exceeded the last year's by Rupees 2,952-14-0, which is an unusual increase over those of the previous years. It is, however, believed that people in this range would require an ample supply of timber of different descriptions for their building and other purposes always.

18. There is apparently an enormous loss to Government and damage to the jungles under the License and Voucher system. If this could be suppressed altogether, and departmental working introduced instead, a sufficient quantity of all descriptions of wood available from the range for some years' consumption must before-hand be felled and brought to the market depôt at Sathiamangalum, when the revenue from this source will no doubt be abundant, and this system can, in my opinion, be carried on cheaply and economically. The average rate per cubic foot for felling, supervision, carriage hire, *etc.*, will amount to 8 Annas; while the selling price will be 12 Annas a cubic foot, or a profit of 4 Annas on 20,000 cubic feet we can always anticipate to meet demands for, will be obtained, or in other words 5,000 Rupees as net profit.

SECTION IV.

19. *Yield of Forest.*—The subjoined statement shows the total yield of timber, *i.e.*, the quantity of timber, *etc.*, sold and removed free of payment:—

Yield of Forest.

Timber.					Firewood for Railway and other purposes.		Bamboos.		Palmyrah.	Charcoal.	Forest produce.	Remarks.
Departmentally.		On License.		Free.	On License Department.	Free.	On License.	Free.				
C. FT.	MDS.	C. FT.	MDS.	C. FT.	HEAD-LOADS.	TONS.	CART-LOADS.	CART-LOADS.	NO.	TONS.	BANDY-LOADS.	
13¾	4,360	25,062½ =1,269 bandy-loads at 20 cubic feet each.	...	200 =10 Bandy-loads at 20 cubic feet.	73	*...	.....	*.....	.....	.....	13	

* The Tasildar has not furnished the statement called for.

N. B.—The firewood, bamboos, valum bark, and charcoal have been given on contract, and so the quantity removed is not ascertainable. The contract amount realized during the year is Rupees 1,745-10-8.

SECTION V.

20. *Financial Results.*—The financial results of the forest is satisfactory. The expenditure is Rupees 6,927-6-9, and the receipts Rupees 15,891-4-8, and the balance in favor of Government is Rupees 8,963-13-11, which, added together with Rupees 1,633-1-9 spent on plantations, will make a clear profit of Rupees 10,596-15-8; but as the sandalwood is being gradually worked out it is necessary to maintain a plantation for the future supply—*Vide* paragraphs 7, 8, 13, and 17.*

* For comparison of Financial results.

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SECTION VI.

21. General Remarks.—*Working Charges, Advance.*—Rupees 5,000, sanctioned under "A. Conservancy and working" for the year under report, have been drawn and fully accounted for by submission of bills agreeably to the instructions conveyed in paragraph 3 of the Proceedings of the Board of Revenue, No. 1,538, dated 9th August 1872—*Vide* Statement submitted on the 24th April 1874 in conformity with the order of the Board (Proceedings, or Official Memorandum, No. $\frac{3}{1\,3\,2}$, dated 20th February 1874, paragraph 1.)

22. *Permanent Advance Fund.*—Agreeably to the instructions of the Accountant-General, conveyed in his Circular, No. 32, dated 5th December 1873, a report has been submitted to the Accountant-General through the Collector on the 1st April 1874, to the effect that the Permanent Advance Fund of Rupees 300 placed at my disposal (Proceedings of the Board, No. $\frac{7}{1\,8\,7}$, dated 12th February 1873) is due from and to be accounted for by me.

23. *Conduct and Health of Establishment.*—Cundasawmy Pillay, the Forest Overseer, has performed his duties in a satisfactory manner. The Sub-Overseer, Pichiçootty Pillay, has been diligent in the discharge of his duties. The health of the Forest Peons has suffered much from fever.

24. *Criminal Prosecutions.*—These are a failure, as there is no Forest law. A Statement of Forest offences tried and disposed of by the Magistrate during the year is subjoined:—

Register of Forest offences tried before the Sub-Magistrate in the Sathiamangalum Range during the official year 1873-74.

Places where and date when offences were committed.	Offences.	Number of persons charged.	By whom tried.	Result and punishment if convicted.	Remarks, if any, recorded by trying officer as to conduct of department.	Informer.
Kanakumpolliem.	Stealing timber.	One.	2nd Class Magistrate.	20 Rupees fined, or 20 days' imprisonment.	.....	Cunnoosawmy Chetty.
4th March 1874.						

25. *Free Pass.*—Free passes do not work well. A statement called for for the year has not been furnished by the Tahsildar of the Sathiamangalum Taluq.

Ootacamund,
30th May 1874.

(Signed) H. R. MORGAN, Colonel,
Deputy Conservator of Forests.

No. 227.

COLLEGAL FOREST.

Annual Administration Report of the Collegal Forest for the official year 1873-74.

The subject is treated as usual under the following Sections:—

Section I.—Inspection Tours of the Deputy-Conservator.

Section II.—Reserves.

A, Reserved-Forest and contemplated Operations.

B, Fuel-reserves and contemplated Operations.

C, Plantation and contemplated Operations.

SECTION III.—License and Voucher system.
SECTION IV.—Yield of Forests.
SECTION V.—Financial Results.
SECTION VI.—General Remarks.

SECTION I.

1. *Inspection Tours of the Deputy-Conservator.*—*Vide* Section I. under Sattiamangalum forests.

SECTION II.

RESERVES.

2. *A, Reserved Forest and contemplated Operations.*—This forest, belonging to Government, contains an area of 500 square miles, and the valuable trees are hereunder-mentioned :—

Trees	Estimated No.
Teak (*Tectona grandis*)	5,000
Blackwood (*Dalbergia latifolia*)	3,000
Jungle wood	(a)
Satinwood (*Chloroxylon Swietenia*)	(a)
Vengay wood (*Pterocarpus marsupium*) ..	(a)
Sandalwood (*Santalum album*)	1,00,000
Sal (*Vatica laccifera*)	(a)

(a) Not ascertainable.

3. OPERATIONS, *Felling.*—3,636 maunds of Sandalwood and 522 of Sandalwood roots were felled and dug, respectively, on the Bellirungum and Mudaisverum Hills and in the Bylore jungle, and no other timber was felled in consequence of there being a sufficient stock on hand out of last year's, and of there being no demand for the timber by the public, except by the Department Public Works which has taken a quantity in the year under report from our depôts to the extent of Rupees 528-14-6, exclusive of carriage hire. The cost of the felling of the above quantity is Rupees 1,715-8-6*.

* Includes Rs. 213 spent out of old advance unadjusted up to 31st March 1873.

4. *Sawing Sandalwood.*—11,230 Sandalwood trees were sawn for being prepared into billets, at a cost of Rupees 35-4-9.

5. *Sawing Timber.*—367¼ cubic feet of timber were sawn into rafters, *etc.*, at Collegal, Bylore, and Busvanathum jungles, at a cost of Rupees 110-14-0† for supply to Department Public Works.

† Includes Rs. 63-8-0 spent out of old advances unadjusted on 31st March 1873.

6. *Carting.*—The above-said quantity of Sandalwood and roots was brought to the main depôt at Collegal from Mudaisverum Hills and Bylore jungle, a distance of 55 and 30 miles from the former and the latter respectively, at a cost of Rupees 2,169-14-0,‡ and 204 cubic feet of sawn logs from the Bylore jungle to Nokanully and four carts of logs from Modully jungles to Collegal to be sawn were brought at a cost of Rupees 46§.

‡ Includes Rs. 282-10-0 spent out of old advance remained unadjusted on 31st March 1873, and 200 Rs. advanced to Sandalwood carriage contractor in 1873-74.

§ Includes Rs. 34 spent out of old advance unadjusted on 31st March 1873.

7. The elephant, the bullocks, and buffaloes, whose feed and keep amounts to Rs. 71-9-0, were employed in dragging timber clear of the plantation in the Bylore jungle, in carrying logs to be sawn for Department Public Works into reepers from the Modully jungle, in watering the plants, and in ploughing the land.

8. *Preparing Sandalwood and Roots.*—3,636 maunds of Sandalwood and 522 of roots were prepared, *i.e.*, cleaning the sapwood and stacked in the depôt at Collegal, at a cost of Rupees 269-10-0¶.

¶ Includes Rs. 28-2-0 spent out of advance remained to be adjusted on 31st March 1873.

	1872-73. Rs.	A.	P.	1873-74. Rs.	A.	P.
Receipts	17,148	8	0	15,528	14	6
Disbursements	5,993	9	6	4,124	8	9

9. The receipts and disbursements of the current year, compared with those of the previous year, are as per margin.

10. The reason of the receipts of the past year being greater than that of the current year by Rup[illegible]9-9-6 is owing to the old balance of Sandalwood in the depôt having been disposed of and [illegible]redited in the accounts of that year; and the disbursement of the former being cons[illegible]r than that of the latter by Rupees 1,869-0-9 is attributable to the fact that, first [illegible]upees 1,500 was transferred to the Bhowani forest from the budget grant of the v[illegible]rt, as that sum was absolutely necessary to meet some urgent expenditure of [illegible]rations; secondly, that about 2,000 cubic feet of different descriptions of timber [illegible]ood were felled and brought to the depôt in that year on, hired and Circar bullocks, [illegible]eep of the latter alone amounting to Rupees 491-1-11 against Rupees 71-9-0 in [illegible]r, while no felling of other timber was carried on except carting on, hired bullocks [illegible]ity to the depôt in this year; and, thirdly, that Rupees 889-14-5, which remained [illegible]n 31st March 1873, and Rupees 16-4-1, ordered by Government to be written off to [illegible]Loss," were charged off in the accounts of that year; but the former has been duly r[illegible]work and accounted for by submission of bills in the current year.

[illegible]*ntemplated Operations.*—To fell 3,000 maunds of Sandalwood and dig 1,000 of roots and [illegible]bic feet of other timber to supply the market at Collegal, *etc.*

[illegible]*5, Fuel-reserves and contemplated Operations.*—None.

[illegible]*C, Plantation and contemplated Operations*—

(1.) *Fuel Plantation.*—None.

(2.) *Timber Plantation.*—In the past year, 9 acres were planted with 9,000 Sandalwood plants; this brings the total planted to 56 acres, or 38,000 plants planted up to the year. In addition to this 10 acres have been cleared and got ready for this year's planting. The cost of this year is Rupees 2,975-7-3 including Rupees 227-11-0 spent in building an anicut and cutting a channel; up to last year Rupees 8,305-2-4; total up to 31st March 1874 is Rupees 11,509-6-6. I have already explained that the cost of watering the plants will be much reduced by cutting a water-channel up to the plantation. In the year under report 95¾ cubic yards of channel work have been cut.

	1872-73. Rs.	A.	P.	1873-74. Rs.	A.	P.
Receipts	.....	...	...	.....	...	...
Disbursements	4,694	7	6	2,975	7	3

Includes Rs. 228-6-11 spent for cutting a channel and charged to "X, Communication, *etc.*"

14. The receipts and disbursements of the current year, compared with those of the past year, are as per margin.

15. The disbursement of the past year being greater than that of the current year is due to the fact that 14,000 plants were planted in that year in excess, or nearly double the number planted in 1873-74.

16. The subjoined is the statement of cost, *etc.*, of the plantation.

Name of the Plantation.	Year in which the Plantation was formed.	Area in Acres.	Description of the Trees.	Number of Trees.	Cost: During the year	Cost: Up to the year.	Receipts: During the year.	Receipts: Up to the year.	Remarks.
					Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	
Bylore..	1870 ...	56	Sandalwood.	38,000	(a) 2,975 7 3	(b) 11,509 0 6	... ...	... ...	(a.) Includes Rupees 227-11-0 spent for cutting a channel out of "X., Communications." (b.) Includes Rupees 228-6-11 spent for cutting a channel out of "X., Communications," 1872-73.

(3.) *Experimental Plantation.*—None.

17. *Contemplated Operations.*—To plant 10 acres and to clear as many acres. To build the anicut and cut a channel.

18. *Forest worked under the Voucher and License System.*—Statement E shows the collections and quantity removed of each ...iption of wood. The receipts and disb... s of the current year, compared with ... past year, are as per margin, exclusi... um realised on contract of fire-wood, bamboos, Valum bark, and charcoal, which is exl... "Permit fees and rent of jungles and privileges." The surplus revenue over the pa... this source is only Rupees 148, which is owing to about eighty bandy-loads of jun... as timber having been removed in excess in the current year.

	1872-73.	1873-74.
	Rs. A. P.	Rs. A. P.
Receipts	560 0 0	708 0 0
Disbursements	....	....

19. The license and voucher system at present works best, departmental fellin... no encouragement from merchants; in fact, they do not buy.

SECTION IV.

20. *Yield of Forest.*—The subjoined statement shows the total yield of timb... quantity of timber, *etc.*, sold and removed free of payment.

Yield of Forest.

Timber.				Fire-wood for Railway and other purposes.		Bamboos.						Remarks.
Departmentally.		On License.		Free.	On License and Departmentally.	Free.	On License.	Free.	Palmirah.	Charcoal.	Forest-Produce.	
C. FT.	NOS.	C. FEET.	NOS.	C. FEET.	C. LBS.	C. LBS.		C. LBS.				
...	*3,636½	4,400 = 220 carts at 20 c. ft. each.	...	1,120 = 56 carts at 20 c. ft. each.	...	180½	...	199½	...	...	...	* Exclusive of 522 maunds of Sandalwood roots removed and sold.

N.B.—The fire-wood, bamboos, Valum bark, and charcoal, have been given on contract, and so the quantity removed is not ascertainable. The contract amount realised during the year is Rupees 1,321-10-8.

SECTION V.

21. *Financial Results.*—The financial results of this forest is satisfactory. The expenditure is Rupees 9,484-3-8, the receipts Rupees 17,581-7-2, and the balance in favor of Government is Rupees 8,097-3-6 which added together with Rupees 2,975-7-3 spent on plantations will make a clear profit of Rupees 11,072-10-9. It is necessary to maintain a plantation, the Sandalwood from the natural forest being gradually worked out.

	1872-73.	1873-74.
	Rs. A. P.	Rs. A. P.
Receipts	18,860 10 0	17,581 7 2
Disbursements	13,120 1 0	9,484 3 8

22. The receipts and disbursements of the current year, compared with those of the past year, are as per margin, and for explanation of the difference between the results of those years *vide* paragraphs 10, 15, and 18 of this report.

SECTION VI.

23. General Remarks.—*Working Charges, Advance.*—Rupees 7,100 sanctioned for the working of the forest with during the year under report have been drawn and accounted for by submission of bills, except Rupees 294-11-0 which remain against the Sandalwood carriage contractor and plantation coolies (*vide* remarks in Statement submitted on 24th April 1874, agreeably to the instructions of the Board conveyed in paragraph 3 of their Proceedings, No. 1,538, dated 9th August 1872).

24. *Permanent Advance Fund.*—A report called for by the Accountant-General in his Circular No. 32, dated 5th December 1873, to the effect that the Advance Fund of Rupees 800 is due from and to be accounted for by me, had been submitted on the 1st April 1874 to him through the Collector.

25. *Conduct and Health of Subordinates.*—The health of the establishment has been much as usual, fever being very prevalent. The exchange of Overseer Taylor with Appavoo Moodelly was unfortunate as the plantations under the former have not made that progress which they would have made under the experienced hands of the latter.

26. *Criminal Prosecution.*—A statement of forest-offences tried by the magisterial officer is subjoined:—

Register of Forest-offences commencing from April 1873 *to March* 1874.

Month.	No.	Place where and when Offence committed.	Offences.	Person charged.	By whom tried.	Result and Punishment if convicted.	Remarks, if any, by the trying Officers to the conduct of the Department.	Informer.	Remarks.
1873., Dec.	1.	Linga Nellore, 24th December 1873.	Felling timbers without license.	Chennay Gowda. Maday Gowda. Yeeray Gowda. Chicka Gowda. Beelagy Sanidar.	By the Sheristadar of Collegal.	Pending orders of the Collectors.	.....	A. K. D. Tharmaboosay and Cawder Saib.	Found in their houses and backyard.

27. *Free Passes.*—These appear to work indifferently, and the quantity taken is shown in the statement under paragraph 20 of this report.

28. *Improvements.*—1,230 feet long and 5 feet broad of fire-path were cleared around the plantation, and 960 running yards of channel have been made for water to be brought on.

Ootacamund,
30*th May* 1874.

(Signed) H. R. MORGAN, Colonel,
Deputy-Conservator of Forests.

BHOWANY FOREST.

Annual Administration Report of the Bhowany Forest for the official-year 1873-74.

The subject is treated as usual under the following Sections:—

Section I.—Inspection tours of the Deputy Conservator.
Section II.—Reserves.
A.—Reserved Forest and contemplated operations.
B.—Fuel Reserves and contemplated operations.
C.—Plantations and contemplated operations.
Section III.—License and Voucher system.
Section IV.—Yield of Forests.
Section V.—Financial Results.
Section VI.—General Remarks.

Section I.

1. *Inspection-tours of the Deputy Conservator.*—*Vide* under Section I. of the Sattiamangalum Forest.

Section II.

2. Reserves A—*Reserved Forest and Contemplated Operations.*—This Forest contains an area of 400 square miles, and the valuable timber trees are hereunder mentioned :—

Trees.	Estimated No.
Sandalwood (Santalum Alvum)	1,10,000
Teak (Tectona grandis)	5,000
Vengay (Pterocarpus Marsupium)	10,000
Achawood (Hardwickia binata)	20,000

3. *Operations—Felling Sandalwood.*—1,355 maunds of sandalwood and 1,355 of roots were felled and dug respectively on the Burgoor hills on contract at a cost of Rupees 713-14-6.

4. *Fuel.*—660 tons at Sambully, Nagaputty and Nattamungalum, 420 tons at Neringapett, and 200 tons in the jungles, of Railway fuel, were felled and stacked on contract work at a cost of Rupees 2,319-4-8.

5. *Sawing Fuel.*—1,070 tons of Railway fuel were sawn into billets of 18″ × 9″ each at Erode, and 162 tons at Coolanully Depôts, for delivery to the Madras and the Great Southern of India Railways respectively on contract work at a cost of Rupees 754-7-6.

6. *Carting Sandalwood.*—3,434 maunds of Sandalwood trees and roots were brought on hired bullocks from the Burgoor hills to the main depôt at Bhowany, a distance of 35 miles at a cost of Rupees 1,373-7-4.

7. *Floating Fuel.*—1,100 tons of fuel to the Erode Depôt and 180 tons to the Coolanully Depôt were brought from the felling depôts above mentioned on carts as far as Neringapett and Cawverepoorum and on boats from the latter places to the sawing depôts. The cost of the floating, inclusive of the supervision by maistries, purchase of materials for building boats, repairing charges thereof, and charges for conveyance of boats back to Erode, is Rupees 5,116-5-8, which is, I should remark, enormous, owing to the mismanagement of the work by the Floating Overseer, and want of supervision by Mr. Overseer Grant who had, however, to attend to the Sandalwood operations.

8. *Repairing Sandalwood.*—2,700 maunds of Sandalwood and roots were prepared by the carpenters and stacked at a cost of Rupees 214-1-10.

9. *Roads.*—A road for carts to bring fuel to the banks of the river from Chinna Covil to Nadoo Covil a distance of six miles, a branch road from the Neringapett public road leading to the bungalow, and another road at Cawverepoorum, have been constructed.

10. The receipts and disbursements of the current year compared with those of the previous year are as per margin. The receipts of 1873-74 being exceeded by those of the last year by Rupees 8,378-5-0 notwithstanding fuel to the extent of a nearly double the quantity of last year was supplied to the Railways, is first owing to a less quantity of sandalwood having been felled and sold in that year consequent on the curtailment of 1,000 Rupees from the Original Budget grant; and secondly some 1,400 maunds of old balance of sandalwood and some 1,000 maunds more than that year's sale were sold and value credited in the previous year. The difference in the receipts would have appeared somewhat less, had the Madras Railway paid within the year Rupees 1,476-0-0 for 246 tons delivered in March 1874.

	1872-73. Rs. A. P.	1873-74. Rs. A. P.
Receipts	23,487 8 0	15,109 3 0
Disbursements	17,024 13 4	15,166 6 0

11. The disbursement of the previous year being also greater than that of the current year by Rupees 1,858-7-0, is due to the fact that eight pairs of bullocks and six carts were brought and five carts were made in that year for conveying boats from Erode to Neringapett and *vice versâ* to prevent bandy contractors from demanding an unreasonable hire for their carts when their services are absolutely required, and that a larger quantity of sandalwood than the current year's was prepared.

12. *Contemplated Operations.*—To fell 2,000 maunds of sandalwood, 400 cubic feet of teak, etc., wood and bring it to the depôt, and 2,000 tons of fuel for the Railways.

13. To improve the raft channel in the Cauvery river round the Neringapett anicut at an expense of Rupees 7,750.

14. *B. Fuel Reserves and Contemplated Operations.*—None.

15. *C. Plantation and Contemplated Operations.*

(1) *Fuel Plantation.*—None.

(2) *Timber Plantation.*—None.

(3) *Experimental Plantation.*—The experimental fuel plantation progresses favorably and Rupees 233-10-0 have been spent in the year under report. To plant the trees when water is scarce in the river during the hot season, a large well has been dug with a stone wall of 42½ yards × 3 yards round it.

16. The receipts and disbursements of the current year compared with those of the previous year are indicated in the margin.

	1872-73. Rs. A. P.	1873-74. Rs. A. P.
Receipts	....	....
Disbursements	94 1 0	233 10 0

17. The expenditure of the current year being greater than the previous year's by Rupees 139-9-0 is attributable to the construction of a well with a stone wall round it as above mentioned.

18. The subjoined is the Statement of cost, *etc.*, of the plantation.

Name of the Plantation.	Year in which the Plantation was formed.	Area in acres.	Description of the trees.	No. of trees.	Cost. During the year. Rs. A. P.	Cost. Up to the year. Rs. A. P.	Receipts. During the year. Rs. A. P.	Receipts. Up to the year. Rs. A. P.
Bhowani.	1871.	64 Sq. yds.	Firewood.	....	233 10 0	608 5 10	....	....

19. *Contemplated Operations.*—To clear 2 acres of land and to plant experimentally 2,000 fuel trees.

Section III.

20. *Forests worked under License and Voucher System.*—The Statement E. represents the collections and the quantity removed of each description of timber from this range.

21. The receipts and disbursements of the current and past year are exhibited in the margin, exclusive of the sums realized on contract of firewood, valum bark, and charcoal, which appears under "Permit fees and Rent of Jungles and privileges."

	1872-73. Rs. A. P.	1873-74. Rs. A. P.
Receipts	2,241 0 0	3,286 15 0
Disbursements	....	....

22. The reason of the receipts being greater by Rupees 1,045-15-0 than last year's is owing to a few cart-loads of teak and junglewood removed in excess and to the fact that the collection of seignorage on firewood, bamboos, valum bark, and charcoal leased and the kist-money shown under "Permit fees,, *etc.*, up to previous year, was temporarily made by departmental agency during the ten months of the year under report, agreeably to the orders of the Board, conveyed in their Proceedings, No. 22-770, dated 10th May 1873, and the amount realized has been therefore included in the amount exhibited under heading No. II.

23. The collection of seignorage on firewood, etc., has, with the permission of the Collector, been leased for a year for 900 Rupees, commencing from February last, and the instalments due for the two months of the year have been paid and carried to heading No. IV. "Permit fees, etc.," *vide* Statement A.

24. My reasons assigned in paragraph 18 of the Sathiamangalam Forest for suppression of the Voucher and License system, and introduction of the departmental working which can be carried on cheaply and economically will equally apply to this range.

SECTION IV.

25. *Yield of Forest.*—The subjoined Statement shows the total yield of timber, *i.e.*, the quantity of timber, etc. sold and removed free of charges.

Yield of Forest.

TIMBER.					FIREWOOD FOR RAILWAY AND OTHER PURPOSES.		BAMBOOS.		Palmirah.	Charcool.	Forest Produce.
Departmentally.		On License.		Free.	On License and Departmentally.	Free.	On License.	Free.			
C. ft.	Maunds.	C. ft.	Tons.	C. ft.	Tons.	Tons.	C. load.	C. load.			Maunds.
120	2,710.	14,260.	„	3,960.	1,413¼.	6.	711. 8,256. Head-loads.	69.			120.

N.B.—The firewood, bamboos, valum bark, and charcoal have been given on contract from February 1874, and so the quantity removed in the last two months of the year is not ascertainable. The contract amount realized for this period is Rupees 150.

SECTION V.

26. *Financial Results.*—It is a matter of regret to observe that the financial result of this forest is not satisfactory this year, the gross expenditure of Rupees 18,825-14-3 having exceeded the receipts of Rupees 18,609-1-0 by Rupees 216-13-3 which is a balance against the forest, but if the amount spent on the plantation, viz., Rupees 233-10-0 is treated out of account there would be left a small sum of Rupees 16-12-9 in favor of Government. A fair result over the amount spent in the year would have been represented, had it not been for the culpable negligence of the floating Overseer in the execution of the works entrusted to him, had the Madras Railway paid Rupees 1,476-0-0 within 31st March 1874 as repeatedly requested for the 246 tons of fuel delivered to it in that month, and had not Rupees 1,922-1-0 been paid in the year for the work done in the previous year, viz., making 1,400 yards holes of rocks in the Cauvery river, and removing them from Bhowany to Erode.

27. Only 590¼ tons of fuel were supplied to the Great Southern of India Railway during the year against 2,500 indented for, and it is evident that the value of undelivered quantity at 6 Rupees per ton would have brought the receipts to little more than 30,000 Rupees anticipated by me, and mentioned in my letter No. $\frac{301}{141}$, dated 29th September 1873, had funds been adequately available, and the floating Overseer simultaneously used economy in the expenditure of the operations and vigorously discharged his duties with implicit obedience to my orders.

28. The financial results of the current year compared with that of the previous year are fully explained in paragraphs 10 and 11 and 17 of this report.

SECTION VI.

29. *General Remarks.*—Working charges advance Rupees 15,400 including Rupees 1,500 transferred from the Collegal forest, sanctioned for the Sandalwood and Railway fuel operations for the year under report have been drawn, and fully accounted for by submission of bills agreeably to the instructions of the Board.—*Vide* Statement submitted on the 24th April 1874 in conformity with the orders of the Board.—*Vide* their Official Memorandum No. $\frac{1}{121}$, dated 20th February 1874, paragraph 1.

30. *Permanent Advance Fund.*—Agreeably to the instructions of the Accountant-General, conveyed in his Circular No. 32, dated 5th December 1873, a report has been submitted on the 1st April 1874, to that functionary through the Collector to the effect that the Permanent Advance Fund of Rupees 2,000 is due from and to be accounted for by me.

31. *Conduct and health of Establishment.*—The health of the Establishment has been pretty good. The floating Overseer has been dismissed for gross neglect of his work. Overseer Grant has not exercised that supervision over the floating Overseer which was enjoined upon him.

32. *Criminal Prosecution.*—A Statement of offences committed against the Forest Rules and disposed of during the year is appended.

33. *Free Pass.*—These are abused here as elsewhere, ryots helping themselves to reserved wood, in fact free passes are not properly controlled, and much damage is done to the jungles.

OOTACAMUND,
3rd June 1874.

(Signed) H. R. MORGAN, Colonel,
Deputy Conservator of Forests.

COMMISSIONER'S OFFICE, OOTACAMUND,
24th June 1874.

No. 53.

From

J. R. COCKERELL, ESQ.,
Commissioner of Nilgiris,

To

J. GROSE, ESQ.,
Secretary to the Board of Revenue.

SIR,—I have the honor to submit the Annual Report of Lieutenant-Colonel Morgan, Deputy Conservator of Forests, for 1873-74 on the Mudumullai and Seegur forests.

2. I visited these forests in company with Colonel Morgan at the beginning of the year. The teak plantation at Benni I found in a very luxuriant condition of growth. The plantation at Mudumullai was growing less well. The trees were spindly, and the bark more or less covered with Lichen, a symptom of want of vigour. Colonel Morgan does not propose to add to this plantation.

3. The Benni plantation is on rich black soil, and Colonel Morgan will add ten acres to it in the coming year.

4. The sandalwood plantation appeared to be thriving.

I have the honor to be,
Sir,
Your most obedient servant,

(Signed) J. R. COCKERELL,
Commissioner.

MUDUMALLAI FOREST

Annual Administration Report of the Mudumallai Forest for the official year 1873-74.

The subject is treated as usual under the following Sections :—

SECTION I.—Inspection-tours of the Deputy Conservator.
SECTION II.—Reserves.
A.—Reserved forests and Contemplated operations.
B.—Fuel-reserves and Contemplated operations.
C.—Plantations and Contemplated operations.
SECTION III.—License and Voucher forests.
SECTION IV.—Yield of forests.
SECTION V.—Financial results.
SECTION VI.—General remarks.

SECTION I.

2. *Inspection-tours of the Deputy Conservator.*—In April the sandalwood plantation, the carting operations, and the sawing in Seegur Forest were inspected. The plantations at Benni, and carting operations in Mudumallai Forest. Again, at the end of the month, the Sandalwood plantation in Seegur Forest was inspected.

3. In May the sandalwood plantation in Seegur was again inspected, and the boundary of the Ballyrungum's with the Collector of Coimbatore.

4. In June the carting operation at Tippicadoo ; the sandalwood plantation, and sawing operations in the Seegur Forest. The plantations and forest work at Mudumallai.

5. In July the floating operations at Neringapett, Bhowani, and Erode.

6. In August the forest operations at Mudumallai, and the plantations at Benni. The sawing and sandal planting operations in Seegur.

7. In September the work in Mudumallai and Seegur Forests was inspected.

8. In October the sandal plantations at Tullimulli and Vyloor in Collegall, and the adjacent forests. The carting at Tippicadoo.

9. In November the forest work at Mudumallai ; the sandalwood planting in Seegur ; the floating operations at Neringapett, Bhowani, and Erode.

10. In December the timber yard at Mysore, the forest operations in Mudumallai, the sandal planting in Seegur, and sawing work was inspected.

11. In January the sandalwood plantations and sawing work in Seegur Forest.

12. In February the carting and other Forest operations at Mudumallai ; the floating operations at Neringapett, Bhowani, and Erode.

13. In March the work in Mudumallai Forest ; the sandal plantations of Tullimalli in Sathiamangalum, those of Vyloor in Collegall, and the forests generally.

SECTION II.

14. *A. Reserved Forest—Operations.*—This forest leased for ninety-nine years and a portion of Wynaad worked in connection with it contain about 300 square miles. It contains valuable trees noted hereunder :—

Trees.	*Estimated No.*
Teak (Tectona grandis)	150,000
Vengay (Pterocarpus marsupium)	40,000
Blackwood (Dalbergia latifolia)	5,000
Ven Teak (Lagerstroemia microcarpa)	1,000
Kurry Murdu (Terminalia tomentosa)	1,000

15. *Felling Timber.*—Agreeably to the advice of the Board felling is limited till ⅔rds of the stock are disposed of. 4,381¾ cubic feet of teak have been felled and squared by Coorumbers in Adirkallummen Goody, a distance of 14 miles from the karkana, at a cost of Rs. 410-12-6, or 1½ Annas per cubic foot.

16. *Sawing.*—It is very difficult to obtain the labor of sawyers. 4,342½ square feet of teak have been sawn by sawyers into cart loads, at a cost of Rupees 215-15-0, or 20 square feet per Rupee.

17. *Dragging Timber.*—12,591¾ cubic feet of teak have been dragged by elephants from the forests to the depôt at a cost of Rupees 1,103-5-2, being the amount of their feed and keep, *96 Rupees supervision, besides some 150 logs of teak containing 5,238½ cubic feet which, at contract rate is equivalent to 200 Rupees, were set up for sawyers, and felling cleared of trunks of trees.

18. *Carting Timber.*—In the year ten carts only have been employed in carting timber from the forest to the karkana and Tippicadoo Depôts. 16,428 cubic feet of teak logs were carted to the above said depôts, and 8,456½ cubic feet of the cracked and worst logs from the latter depôt to the Northern Hay Saw-mill for sawing, the whole at an expense of Rupees 2,218-9-10, being the amount of feed and keep of the cattle. I may remark that a good deal of carting in the forest was from the very farthest depôts this year too, and contractors would probably have charged 3 Annas a cubic foot instead of 2 Annas, so that our carts have worked cheaply in addition to the little profit.

19. *Roads.*—The main line of road with feeders is in a good state of repair though wild elephants are still troublesome, breaking bridges and trampling the roads into a muddy quagmire.

20. *Building Office-rooms, etc.*—A building consisting of two rooms for the accommodation of office clerks, and a timber shed for storing in sawn timber such as planks, rafters, etc., with a wooden roof, has been erected on the premises of the present wood-yard at Ootacamund at an expense of Rupees 603-4-0, sanction having been duly accorded by the Board for the former. The receipts and disbursements of the current and past official year are as per margin.

	1872-73. Rs.	A.	P.	1873-74. Rs.	A.	P.
Receipts	45,943	8	6	41,802	1	3
Disbursements	42,758	13	2	37,024	2	2

21. The explanation of the variations in the receipts and disbursements of this and the past year, in paragraph 36 of this Report under " Financial Results, " will almost apply to this.

22. *Contemplated operations.*—To fell 4,000 cubic feet of teak, and to cart 30,000 cubic feet to Mysore and 5,000 to Ooty—partly beams and partly sawn timber.

23. B.—*Fuel reserves and Contemplated operations.*—None.

24. C.—*Plantation—Operations* :—

(1).—*Fuel Plantation.*—None.

(2).—*Timber Plantation.*—This year 10,000 teak plants were planted at Benni and Mudumallai, the failure at the end of the year amounted to about 2 per cent. ; the season was favorable for planting ; the total number of plants is now 70,000. Ten acres have been cleared for this year's planting, and new nurseries formed ; the cost of the plantations for the official year amounts to Rupees 2,404-13-7—total up to last year, Rupees 15,524-0-11. Total of the whole planting up to March 1874, Rupees 17,928-14-6, or about 4 Annas a plant all round up to date.

25. The receipts and disbursements of the year compared with that of the previous official year are as per margin. The cost of the past year being greater is attributable to 7,000 plants having been planted in excess of the current year's estimate.

	1872-73. Rs.	A.	P.	1873-74. Rs.	A.	P.
Receipts...	...	...	...	...	...	...
Disbursements... ...	3,282	10	1	2,404	13	7

26. A Statement of cost, etc., of the plantation is subjoined :—

—	Name of the Plantation.	Year in which the Plantation was formed.	Area in Acres.	Description of Trees.	Number of Trees.	Cost. During the year.	Cost. Up to the year.	Receipts. During the year.	Receipts. Up to the year.
	Acres.	Trees. Years.				Rs. A. P.	Rs A. P	Rs.	Rs.
Mudumallai	20	20,000 1863.	Mudumallai and Benni.	1863 and 1869	75	Teak.	70,000	2,404 13 7	17,928 14 6	...	...
Benni.....	50	50,000 1869.									

(3.) *Experimental Plantation.*—None.

27. *Contemplated operations.*—To plant 10,000 trees.

SECTION III.

28. *Forests worked under the License and Voucher System.*—Only one tree called Mookey has been cut and removed on payment of a seigniorage of 1 rupee. The receipts and disbursements of the year compared with that of the previous year are as per margin.

	1872-73. Rs	1873-74. Rs.
Receipts	100	1
Disbursements	...	...

29. The collection of seigniorage on firewood and bamboos in the Seegur and Mudumallai Forests was collectively leased for 100 Rs., which has been by a clerical error credited to the latter (the former was amalgamated with the Sathiamangalum Forest) in full instead of ⅓rd of it as usual in 1872-73, so the full amount realized under that head in 1873-74 has been credited to the former.

30. Moreover there will be no more revenue from this source, as the Collector of Malabar, under whose control the Mudumallai Forest was then temporarily placed, has, in his letter, No. 1,733, dated 11th July 1873, ruled that we have no right to lease the cutting of bamboos, nor has the Rajah of Nellumbore, the proprietor of the forest, any such right, but stated that we can cut and sell bamboos if the Rajah fails to remove them within three months from date of notice. This ruling prevented me from leasing the collection on bamboos as well as on firewood which alone no contractor is willing to tender for.

31. As the forest is departmentally worked, no other timber is allowed to be removed on payment of seigniorage, *i.e.*, on "License and Voucher."

32. And so no comparison can be made as regards the result of the license and voucher system with that of the departmental working in order to explain which of the two is cheapest and most economical.

SECTION IV.

33. *Yield of Forests.*—The subjoined Statement shows the total yield of the forest, *i.e.*, the total quantity sold and removed free of payment. In fact no timber was removed free of payment :—

Yield of Forest.

Timbers.					Firewood for Railway and other purposes.		Bamboos.		Palmirahs.	Charcoal.	Forest Produce.
Departmentally.		On License.		Free.	On License.	Free.	On License.	Free.			
Cubic feet.	Maunds.	C. Ft.	Maunds.	C. Ft.	Tons.	Tons.	Bandy.	Bandy.	Number	Tons.	Maunds.
4,381½	...	10	...	...	...	...	...	...	...	...	...

SECTION V.

34. *Financial Results.*—This is more satisfactory than that of last year, the total expenditure of the forest amounts to Rs. 39,428-15-9, and the returns to Rs. 41,822-14-10, showing a profit of Rs. 2,393-15-1. The sales at auction in Mysore have enabled us to dispose of 22,330¾ cubic feet of teakwood, and this year we shall probably sell a little more than that quantity. The prices realized this year too are not high, but a rupee a cubic foot the usual average rate obtained causes no loss though we gain but small profits. If the amount of Rupees 2,404-13-7 spent (out of profit) on plantation be added to the surplus of Rupees 2,393-15-1, the whole profits of the year will amount to Rupees 4,798-12-8—a fair result for the year's work.

35. In addition the whole of my pay is charged to Mudumallai* Forest alone. If 10 per cent. on the gross expenditure of the other forests was charged for supervision, this would reduce the charge of supervision for Mudumallai from Rs. 13,570-14-0 to Rs. 9,767-14-0, or the profit of Mudumallai for the year would be Rs. 8,601-12-8, instead of as it appears at present.

* *Vide* paragraph 9 of G. O., No. 2,381, dated 24th December 1863.

36. It will be observed that the Revenue of the current year, compared with that of the past year, has fallen short by Rupees 4,220-9-8, which was owing to the market being dull in Ootacamund and Mysore, and to the fact that the Department of Public Works does not take such a quantity from the former depôt as was originally anticipated, and the disbursements of the current year being less than the previous year by Rs. 6,610-0-3, is attributable to the curtailment made by the Board in the working charges, original grant, to the extent of almost the similar amount.

	1872-73. Rs.	A.	P.	1873-74. Rs.	A.	P.
Receipts	46,043	8	6	41,822	14	10
Disbursements ...	46,039	0	0	39,428	15	9

SECTION VI.

37. GENERAL REMARKS—*Stock of Timber.*—It is worthy of remark that the stock of timber in different depôts which at the beginning of the year stood at Rupees 1,05,694 has been reduced, agreeably to the advise of the Board, to Rupees 76,513, and will most probably be nothing at the end of next official year if the Department of Public Works take the quantity indented for.

38. *Working Charges, Advances.*—Rupees 22,300 inclusive of Rupees 550 transferred by the Board in their Proceedings, No. 71/1724, dated 13th March 1874, from the "Office contingencies" to "A. Conservancy and Working", in addition to the Budget grant originally sanctioned have been fully accounted* for by submission of bills in conformity with the orders of the Board—*vide* paragraph 3 of their Proceedings, No. 1,538, dated 9th August 1872.

*Vide Statement furnished on 24th April 1874.

39. *Permanent Advance Fund.*—A report called for by the Accountant General in his Circular No. 32, dated 5th December 1873, has been submitted to him through the Commissioner to the effect that the Permanent Advance Fund of Rupees 2,000 is due from and to be accounted for by me.

40. *Improvements.*—The improvements consist of a new road penetrating to a part of the forest hitherto unworked. The keeping up of the old plantations and the formation of new; these should be extended, and it is not a wise economy to stint them, as in the future our principal source of timber must be derived from plantations. In former reports I have pointed out that without plantations, the Forest Department is useless; to meet future demands, we must plant. No man can tell the day when Mudumallai Forest may not be called upon to furnish 4 or 500 tons of teak as it was in 1855 under my management, and we ought to be prepared for such a demand by steadily planting 15 acres every year—this should from no charge against the forest.

41. *Conduct and Health of Establishment.*—The Overseer Vencatappa Naidoo has done fairly well. I had several attacks of fever between April and August, and the establishment suffered somewhat.

42. *Criminal Prosecution.*—None.

43. *Free Pass*—We have no free passes in this forest, nor have we any inhabitants to speak of; in fact it is one the few forests quite reserved.

OOTACAMUND,
20*th May* 1874.

(Signed) H. R. MORGAN, Colonel,
Deputy Conservator of Forests.

SEEGUR FOREST.

Annual Administration Report of the Seegur Forests for the official year 1873-74.

The subject is treated as usual under the following Sections :—

SECTION I.—Inspection-tours of the Deputy Conservator.
SECTION II.—Reserves.
A.—Reserved forest and Contemplated operations.
B.—Fuel reserves and Contemplated operations.
C.—Plantations and Contemplated operations.
SECTION III.—License and Voucher forests.
SECTION IV.—Yield of forests.
SECTION V.—Financial results.
SECTION VI.—General Remarks.

SECTION I.

Inspection-tours.—*Vide* Section I. under Mudumallai Forest.

SECTION II.

Trees.	Estimated No.
Sandalwood (Santalum album)	50,000
Teak (Tectona grandis)	100,000

2. *A. Reserved Forest.*—This forest belonging to Government contains forty square miles, and the estimated valuable trees thereof are as per margin.

3. *Operations—Felling and Digging Sandalwood and Roots.*—Forty bandy loads of sandalwood were felled and roots dug by the Coorumbers in the jungles of Amiakattay, Catiapoor, Mavanulla, and Seegur at an expense of Rupees 818-2-8.

4. *Felling Teak.*—Some teak logs have been felled and squared at an expense of Rs. 38-4-6.

Carting.—The above quantity of sandalwood and roots were brought on hired carts from the above places to the depôt at Musingoody with the aid of two pairs of bullocks from the Mudumallai Forest, at an expense of Rs. 136.

5. *Preparing.*—The above quantity of sandalwood and roots was prepared by Carpenters and turned into 994¼ maunds, of which maunds, 432¼ sandalwood and 562 of roots at an expense of Rs. 100.

6. *Comparison of Receipts and Disbursements.*—The receipts and disbursements of the current year could not be compared with that of the former year, as the transactions of the previous years were amalgamated with that of Sathiamangalum Forest.

	1872-73. Rs. A. P.	1873-74. Rs. A. P.
Receipts	.....	2,004 0 0
Disbursements	.....	1,413 1 2

7. *Contemplated operations.*—To fell 1,000 maunds of sandalwood and 1,000 cubic feet of teak and to bring the same to the depôts.

8. B.—*Fuel reserves and contemplated operations.*—None.

9. C.—*Plantations and Contemplated operations* :—

10. (1).—*Fuel Plantation.*—None.

11. (2).—*Timber Plantation, Sandalwood.*—It has been reported last year that a new sandalwood plantation in a very favorable site was opened. 5,000 plants were put out during the year, all doing exceedingly well. The total number of plants is now 14,000. Seven acres have been cleared for planting this year. The cost of the plantation for the official year amounts to Rs. 1,386-4-10, total up to last year Rs. 2,081-4-1. Total of the whole up to the year is Rs. 3,467-8-11, or about 4 Annas a plant.

	1872-73 Rs. A. P.	1873-74 Rs. A. P.
Receipts	.....	.....
Disbursements	1,742 3 5	1,386 4 10

12. The receipts and disbursements of the year compared with that of the previous official year are as per margin.

13. The cost of the past year being more than that of the present is attributable to the weeding of old plants.

14. A Statement of cost, etc., of the plantation is subjoined :—

Name of the Plantation.	Year in which the Plantation was formed.	Area in Acress.	Description of Trees.	Number of Plantation.	Cost. During the Year.	Cost. Up to the year.	Receipts. During the year.	Receipts. Up to the year.
					Rs. A. P.	Rs. A. P.	Rs.	Rs.
Seegur..	1873	14	Sandalwood.	14,000	1,386 4 10	3,467 8 11	....	....

15. (3).—*Experimental Plantation.*—None.

16. *Contemplated operations.*—To plant seven acres and to clear seven acres for next year's planting.

SECTION III.

17. *Forests worked under License and Voucher System.*—The collection of seigniorage on firewood and bamboos, and of valum bark, has been let out on contract, and the full amount for the former, and one-half of the latter, *viz.*, Rupees 130, have been realized and credited to forest, together with Rs. 60 realized by removal of twelve bandy-loads of valum bark in November 1873.

	1872-73 Rs. A. P.	1873-74. Rs. A. P.
Receipts	.....	190 0 0
Disbursements	.....	.....

18. The receipts and disbursements of the current year could not be compared with the past year for reasons stated in paragraph 6 of this Report.

19. No timber except firewood and bamboos and valum bark is allowed to be removed on license and voucher system, and so no comparison can be instituted as regards the result of the license and voucher system with that of departmental working in order to explain which mode is the cheapest and most economical.

SECTION IV.

Yield of Forest.—The subjoined Statement shows the total yield of the forests, *i.e.*, the total quantity sold and removed free of payment. In fact no timber was removed free of charge.

Yield of Forest.

Timber.					Firewood for Railway and other purposes.		Bamboos.		Palmirahs.	Charcoal.	Forest Produce.
Departmentally.		On License.		Free.	On License.	Free.	On License.	Free.			
C. Ft.	Maunds.	C. Ft.	Maunds.	C. Ft.	Tons.	Tons.	Cart Loads.	Cart Loads.	No.	Tons.	Maunds
500	994¼	....	....	....	Given Contract.	....	Given Contract.	....	..	..	....

SECTION V.

21. *Financial Results.*—The expenditure is Rs. 2,799-6-0, inclusive of the fixed charges of Rs. 40 per month transferred from the Mudumallai Forest by the Board in their Proceedings, No. 183/5,747, dated 8th September 1873, and the receipts Rs. 2,194, which leaves a balance of Rs. 605-6-0 against the forest, but if the amount of Rs. 1,386-4-10 spent on plantation be treated out of account here, the net expenditure incurred for profit would be Rs. 1,413-1-2, which would then exhibit a profit of Rs. 780-14-10 to Government.

22. A comparison of receipts and disbursements of the current year with that of the past year cannot be made for reasons stated in paragraph 6 of this report.

SECTION VI.

23. GENERAL REMARKS—*Working Charges, Advance.*—Rs. 2,500 sanctioned for the working charges and drawn for the same during the year have been fully accounted* for by submission of bills pursuant to the instructions of the Board conveyed in their Proceedings,† No. 1,538, dated 9th August 1872.

* *Vide* Statement submitted on 24th April 1874.

† Paragraph 3.

24. *Permanent Advance Fund.*—A report called for by the Accountant General in his Circular No. 32, dated 5th December 1873, to the effect that the amount, *viz.*, Rs. 200, is due from and to be accounted for by me, has been submitted to that functionary through the Commissioner.

25. *Conduct and Health of Establishment.*—The Superintendent of the Plantation, Ponnusawmy Pillay, has done fairly well. Fever has somewhat prevailed in this Range.

26. *Criminal Prosecution.*—None.

27. *Free Pass.*—None.

(Signed) H. R. MORGAN, Colonel,
Deputy Conservator of Forests.

No. 238.

COLLECTOR'S OFFICE,
CAMP MADIGHERRY,
11*th June* 1874.

From

F. PRICE, Esq.
Acting Collector and Conservator of Forests, Salem,

To

J. GROSE, Esq.,
Secretary to the Board of Revenue.

I HAVE the honor to transmit, with the usual statements, the Administration Report of the Deputy-Conservator of Forests for the year 1873-74.

2. Mr. Brougham was, during the year under report, 196 days absent from his headquarters, and his attention has principally been devoted to the exploration of the very feverish jungles on the Javadi and Yelagherri Hills in the Tripatore, and the Kollimallays and Puchamallays in the Namkul Taluq. He also inspected a portion of the forests of the Denkencottah Range, and frequently visited the fuel reserves. During his tours, Mr. Brougham has given his attention to the different forest products of the district, and has found many valuable fibres, lac and true Chittagong on the Kollimallays. He has also devoted considerable time and trouble to the preparation of a list with descriptive notices of the trees found within his charge. I owe very much of the smooth and, I believe, satisfactory way in which forest matters have worked to his ability and application.

3. I am sorry to say that I have myself been unable to do anything in the way of inspecting. I was detained in Salem until December, and when I did go out, there were so many things to look to, that I had no time for any inspections, until the fever season was far advanced, and the illness, which has now compelled me to leave India, incapacitated me from bearing any exposure.

4. Mr. Brougham has not, in his present report, recorded any remarks upon his inspection tours ; but I consider it necessary to make the following observations touching those offered by me last year under this head.

(1.) With regard to the Ponnakadu (hoe) cultivation on hills, I have issued instructions that the Malayalies may continue to occupy the land which they now hold, or to take up ground which was formerly cultivated by them and was subsequently abandoned, but that they are not to interfere with any virgin forest unless upon application to, and with the permission of, the Deputy-Conservator of Forests. These orders have been published in every hill village.

(2.) The Assistant Superintendent, Revenue Survey, who was deputed to look into the boundary dispute between the Neyamalai Muttah and the Peria Kulroyen Hills, decided, so it had been reported to me, that the slopes of the hills belong to the Muttahdar. I have written to the Superintendent objecting to this, on the ground that Government had no notice and have not has any opportunity of stating their case. My letter has not been replied to.

(3.) I have in vain tried to get the Poligar of the Chinna Kulroyens to come to terms about the hills of his poliem. He is willing enough, but is in the hands of a particularly wary and artful Chetty, who prevents his having anything to say to the authorities. I went out to the foot of the hills last December, where I remained for some time in the hope that the Poligar would come down and talk matters over ; but as usual he could not be found. I would have gone up myself, but the Tahsildar, who did all that he could to find the man, said that my appearance would be the signal for the Poligar's disappearance, and that the only chance was for him to go up alone ; which he did, but without success.

(4.) The necessary arrangements have been made with regard to the sandalwood plantation at Kanavainagasundaram. The bandy-track to the foot of the Mailgherry Hills has been put into excellent order for the first two miles, which was the worst part of it. A further portion will be repaired and improved during the current year.

(5.) Nothing has been done with regard to the Thuringi Forests along the banks of the Cauvery and Toppoor Rivers. The matter is one which must stand over until the question of fuel supply for Railways, which is now under consideration, has been disposed of. This will, if done properly and satisfactorily, take quite another year.

(6.) Instructions to open out timber depôts at Dharampuri, Shendamungalam, and Razipur have been issued. We have had, for the present, to close our bamboo depôts, as the renters of muttah jungles combined and undersold us. I have, in closing the depôts, put a stop to selling licenses to cut bamboos, except in exceptional cases. I have considered this measure necessary in order to let private persons cut the bamboo jungles in their possession out, which they very soon will do, and when this takes place, depôts, which I consider most essential to forest management, can again be opened.

(7.) The Kadathur Muttah dispute is in the hands of the Deputy-Conservator of Forests (*vide* G.O., Revenue Department, No. 158, dated 4th February 1874), and will, I trust, be settled during the current year.

SECTION II.

5. Reserved Forests A.—The forest ranges of Denkencottah and Tripatore, which are those held to be reserved, remained under the charge of the same officers as in the previous year. There was an increase in the quantity of timber cut and stored. The falling off under the head of sandalwood was the result of the necessity for letting the forests of this description rest.

Altogether the outlay on these ranges was Rupees 6,627-3-6, and the receipts Rupees 16,464-3-5, as against Rupees 5,830-10-7 and Rupees 10,495-5-7 in 1872-73.

It will be thus seen that the return for an expenditure of Rupees 796-8-11, above that of the preceding year, was Rupees 5,968-13-10, which speaks very favorably for departmental management. The increase in the receipts was due for the greater part to a large demand for timber and to some Acha logs, which were felled on the banks of the Cauvery and brought up to Pennagaram by coolies, having realized very high prices. If the ghaut had been open, we might have made much more.

The contemplated operations for the coming year will appear in the covering letter to the Forest Budget.

I may observe, however, that the estimate for the highly needful ghaut from Pennagaram to the Cauvery has not yet been prepared by the Department of Public Works. All that has been done has been to send me a sketch of a trace and an estimate for a bridle-path. The estimate for the Anaibidda Madugu Road has not yet been taken in hand.

This delay has not been my fault, for I have taken care throughout the year that the District Engineer should be frequently reminded of the ghaut. I trust that the construction of it will not be left to the Department of Public Works; for if it is, and they carry the work out at the rate that they generally do others in the district, it will be some three or four years longer before we are able to use it.

B.—Fuel Reserves.—As regards the A, B, C, D, E, Ummaneri, Tellapalle and Utengherry Reserves, I have nothing much to say. They have been carefully preserved, and only one accidental fire occurred. The system of allowing grazing and of renting the right of removing dead wood has no doubt operated most beneficially. The season was, throughout, an extremely bad one for planting work of all kinds. There was failure of rain at its commencement, and what few seedlings came on were cut down by the extreme heat of the early summer. The heavy rain, which we have recently had, will, I hope, tend, taken with the valuable advice of the present Acting Inspector of Forests on the subject of planting, to better results for the future.

Instructions to give up the Putchoor Plantation have been issued.

The Yelagherry Sandalwood Plantation is not encouraging. If it does not improve this year, it will be highly desirable to give it up. The locality is poisonously feverish, water is scarce, and gardeners are difficult to get. The condition of the Kanavainagasundaram Plantation in the Denkencottah Range is on the other hand very satisfactory, and I have every hope that it will prove an entire success. Instructions to extend it have been issued. The soil and position of this plantation are well adapted for producing good sandalwood, and I have no doubt that in time to come, it will be very valuable. I saw the nursery at Denkencottah, and think that it may be continued. The sandalwood trees in it have grown surprisingly, but they will never be good for much as the soil is too rich. The ground is, however, well suited for raising seedlings.

The plantation on the Shevaroy Hills continues to be a mistake, and the only reason why it has been allowed to remain on the list is, that the gardener employed upon it is also a forest watcher, whom we could not dispense with.

SECTION III.

6. *Forest worked under the License and Voucher System.*—It will be observed that the only taluqs worked under the license system were Salem and Namkul. In both of these, depôts will soon be opened, and as these gain a footing, the issue of licenses, which I consider most inimical to Forest Conservancy, will be discontinued. There is no doubt that under the license system two cart-loads of timber are destroyed for every one taken out, to say nothing of the damage done, owing to the propensity of the native whenever he is in the jungle with any cutting instrument in his hand to "whittle" the nearest tree.

SECTION IV.

7. *Yield of Forests.*—It is impossible to make, for the year under report, any correct, or approximately correct, estimate of the amount of timber and firewood annually removed free of charge from the jungles for the use of the ryots, and until the staff of the Forest Department is strengthened, I do not see how data upon this point are to be acquired. I think the subject one which it would be better to leave alone until the forests have been demarcated and surveyed, and the question of Railway fuel-supply settled. Making the minute and in some case harassing inquiries which would be necessary will only lead to cause discontent and alarm amongst the agricultural classes. They have only recently had the new Revenue Settlement introduced, and I think that it would be as well to leave them alone for a time. There is almost everywhere sufficient wood to last for many years to come. It is the demands of the Railway, not those of the ryots, that are disforesting the country, and I would most strongly advocate this question being dealt with before anything is done as regards the other.

Our relations with the Railway in the matter of fuel supply are extremely unsatisfactory. I consider that the only method of remedying the existing state of affairs is, that the Company should either take entirely from us or not at all. The proprietors of muttahs within reach of the rail, who have no thought beyond to-day, are rapidly cutting down their jungles for Railway fuel, which they sell for a little less a bandy-load than our contractors can. The consequence is that the Company take from them; that practically unlimited smuggling from Government forests takes place, and that we are with our petty establishment powerless to check it, for the Railway Company take from contractors' cutting, one in muttah and the other in the adjoining Government jungles, and if they combine, as I strongly suspect that they do, there is no telling what is stolen timber and what not.

SECTION V.

8. *Financial Results.*—The financial results for the year were Rupees 65,219-15-5, against Rupees 64,233-12-4. The receipts would, as Mr. Brougham states, have been larger if the sandalwood contractor had been paid in time. The increase is not a very great one, but it is one which I feel assured that coming years will see much larger.

SECTION VI.

9. (I.) *General Remarks.*—I have nothing to add to those made by Mr. Brougham.

(II.) *Conduct of Subordinates.*—The conduct of all the subordinates of the department has been extremely good. Of Mr. Brougham and his qualifications it is not necessary for me to say anything. I trust, however, that it may be found practicable to confirm him in his present office. Overseer Mahomed Ali Saib is an officer well deserving of promotion. I consider him fully qualified for a post higher than that which he now holds. He is energetic, hard-working and trustworthy. Overseer Mr. Franklin is, I have every reason to believe, a very good officer.

(III.) *Criminal Prosecutions.*—It will be observed that the number of prosecutions for forest offences was more than 50 per cent. less than in last year. The falling off was caused by more judicious management than heretofore, and the ryots being better acquainted with the forest rules.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) F. PRICE,
Acting Collector and Conservator.

DEPUTY-CONSERVATOR'S OFFICE,
SALEM,
13th May 1874.

From No.

MR. J. H. B. BROUGHAM,
Deputy Conservator,
Salem Forests,

To

F. PRICE, Esq.,
Collector and Conservator of Forests.

I have the honor to submit the Administration Report for 1873-74.

SECTION I.

2. *Inspection Tours.*—During the year under review, I have visited nearly the whole of the forests on the Javadies and the Yellagherri Hill Ranges in the Tripatore Taluq, a portion of the forests in the Denkencottah Range and the Kollimallays, and the slopes of the Puchamallays in the Namkul Range. I have also frequently inspected the fuel reserves in the Salem Taluq, and my total absence from head-quarters has covered a period of 196 days.

SECTION II.

3. A.—RESERVED FOREST—*Denkencottah and Tripatore.*—Overseer Mahomed Ali Saib has continued in charge throughout the year of the Denkencottah Range, and Mr. Franklin as Overseer of Tripatore.

4. These forest ranges are looked upon as reserved. Timber removed from them is effected departmentally and sales made; but in regard to bamboos, firewood and charcoal the usual license system is adhered to for the present, as the arrangement in connection with the opening out of depôts has not been quite decided on. With a view to meet the convenience of the agricultural lass who live at great distances from the depôts licenses were, however, granted as an exceptional measure.

5. In the Denkencottah Range, there were felled and stored 2,630-4-6 cubic feet of timber, 1,740-5 maunds of sandalwood, 273-19½ maunds forest products at a total expenditure of Rupees 1,725-6-5.

6. In the Tripatore Range, the following were the removals from the forest: timber 7,599-8-7 cubic feet, sandalwood 53-6 maunds, forest products 1-12½ maunds, and the expenditure Rupees 4,901-13-1.

7. The total expenditure in both ranges, on account of the removal detailed above, has therefore been Rupees 6,627-3-6 against Rupees 5,830-10-7 of the previous year, and the receipts Rupees 16,464-3-5 against Rupees 10,495-5-7 in 1872-73.

8. The increase in the receipts during the year under report has been attributable to the circumstance that there was a large demand for timber, and to some Atcha logs, which were felled in the Anabidda Mudugu Jungles of the Denkencottah Division, having realized profitable rates.

9. It will be further observed that for the difference of outlay, viz, Rupees 796-8-11, the return has been Rs. 5,968-13-10, a circumstance which speaks well for the departmental system.

10. B.—FUEL RESERVES.—*A. Reserve.*—The extent of this reserve is 2,560 acres. During the year 9 acres of ground were ploughed up and sown broadcast, the seeds germinated very satisfactorily, but in consequence of the failure of rain on which the success of planting of this kind in a great measure depended, the casualties became very heavy and only here and there a few plants can be seen. There were also 1,239 pits dug and planted with different sorts of seeds, which have only germinated in places owing to the seeds having been rooted up and destroyed by rats. The number of casualties which occurred during the year was 508, the replaceals 412, the remainder 96 pits were re-opened and sown with vaimboo seeds, which have not germinated. The expenditure during the year has been Rupees 265-5-4.

11. *B. or Moroor Reserve* is 964 acres in extent. During the year the casualties were very large, and in consequence it was necessary to re-open and re-sow 300 chains of channels; 420 pits had also been dug and sown with seeds. Among the transplanted trees, there were seventy-five casualties and forty-five replaceals, and the remainder thirty pits were sown with babul seeds. The expenditure during the year has been Rupees 243-8-1.

12. *C. Reserve,* extent 320 acres. During the year there were only 34¼ acres of scrub-jungle cleared, ploughed and broadcast with babul seeds. Through the failure of rain, the operations could not be extended; there were 1,050 casualties and 1,000 replaceals, and 720 new pits and fifty-four old pits re-opened and sown with seeds of kinds. As this reserve is chiefly being improved under the broadcast system of planting, it is hardly possible to form an estimate of the number of casualties; but there is no doubt that they have been very large, considering how bare the spaces look now to what they did about the beginning of the official year. If the casualties continue to be as large as they have been, there is no doubt that work will have to be done over again; but if the existing plants hold out till we get a few showers of rain, I am of opinion that it will not be necessary to replace the lost plants, as the surviving ones will suffice to cover the ground. The expenditure has been Rupees 610-8-7.

13. *D. or Burgoor—E. or Pudoor Reserves.*—The extent of the former is 1,600 acres and the latter 2,400; these for the most part being hill reserves, as mentioned in my previous reports, there has consequently been but little chance for improving them; however, gaps which occurred here and there have been dug and sown with seeds; the number of pits dug in each reserve during the year has been 480; the fences of both reserves have suffered much damage from the wild boar, which uproot the aloes on every occasion that they are replaced; the expenditure on the D. Reserve has been Rupees 75, and on the E. Reserve Rupees 78.

14. *Ummanary Reserve* is about one and half square miles in extent. 178 pits had been dug and sown with seeds, the expenditure has been Rupees 72.

15. *Pellapully Reserve* about four square miles in extent. During the year 920 pits were dug and sown with seeds, and an expenditure of Rupees 200-1-10 has been incurred in fencing. An accidental fire broke out in the reserve, but the damage was confined only to some clumps of bamboos which had seeded and died off. The expenditure, including the above item of Rupees 200-1-10, has been Rupees 210-1-10.

16. *Utengherry Reserve* about one square mile in extent. 108 chains of ditch and bank and ten chains of stone wall had been constructed, and the expenditure has been Rupees 239-8-0.

17. During the year, the expenditure on all the reserves has been Rupees 1,866-8-2 against Rupees 1,585-7-4. The increase is attributable to extension and improvement of the several tracts under notice and the fencing of a new reserve. The receipts have been Rupees 89, being the amount realized on the sale of tamarind trees.

18. PUTCHOOR.—The extent of this plantation is 9 acres. Fifty measures of babul seeds were sown broadcast over two acres of ground, and 100 pits re-opened and re-sown; the casualties have been very heavy, which is partly attributable to the failure of rain and partly to the nature of the soil which is poor. Several attempts have been made to reclaim the land; but, as they have all proved unsuccessful, it appears advisable that the site should be abandoned. The expenditure incurred during the year has been Rupees 55-5-9.

19. YELAGHERRY—*Sandalwood Plantation.*—At the commencement of the year under report, the surviving plants numbered 905, but through failure of rain, there were only 146 plants existing on the date of my inspection in November last, and these at the time looked very unhealthy. From reports subsequently to hand, I learn they have all perished. It is a matter much to be regretted that a supply of water on the spot for watering the trees could not be obtained, otherwise the trees may have been saved. There has been also great difficulty in obtaining the services of a gardener for the plantation on account of the unhealthiness of the locality. I endeavored to obtain the services of one of the resident Malayalies, but they are apparently very reluctant to take employment owing to their field duties. Expenditure—*Nil.*

20. *Canaganavasoondrum.*—This plantation is situated near the foot of the Mailgherries, about 20 miles south-east of Denkencottah, and is about 3 acres in extent, but capable of extension. 2,385 plants have been established, and, on the date of my inspection in March, they were in a very healthy condition ; the average height is about 6 inches, the plants have been sown in rows at a distance of 4 to 6 feet apart ; the expenditure incurred during the year has been Rupees 256-9-6.

21. DENKENCOTTAH —*Sandalwood Nursery.*—This has been established in the compound of the office, and a series of experiments have been carefully made and noted with a view to ascertain the method for growing this valuable tree. 153 plants which were planted out during the year 1872-73 were measured by me in March last, and were found to have attained an average height of 5 feet ; it is proposed to keep up this nursery in order to improve the sandalwood tract at Sunjevaramanoor. The expenditure incurred on the experiment during the year has been Rupees 47-14-10.

22. *Shevaroy Hills.*—The existing trees in this plantation have been weeded, etc., during the year, and the plantation has not extended as the soil is unfavorable. The condition of the plants except the Eucalyptus and the Belgaum Walnuts is not encouraging, being much stunted in growth. This may be attributable to the nature of the soil, but I am of opinion that it is more attributable to the frequent attacks of the goat moth ; the expenditure during the year has been Rupees 173-4-7.

SECTION III.

23. *Forest worked under the License and Voucher System.*—The Salem, Ahtur and Namkul Taluqs have been worked under the license system, and the attention of the Department has been mainly directed to the preservation of the more valuable kinds of timber and to the prevention of smuggling. There has been, however, a small quantity of timber removed from the forest departmentally to supply a small depôt at Salem ; the bamboo jungles of the Salem Taluq were also worked by departmental agency for four months and brought in a good revenue—*vide* Appendix A. The subjoined statement exhibits the removals under license and free passes in all the ranges during the year under notice compared with that of 1872-73.

License Removal.

District		On License.						On Free Passes.			
		Cubic feet of Timber.	Bandy-loads of Charcoal.	Bandy-loads of Bamboos.	Bandy-loads of Bark.	Bandy-loads of Firewood.	Tons of Engine Fuel.	Bandy-loads of Timber.	Bandy-loads of Firewood.	Bandy-loads of Bamboos.	Head-loads of Charcoal.
							Tons. lbs.	Cubic feet.			
Salem.	1872-73 ...	50,400	1,990¼	11,535	488	16,388	4,802 1	53,584	2	1,400	...
	1873-74 ...	27,216	2,636	5,757	373	2,877	4,420-1,007	Bandy-loads. 2,624	69	1,563	4
	Amount realized.	3,473-11-0	.....	4,852-9-0	...	.....	.....	.....	...	...	...
	DEPÔT SYSTEM.	Cubic feet.									
	1873-74 ...	9,709-11-9	.....	1,441	...	.....	.....	.....	...	...	...
	Amount realized.	8,808-4-8	.....	8,358-1-5	...	.....	.....	.....	...	...	...

SECTION IV.

24. *Yield of Forest.*—The yield of the forest for the year under review has been as follows. I have no accurate data of the quantity of fuel removed by the agricultural classes without passes, but there is no doubt it has been very large. In many of the large villages and towns which I have passed through, I made a note of the average daily removals which I have entered in Column V., but by no means does it represent even one-third of the supplies obtained from the jungles by the inhabitants.

Description of Articles.		Departmental Removals.	Removals on Licenses and Vouchers.	Removals on Free Passes	Removals without Passes.
Timber	C. ft.	10,353 2 7 lbs.	27,216	Bandy-loads. 2,624	.....
Sandalwood	Mds.	1,793 11	.....	.....	... ..
Bamboos	Bandy.	1,441	5,757	1,563	.....
Charcoal	do.	.....	2,636	Head-loads. 4	.....
Bark	do.	.....	373	.....	...
Firewood	do.	.....	2,877	69	Head-loads. 248,200
Engine Fuel	Tons.	.....	Tons lbs. 4,420 1,007	.....	.....
Puply	Mds.	7 7 lbs.	.....	.....	.....
Honey	do.	1 15	.....	.....	.....
Bees-wax	do.	3 3	.....	.....	.....
Seeakoy	do.	267 19	.....	.....	.....

SECTION V.

25. *Financial Results.*—The financial results for the year have been Rupees 65,219-15-5 against Rupees 64,233-12-4 of 1872-73.

26. The receipts would have been augmented by about 4,000 Rupees had the sandalwood contractors received charge of the sandalwood from the depôts previous to the expiration of the year, and notwithstanding they were called on to do so on more than one occasion, failed and I have not been able to ascertain the cause of their default.

SECTION VI.

27. *General Remarks.*—The bamboos in the Tripatore Range were farmed out during the year and realized Rupees 3,749-11-0, the removals were confined to 300 bandy-loads per mensem, and the contractor was restricted to cutting in certain localities which were marked out from time to time by the department. The bamboos so cut were to be removed through certain Tannahs where the quantity was registered. The removals by the contractor have fallen far short of the limit placed in them, which is represented to be partly owing to bamboos being brought into the market from private sources and partly to an epidemic fever which broke out and prevailed for three or four months and from which the woodcutters were great sufferers.

28. It was considered expedient to continue the farming of dry wood as a preventative against the fires doing much injury and taking a wider spread in the jungles. The amount realized therefore on this account during the year has been Rupees 3,076-12-0.

29. An attempt was made in the Salem Range to work the bamboo jungles under the depôt system, and depôts were established at Vadagumputty, Salem, Rasipore and the Shevaroy Hills, and during the short time the same was in existence the sales were highly satisfactory. The town traders, however, not to be done out of the profits accruing to them from the sale of bamboos, entered

into a combination and arranged for getting supplies from muttah jungles under the impression that the Forest Department would be compelled to return to the license system. The Department could not sell at such low rates as the merchants, and with the concurrence of the Collector and Conservator it was deemed expedient to close the depôts for the present.

30. A small timber depôt has been maintained in the Salem Range for the purpose of supplying the Public Departments, but the sales during the year have been very small.

31. It was my intention to increase the number of depôts in this district, but as I found that the town traders were underselling this Department and were able to effect this object with ease with the facilities they have of obtaining timber at very nominal rates from muttah jungles, I did not consider it advisable or expedient under the circumstances to enlarge the number of depôts. In the same manner during the year under report, the Railway Company acquired large supplies not of fuel from private sources, in consequence of which the Government have not contributed as largely as hitherto, making a corresponding reduction in the revenue of the forests for the year.

32. Roads.—The road from Pennagaram to Odaputty has been repaired during the year, but the only drawback to convey timber from our Atcha Forest has been the ghaut over which it is impracticable to take carts. A trace for a new ghaut road admitting of wheel traffic has been completed, and it is hoped that during the next official year, we shall be able to unlock the forest looking to the Cauvery, which has hitherto not been tapped.

33. The roads from Pennagaram to the Chenar and Cauvery, and two miles of road from Denkencottah to the Mailgherry Hills, have also been repaired at a total cost of Rupees 756-8 0.

34. Conduct of Subordinates.—The conduct of the subordinates generally has been all that could be desired. They have sufferred much in health however during the year, which has been a most unhealthy one; four deaths from fever occurred among the peons.

35. Criminal Prosecutions.—The number of criminal prosecutions have been 124, in which 417 were concerned and 311 convicted.

36. I hope it will not be considered irregular for me to allude in this report to a little I had done in the matter of exhibiting specimens of woods, gums and dyes, etc, at the Vienna Exhibition on behalf of the Department and the district. At this Exhibition, the Judges awarded a medal to the collection that I had made and forwarded. Another attempt that I made at the Madras Agricultural and Agri-Horticultural Exhibition on my own behalf met with success, and prices were awarded of the specimens of fibres, woods, gums, and wax.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) J. H. B. BROUGHAM,
Deputy Conservator.

Mangalore,
19*th September* 1874.

No. 1,896.

From

E. GIBSON, Esq.,
Acting Head-Assistant Collector in charge of South Canara,

To

J. GROSE, Esq.,
Secretary to the Board of Revenue.

Sir,—As desired in your telegram of yesterday's date, I have the honor to forward, herewith, a copy of the Collector's Forest Administration Report or rather letter (without enclosures), submitting with his remarks the Deputy Conservator's Report for the past official year 1873-74.

2. With reference to paragraph 3 of that letter, I beg to state, that from the reply since received from Mr. Cherry it appears that, during the year under report, he made five tours, and the aggregate number of days he was on circuit amounted to seventy-three.

Enclosure No. 1.

Mangalore,
11*th August* 1874.

No. 1,524.

From

H. S. THOMAS, Esq.,
Collector of South Canara,

To

J. GROSE, Esq.,
Secretary to the Board of Revenue.

Sir,—I have the honor to forward my Deputy Conservator's Administration Report for the past official year 1873-74. My already written letter, No. 1,489, dated 10th August 1874, being of the same nature, my remarks here will be very brief.

2. *Section I., paragraphs 6 and 7.*—It has been pointed out in return that there is a great deal of unnecessary office work which should be dispensed with, and the residuum of necessary work facilitated by printed forms.

3. I took opportunity to visit the forests during five of the seven tours I made in the district during the official year under report, and the total period of my absence on circuit amounted to 154 days. I have asked Mr. Cherry to state the period he was out on inspection duty, but not having yet received a reply from him, I am unable to supply this want in this report which is already over-due.

4. *Section II.-A., Reserved Forests, paragraph* 9.—It is for the Deputy Conservator to indicate what sites should be reserved. He has been called on to do so.

5. *Paragraph* 11.—Measurement immediately on felling would have obviated this difficulty as well as the others mentioned in my report.

6. *Paragraph* 14.—Mr. Cherry seems to refer to other than elephant work, for which he failed to obtain contracts. In view of the heavy rates of hire charged by the merchants for their elephants, I have addressed the Inspector of Forests regarding the advisability of purchasing them for the department and shall address the Board on the subject on receipt of a reply from him.

7. *B., Fuel Reserves.*—There are none, because my clear and repeated orders have been neglected. This neglect has been reported in my above-quoted letter.

8. *C., Plantations.*—The Parapa and Hospet reboisements and plantations are in accordance with my views, except that there should be many more of them, and that the Rupees 1,088 left unspent could have been well used thereon.

9. With reference to the Casuarina failure it will be sufficient to extract from the remarks in my former letter that "the Revenue Department avoided a like failure by having earlier sown and therefore stronger seedlings, by planting in June instead of July, by watering and shading in the breaks, and we had breaks too."

10. Both these questions are already noticed at length in my above-quoted report (paragraphs 196 and 197).

11. *Section III., Forest worked under License and Voucher system, paragraph* 29.—The License system or felling of timber in Government Forests on seigniorage should in my view be entirely stopped, and be rendered unnecessary by ready departmental sales. I have so ordered.

12. *Paragraph* 36.—I have given very distinct orders, as will be seen in my former report (paragraphs 109 to 122).

13. *Paragraphs* 37, 38, 39.—If the Deputy Conservator had obeyed his orders to examine and report the tracts to be taken up, communal rights would have been duly examined and real conservancy effected by extra watchers.

14. *Paragraph* 72.—The "writing off" *Anglice* loss of Rupees 7,103, in 1870-71 in consequence of deterioration is a strong argument for proper seasoning, (paragraphs 66 to 73 of my former report).

15. *Paragraph* 80.—At present the local market is ill supplied and in consequence draws largely on Malabar.

16. *Section IV., General Remarks, paragraph* 81.—The Deputy Conservator is right. There certainly has been no "harmonious working." How could it be expected when the subordinate was systematically insubordinate, as reported at length in my above quoted letter.

17. *Paragraph* 82.—Not less, but more assistance has been given as shown in paragraphs 173 to 184 of the said letter.

18. *Paragraph* 84.—This officer has a right of appeal and has used it. His reports also have been freely forwarded.

19. *Paragraph* 85.—This is a general assumption, not to say presumption, without any case in point.

20. *Paragraphs* 86 *and* 87.—A better establishment is necessary, has been reported and awaits the sanction of higher authority. When given that establishment will itself be able to remove the majority of the difficulties mentioned in these two paragraphs. But more might have been done with the present establishment than has been done for want of diligence.

21. *Paragraph* 90.—There have been no vacancies for Overseers. As regards them therefore the difficulties spoken of would seem to be ideal rather than real, and this sketch a fancy portrait. The present Overseers are old appointments of the Forest Department.

22. *Paragrph* 91.—This must be Overseer Gowdie. I fully expected to be in a position to get rid of so indifferent an Overseer. I cannot but think that had the Deputy Conservator's duty been properly done, there would have been no lack of proof. As it is, we differ only in that I have declined to dismiss him as asked on "suspicion." If the Board care to see the papers, I shall submit them with pleasure. They are not unnoticed in my letter above quoted (paragraphs 185, 196).

23. *Paragraphs* 92, 93, 94, 95.—Recognition of deserving services must unavoidably be postponed to the sanctioning of the proposed improved establishment.

24. *Paragraph* 97.—The transfer of the Overseers was rendered unavoidable by the result of the inquiry referred to in my paragraph 22 *supra*, and the persistent employment of another Overseer by the Deputy Conservator as a Clerk in his office, and the hand-writing of the enclosed accounts is that of the same Overseer, even though he is now in a distant range. The transfer was unduly delayed by the Deputy Conservator, and if my instructions had not been disregarded, would have facilitated a more thorough stock-taking than usual. That it has not been taken is to my mind unsatisfactory.

25. Criminal prosecutions were instituted in twenty-nine* cases for offences against the Forest Rules. Their number has fallen off since 1871, Kumaki holders being now treated more leniently under the more liberal principles† advocated by the Board and partly acted upon by Government in that year.

* 24 Convicted.
4 Discharged.
1 Acquitted.
—
Total.. 29
—

† Board's Proceedings, 21st March 1871, No. 1,222.
G. O., 31st March 1871, No. 603.

26. Under the present unsettled state of Kumaki and Kumari rights and the unsatisfactory administration of my Forest Deputy, the people can scarcely be expected to appreciate the advantages of Forest Conservancy. Their general feeling is therefore one of dissatisfaction at the department.

27. As already reported in my letter, No. 1,019, dated the 13th August 1872, the system of free passes is not, to my knowledge, in force in this district, in consequence of the existence of Kumaki privileges. Consequently there are no data from which the quantity of timber and fuel removed free of payment can be calculated even approximately.

I have etc.,
(Signed) H. S. THOMAS,
Collector.

(True Copy.)

(Signed) E. GIBSON,
Acting Head-Assistant Collector in charge.

ENCLOSURE No. 1.

DEPUTY CONSERVATOR'S OFFICE,
MANGALORE, 30*th June* 1874.

Report No. 353.

From

J. W. CHERRY, ESQ.,
Deputy-Conservator of Forests, South Canara,

To

H. S. THOMAS, ESQ.,
Collector of South Canara.

SIR,—I have the honor to submit my Administration Report for the official year 1873-74, and to annex in the prescribed form, the Statements in duplicate, A, B, C, D, E, F, Gs and H, together with the Stock Register E required by the Revenue Board.

2. In drawing up my report, I have observed the arrangement desired in the Revenue Board's Memorandum, No. 22-222, dated 20th February 1874.

SECTION I.

3. *Inspection Tours.*—During September, October and November, I inspected the Kassergode Range, paid two visits to the Teak planting operations at Parapa, and toured through the district with the Inspector, visiting the Catechu localities, and Sandal-still firewood tracts.

4. In February I again travelled through the Kassergode Range and inspected the Revenue Teak planting at Kunyangai on the river Kavoi.

5. In March I visited the Udipi and Kundapur Ranges to superintend certain depôt auction sales.

6. My Range Inspection tours have been hampered by an abundance of Office work, and a deficiency in Office assistance.

7. This drawback has been often represented by me, and I only mention it here to account for what would otherwise appear to have been an insufficiency of time spent on this particular duty.

8. My service travelling for the year extended over 800 miles.

SECTION II.

RESERVES.

9. *A., Reserved Forests.*—Each year I experience the same difficulty in making remarks under this head, because of the absence of definition regarding what our reserved forests are.

There are no forests demarcated or even set apart as reserves. All our ghat forests have been styled "Reserves," and so they are in one respect, for they are so inaccessible at present that neither the department nor others are tempted to work them, but all the forests lying at the foot of the ghats, and others further sea-ward that the department have been in the habit of working, are so intersected with Warg and Kumaki holdings, that it would not be safe to regard them generally as reserves. However, until portions are marked off and handed over exclusively to the department, I conclude it is better to follow the supposition that the whole tract is a reserve, and treat it accordingly under this head.

10. The Departmental operations in these forests then, during the past year, have been as follows :—

11. No felling results have been brought to account, as, up to close of the year, no measurements had been taken. Owing to the large quantity of stock in hand, a few logs (some 300) only were felled towards the close of the year. These are all left in the round as an experiment in opposition to squared timber which it has been thought offers less chance of good seasoning.

12. By means of hired elephants, 1,600 odd cubic feet of timber were dragged from forests to road-side or river's bank.

13. The produce carried from forests to the coast during the year was as follows :—

Cubic feet of timber	7,780½
Bamboos	9,400
Boats	2
Billets of firewood	205

14. Most of this work was performed under contract, which satisfactory form of labour I am doing my best to encourage.

15. Under this head, a comparison between receipts and expenditure for the year under notice, and the previous one, would show an increase in the revenue under (Heading I. in the Accounts) of Rupees 3,500 odd, and a decrease in the expenditure (under Headings I. and III. in the Accounts) of Rupees 2,500 odd.

16. The increase on receipts is due to a better demand for depôt stock, while the decrease in expenditure, though owing in a great measure to curtailment of operations, is, I am glad to think, somewhat due to the gradual reduction of rates.

17. *B. Fuel Reserves.*—There are none in the district under the care of the department.

C. PLANTATIONS.

18. The accompanying Statement H gives certain information under this head. The number of trees set out at Parapa during the year were 9,300.

It is difficult to give accurate details regarding the total area, extent cleared this year, etc., of this planting, as the form of operations there now bears more the nature of "improvement of Forests," or (under the new Budget heading) "Reboisement," than of Plantations.

19. The Parapa Forest is one reduced to secondary growth by Kumeri cultivation some fifteen or twenty years ago, and from the oft-occurring patches of Teak Suckers and Saplings, gives evidence of having at one time borne much of this valuable timber.

20. Such evidence, carrying with it the conclusion that the whole locality was apparently favourable to Teak growth, led to the commencement there of a regular Teak plantation. The best site, a small patch, was first selected, and has fully answered anticipation, but unfortunately the surrounding land is so diversified in nature as to discourage contiguous extensions.

21. Here and there, within a radius of 3 or 4 miles of this first artificial planting, there exists well sheltered nooks and fairly favorable patches of soil, that would re-pay further operations.

22. I have therefore lately endeavoured to greatly extend this work, and instead of confining myself to contiguous teak planting alone, I have contemplated the improvement of the Parapa forest generally, cutting out inferior timber and under-growth, pruning and encouraging

the growth of deserving trees, and planting up available portions with Teak as a rule, but sometimes with other descriptions of timber, according to the suitability of the soil and position.

23. The whole extent of this work should therefore, more properly speaking, come under the head of "Forest improvements" than that of plantation.

24. In the same way, I am endeavouring to improve a well marked piece of forest (it is bounded by the Hospett, Hebbri, and Ajekar roads) in the centre of our operations in the Kundapur Range.

25. In accordance with instructions, an attempt was made last year to plant up with Casuarinas a certain extent of sea-shore immediately to the south of Mangalore. I regret to state that the result has been a disappointment.

26. A nursery of some 10,000 healthy seedlings was formed, and the plants, then on an average of from 13 to 15 inches high, were satisfactorily set out during the first monsoon rains.

27. I regret that the Collector has expressed an opinion that blame for their failure is attributable to myself or subordinates, or "both." I beg respectfully to maintain here my belief that their collapse was due entirely to the unusual and unexpected drought that immediately followed their setting out, and which drought was characterized by an absence of cloud, as well as rain, for twenty-one days in July, a month generally credited in these parts with the heaviest rain-fall.

28. The cost of this experiment was Rupees 506, from which, deducting the sale of material collected for the plantation, leaves a loss of Rupees 486.

SECTION III.

29. *Forest worked under License and Voucher system.*—I find no particular forests in this district to which this heading is properly adapted, for, as I before pointed out, the forest from which produce is drawn, both departmentally and on license, are so closely connected that it is difficult at present to separate them.

30. I will, therefore, treat here only of such forest produce disposed of as has been taken out under license by payment of seigniorage. Such is shown in detail in Statement E. attached.

31. I have added below a memorandum showing the sums realized during the year from the several sources as compared with last year's receipts :—

Headings.	1872-73.			1873-74.		
	RS.	A.	P.	RS.	A.	P.
Timber	1,042	13	1	1,318	12	10
Palmyras	72	0	0	...	...	...
Bamboos	3,076	8	0	2,905	8	0
Charcoal	45	0	0	50	0	0
Firewood	7,285	8	9	5,050	1	3
Sandal farms	2,457	0	0	1,236	0	0
Catechu	3,312	8	0	462	0	0
Cardamoms	350	0	0	700	0	0
Tanning bark	...	...	...	31	4	0
Total...	17,641	5	10	11,753	10	1

32. In the sale of timber there has been a small increase over last year.

33. A falling off of over Rupees 2,000 is shown in the firewood sales. These sales are on account of the contract working of stills for the extraction of Sandalwood oil, and are therefore connected with the sale of sandal farms, from which also in the above memorandum is shown a falling off of 1,000 odd Rupees.

34. This source of revenue has of late years shown signs of weakness owing to the uncertainty with which it is worked, and to the disfavor shown by the contractors to the few attempts that have been made to restrict the extent of their felling operations.

35. The Sandal farms must either be altogether given up, or some arrangement and power must be given to the department by which they may effectually check anything like the reckless felling that has hitherto characterized the working of them.

36. There has been much correspondence about this, but nothing satisfactory has yet been settled.

37. There has been almost a complete falling off in Catechu sales this year. As anticipated and often represented by me, to attempt to secure a steady revenue from an area of Catechu trees (or indeed of any Forest produce) which is open throughout to cattle and public trespass, or to expect its reservation by aid of one or two peons, and a conviction now and then of parties *who must have been actually seen in the act of robbing*, must as in this case result in disappointment. The Catechu tracts are now so exhausted as to require a long rest, and that rest will be exceedingly doubtful, unless stringent measures are adopted to secure it.

38. The idea of taking up portions of Catechu tracts, fencing them in, and planting, etc., is a good one, but in the outset there is the difficulty of communal and grazing rights, etc, which, if any of this land is to be so treated, must be over-ridden.

39. My intention to have selected such tracts this year I have been unable to carry out, owing to occupation on other matters.

40. The differences in revenue under the other items in the memorandum under notice are so slight as to excuse further remarks.

41. In comparing results of timber sold on seigniorage by license and that prepared and sold by the agency of the department, it appears that the former realizes 0-5-6 per cubic foot against the average cost 0-8-10 of preparing the latter, and would seem to intimate that our timber has a more remunerative value when standing, than when brought to the coast market.

42. It must not, however, be forgotten that this 0-8-10 *includes* the standing value which is brought to account as soon as the timber is felled. The standing value has hitherto been nearly, if not quite, as high as the seigniorage charged on trees felled on license.

43. The 0-8-10 rate shown as the average cost of our timber in stock up to the end of the year, does not, however, include supervision by establishment.

44. The result of our departmental preparation and carriage of timber is a subject I propose to discuss further on.

45. *Section IV., Yield of Forests.*—This is shown in Statement G. annexed. As before stated the few trees felled departmentally have not been brought to account.

46. During the year I held five auction sales at Coast depôts and disposed of 7,937 cubic feet of mixed timbers, two poon spars, and 18,783 bamboos. The results were, on the whole, satisfactory; the timber sales averaging 9 Annas per cubic foot. In addition, 2,324 cubic feet of timber, and 100 bamboos, were supplied to the Department Public Works. The rest of the stock disposed of was on individual applications.

47. *Section V., Financial Results.*—The accompanying Statement A. shows the receipts and charges for the year, while F. shows the net results obtained in cash and stock.

48. The aggregate receipts and charges for the year are each about Rupees 3,000 less than for the year before, so that the annual cash result in favor of Government differs little from the previous one.

49. The decrease in stock is, however, 5,019, thereby giving a net loss in cash and stock results of Rupees 1,547 against a net gain of Rupees 9,943 for the year before, or a decrease difference between the two years of nearly Rupees 11,500.

50. This difference is mainly due to the fact, that while the cash receipts under Conservancy this year were 6,000 odd Rupees less than the last, the value of stock brought to account was also less by Rupees 7,000. Otherwise, (with the exception of the deductions from stock Rs. 1,098, entered under Destruction, and used by the department) the results are more favorable, as the sales of stock exceeded last year's by nearly 3,500, and resulted in a small profit over valuation, instead of a small loss, as shown in the previous account.

51. The decrease in receipts under "Conservancy" and in "Additions to Stock" are due, as before explained, to the falling off in revenue from the Sandal still and Catechu resources, and to the restricted stock of felling operations.

52. The stock losses under "Destructions, etc.," are due to thirty-eight logs having been burned, while eighteen were lost during floatage to the coast. In addition 2,000 bamboos were used by the department in repairs to huts, and are entered under this heading in the absence of a more suitable one.

53. In order to compare this year's operations with those of previous years, and with the view of showing in a compact form the results of forest work in this district from as far back as possible, I have compiled and attached two Statements J and K, in which I have endeavoured to concentrate as much information as possible.

54. Statement J shows the net results in value obtained under several headings in the two main working accounts—"Conservancy" and "Stock."

Statement K shows how this result value is divided and represented by "Cash," "Stock," and "Improvements."

55. Not having previous accounts with me, I have only been able to show progressive net results since the year 1863-64, and have started the Statements with the balance of stock I find on hand at the end of that year.

56. It is to be regretted that I have not been able to bring forward the aggregate of cash and stock results obtained during years *previous* to 1863-64, but anyhow, having made a beginning, it will be satisfactory to be able to produce each year an account containing particulars as I have now shown them.

57. Owing to the difficulty of collecting information from past accounts, there are sundry particulars in the present Statements that are not shown *in detail*. The entries however, are correct in the main, and it will be possible to show the details in future additions with sufficient accuracy.

58. It will be seen from these Statements that the result of forest work in this district has been a gain in value since 1863-64 of Rupees 1,03,872 in conservancy working and Rupees 35,447 in the working of stock, or in all of Rupees 1,39,319, which result is represented in Statement K by cash Rupees 92,381, a present balance of stock Rupees 27,110, and a value of Rupees 19,828 in improvements to property.

59. In the same way the results may be seen for the past ten years either separately or collectively.

60. The net results for the year under report are shown as a gain of Rupees 854, whereas in the other prescribed forms furnished, it is shown to be a loss of Rupees 1,547. The difference is owing to *my* net result including Rupees 2,401 under "Enhancement of property," which item is not taken into consideration in the other accounts.

61. In these Statements I have introduced an "Improvements account," as I consider it fair that all expenditure on plantations, purchase of cattle, tools and plant, or any other for which an improvement or equivalent return in value may be estimated to have been obtained should go to such an account and be *credited* to the department, otherwise it will unfairly and largely detract from conservancy results under other headings.

62. At present I have credited this account under "Enhancement of property," only with the amount of expenditure and supervision thereon; but, should it become possible hereafter to fairly estimate the value of our plantation, reserves, etc., on the annual enhancement thereof, this

could be entered instead, while in the column provided all detractions from value, such as losses in cattle, or machinery, transfer of stock to "Stock Account," etc., should be shown.

63. In reviewing the transactions for the past ten years, as shown in Statements J and K there are interesting points to be observed. These will doubtless suggest themselves, and I deem it unnecessary to remark hereupon more than the most important.

64. Under conservancy in the Cash Account it will be seen that, while expenditure has steadily increased, there has been an uncertain and fluctuating revenue, which from 1870 has gradually fallen off, the present year's receipts being 6,000 odd Rupees less than the average for past ten years.

65. The increase in expenditure is due principally to additional charges under establishment. On the other hand, while seigniorage collections have not improved, those from rents, farms, etc., are much reduced.

66. Doubtless the increase in establishment has led to improved conservancy, and this is an important object; but in this district I think that such result should be in a measure indicated by an improvement in the collections of both seigniorage and rents, and I feel certain that this would be so if the difficulties that I am often recounting, and mention again in my paragraph 86, were provided for, and more authority and importance vouchsafed to the Forest Establishment.

67. We are each year losing instead of gaining seigniorage, and this more particularly in Kumaki timber, in which the growing uncertainty regarding the rights of the department and Kumaki holders in Kumaki produce interferes much with collections.

68. Under Rent collections it has been the same. These latter are principally realized from the Catechu and Saudalwood still farms, and the department has never possessed the necessary power to sufficiently ensure and control the working of such on conservancy principles. The consequence is, the first have been exhausted (for a long time at least) and the second have entailed such mischief to the forests that they have been discouraged of late.

69. The reason collections under Rents rose so rapidly in 1870 and 1871 is due to the firewood rate having then risen from 3 to 9 Pies per headload, and the subsequent falling off is in consequence of my having endeavoured to restrict the facilities with which the contractors were enabled to obtain a ready amount of first class firewood at the sacrifice of many of our most useful timber trees.

70. Other points to be observed in connection with the past year's results may be detected in the Stock Working Account. It will be seen that the value of stock estimated to have been obtained, exceeds the expenditure on the obtaining thereof by Rupees 37,898. On the other hand, in the Sales Account, the sales realized Rupees 11,793 *less* than their valuation, clearly showing that the estimated value put upon the stock when brought to account was too high.

71. This may be more particularly seen by comparing Columns 15 and 18 in Statement J., where, in consequence of greatly over-estimating the value of stock obtained in the year 1866 to 1868, there resulted large apparent losses in sales during the three succeeding years.

72. In Column 18 it is satisfactory to find that the subsequent results betoken a fairer valuation of stock; at the same time it will be seen that this is mainly due to Rupees 7,103 having in 1870-71 been written off the account under Deterioration and destruction.

73. I think in future it will be more satisfactory and facilitate the deduction of conclusions regarding results to leave the consideration of "Intrinsic standing value" out of the question, and merely debit the several descriptions of stock with the actual expenditure incurred thereon, with perhaps a small charge (of say for timber 2 Annas per cubic foot) as the "cost of production."

74. I come now to a most important point. It will be seen in Statement J. that the net profit on "Stock working" for the past ten years (shown in Column 22 to be Rupees 16,569) is an average annual gain of about 18 per cent. on the outlay which is shown in Column 13 to have aggregated Rupees 88,650.

75. This is so far satisfactory, but it will also be seen that though I have debited the Stock Working Account, with all cash expenditure pertaining thereto, I have not added a percentage on account of supervision of the establishment. This I have omitted partly because it has not been included in Head-quarter Accounts (with which I have endeavoured as much as possible to make my statements agree) and partly because I know not what proportion, or if any of the establishment may be considered to be kept up solely for present timber operations.

76. I would suggest that the forest produce felled should not be burthened with any share of the cost of the establishment, which I take it is kept up for the conservancy and protection of *standing stock*, to which the amount of stock felled annually bears an exceedingly small proportion.

77. To my mind an account with "Standing Forest Stock" should be opened, and this should be debited with all such expenditure, while, on the other side, it would be credited with a proportionate value for all stock felled and carried to the Stock Account, in which latter account such value (being "cost of production") should be debited.

78. Be this as it may, the fact I wish to bring to notice is that, judging from the past ten years' account, our stock net result would have been *nil* had the expenditure been increased, on account of establishment, supervision, by as little as 18 per cent., and that any higher charge would have resulted in a loss on the working.

79. At the same time, I would point out that the past ten years working has seen almost the commencement and entire organization of, what have been, difficult operations in an exceedingly difficult range, and that such operations must each year become somewhat facilitated and less expensive, while at the same time I trust the market value of our timber will promise to improve.

80. Much has been already done in reducing the working charges, and what immediately requires to be considered is the extension of our market sales. Such extension cannot be entirely expected in the local market (where the introduction of a small quantity of even 5,000 cubic feet of timber would lead to a fall in selling rates) but must be encouraged by the supplying of distant demands, such as might be expected from Bombay.

SECTION VI.

81. *General Remarks.*—The Revenue Board under this head have called for remarks regarding Forest Administration during the year. Owing to my equivocal position I find it difficult to respond, nor shall I attempt to go into details. I feel, however, bound to say in the interest of Forest Administration, that as far as arrangements in this district are concerned, the past year's experience does not lead me to anticipate agreeable results, either in forest development, or in that harmonious working between the revenue and forest establishment which is so much to be desired.

82. This is in a great measure due to the transfer to the Collector's Department of the little authority and importance that formerly belonged to Forest Officers, while on the other hand less assistance has been given to, and a greater amount of work and responsibility required from this establishment.

83. There is also much that is unsatisfactory in the complete severance of Forest Officers, and their Departmental Head and Representative.

84. In addition to this there are many delays necessitated by the constant references from the Forest to the Collector's Department, and the additional burden thrown on the former by the numerous explanations, reports, etc., that are called for to satisfy the enquiries of the latter, or that are entailed in the event of any difference of opinion between the two. And worse than all, that it is practically difficult, or to say the least exceedingly unpleasant, for a Forest Officer to bring to the notice of the authorities, any views or information he may have which are antagonistic to those of his Collector.

85. That the latter should at times require the Forest Department to do (as if an order only was necessary) much that without additional arrangements could not be done, while he may fail to coincide in or see the necessity of much that, in the opinion of the former, should be done, is to be expected, when the Forest Establishment is looked to to give successful practical effect to the theories of those personally unacquainted with Forest Administration.

86. At the same time the following troubles often brought forward still exist, and are more than ever trying to the department. I allude to weak Office Establishment; absence of education and training among Foresters and subordinates generally, poor prospects of promotion for them, and their consequent dissatisfaction; want of forest demarcation and survey; absence of Forest Law; abuse of forest rights; troubles of Kumaki check; difficulties in collecting seigniorage and securing a proper respect for Licenses, and other drawbacks in the departmental working and preparation of stock.

87. I am aware that these troubles cannot be rectified in a day, and I reiterate them here, merely that they may not be lost sight of, but remembered in criticising Forest operations in this district; for until many of these stumbling-blocks are removed, or provided for, it will be impossible to organize or work a sound administration, and therefore impossible to secure a satisfactory extension of operations, or even a steadily increasing revenue.

88. The health of subordinates for the past year has not been worse than for former years, but as might be expected from the nature and locality of operations, has given rise to many applications for leave. There have been no deaths during the year.

89. I am loath to speak of the conduct of subordinates. Irrespective of the annoyances experienced by the absence generally of education and training among them, a constant feeling of distrust is engendered by the dissatisfaction that is shown by them for their life and prospects.

90. This is strongly exemplified in the fact that as a rule, when vacancies occur, whether for Overseers or peons, it is either very difficult to obtain the services of good and efficient men, or having done so to secure them from the depreciation and demoralization which so often sets in.

91. With one exception, I would desire to reflect on none of my subordinates in particular, and, even this exception I do not feel it fair to the party concerned to mention here, as the Collector, with whom such matter would appear to rest, has taken a contrary view of the case to that which I hold.

92. On the other hand one of my Overseers, Mr. Carroll, has much to recommend him, and I regret that his qualifications, as a neat, careful business man and trusty individual, have not ere this obtained for him that recognition that I have more than once recommended.

93. I would also specially mention a certain Range Gumastah, J. M. D'Souza, who has satisfactorily served the department for past 10½ years, and under me has twice, for long periods, energetically attended to the entire work of a range during absence of the Overseer. His pay from first to last has never varied from Rupees 10 a month, which, under the present organization is the *one fixed allowance* to Range Gumstahs in this district, and from which no promotion (unless a single rise to Overseer's grade, which is a step too distinguished to be contemplated) is provided.

94. We are much in want of Ranger's appointments from Rupees 10 graduating upwards to the Overseer or Forester's grade, to which last position all Rangers should be encouraged to look for subsequent promotion.

95. Of my office establishment I desire to record entire satisfaction, and feel that this is but poor acknowledgment for my single Clerk who has, during past year, sacrificed many holidays, and fulfilled a duty that might, with greater fairness, have been exacted from more than one of similar calling and position in order to keep work somewhat up to the mark. Promotion for him in the department is likewise barred by the present arrangement of establishment.

96. In conclusion, I have the honor to ask consideration for the late date of the submission of this report. The delay is due partly to my occupation in making up the Stock Accounts for the past year, which, through deficiency in office assistance, had fallen into arrears, and partly to the time spent in compiling the two Statements J and K. It has also been considerably delayed by the difficulty of estimating the actual stock balance for the year owing to the recent transfer of all my Overseers.

97. So much did this last objection threaten to interfere with the submission of my report that, after several attempts, I was obliged to postpone taking stock to a more convenient time. There are, therefore, certain losses due to difference in measurements and deterioration, which should have been written off in the present accounts and report, but which now must remain to be considered with the operations for the current year.

I have, etc.,

(Signed) J. W. CHERRY,
Deputy Conservator of Forests.

(True Copy.)

(Signed) H. S. THOMAS,
Collector.

No. 217.

MALABAR COLLECTOR'S OFFICE,
ON CIRCUIT AT TELLICHERRY,
9th September 1874.

From

A. MACGREGOR, Esq.,
Collector of Malabar,

To

J. GROSE, Esq.,
Secretary to the Board of Revenue.

SIR,—I HAVE the honor to submit my Forest Administration Report for the past official year in the manner prescribed in the Board's official memorandum, dated 20th February 1874, No. 22/222, and to forward herewith the reports, in original, of the officers in charge of the several forest ranges in this district.

2. The forests in Malabar comprise the following ranges, *viz.*:—

I. Nelambur.
II. Palghaut.
III. Wynaad.

No change in their administration has occurred during the year, except that the connection of the Deputy-Conservator of the Annamallays with the Palghaut Range has been severed since July 1873.

3. *Inspection Tour of Collector.*—The Nelambur Plantations were visited by me on three different occasions during the year under report, *viz.*, in July, December and February. On each of these occasions, I was satisfied with the general working of the range.

4. The aggregate receipts and charges during the year on account of the three ranges amounted to Rupees 42,131 and 45,789, respectively, leaving a net balance of Rupees 3,658

against the forests. The subjoined statement exhibits the comparative gross receipts and charges for the past two years :—

	For 1873/74.	For 1872/73.	Difference.
	RS.	RS.	RS.
Receipts	42,131	41,429	+ 702
Charges	45,789	43,975	+ 1,814

5. Considering that the Nelambur Range is mainly a planting range, in which the oldest plantations have only thirty years' growth, and that the Palghaut Range consists in a great measure of exhausted forests taken up for prospective fuel growth, the result may be considered satisfactory.

6. I shall now proceed to review the reports of each of the ranges.

SECTION I.

Nelambur Forest Range.

7. *Inspection Tour of Range Officer.*—The officer attached to this forest appears to have been on the move in almost every direction of his range, either to superintend field operations or for making arrangements for the floating of timber to the Coast Depôt. He has, on more than one occasion, inspected the latter during the course of the year.

SECTION II.

8. Reserves.—*Plantations.*—This range consists of various blocks of land scattered over the Nelambur Valley. The plantings cover an area of 2,990 acres, almost the whole of which is confined to Teak varying from one to thirty years' growth.

9. The number of Teak seedlings planted out during the year was 128,000. This is less than those set down in the previous year by 107,000. It is, however, somewhat in excess of the standard number, and the funds available necessitate confining operations to this extent.

10. The receipts and disbursements of the year, as contrasted with those of the previous year, are noted below.

	In 1873/74.	In 1872/73.	Increase.	Decrease.
	RS.	RS.	RS.	
Receipts	24,312	17,146	7,166	....
Working Charges	20,000	17,041	2,959	....
Establishments and Contingencies	11,942	9,270	2,672	....
Total...	31,942	26,311		

From this it will be observed that there is an increase of Rupees 7,166 in the receipts, or adding increase of stock an excess of Rupees 8,184, which is attributable to larger sales of timber and saplings effected during the year. The greater part of the increase is in the item of saplings, where the increase was Rupees 3,532. This is very satisfactory, as saplings represent a direct return from the plantations, obtained by the operation of thinning, undertaken for the benefit of the plantations.

11. On the disbursement side, a sum of Rupees 2,900 and odd appears to have been expended in excess of the preceding year under Working Charges ; and Rupees 2,600 and odd in excess under Establishment and Contingencies. The former is mainly due to the seigniorage for the last four years having been paid up in a lump sum this year; and, in part, to increased field operations. It must be borne in mind, that the large area planted last year required a proportionately increased expenditure in weeding. It is in the second year that the weeds are worst, and that the necessity for keeping them down chiefly exists. The increase under Establishment is attributable to the fact that a Probationary Assistant was doing duty at Nelambur throughout the year, which was not the case throughout the year previous, Mr. Stanbrough having joined the range only in the latter part of October 1872.

SECTION III.

12. This range is not worked under the license and voucher system, but departmentally.

SECTION IV.

13. *Yield.*—The number of logs felled were 840, measuring 23,000 cubic feet, of which nearly one-half consisted of Teak. The saplings of classes cut down came up to 28,500.

SECTION V.

14. *Financial Result.*—The receipts during the year aggregated Rupees 24,312, and the charges Rupees 31,942, leaving a difference of Rupees 7,630 on the debit side. Deducting therefrom a sum of Rupees 1,018, being the increased value of stock on hand at the close of the year, a net balance of Rupees 6,612 is found to stand against the range.

15. According to the relative magnitude of operations, the establishment may be divided between plantations and natural forest, in the proportion of $\frac{1}{16}$ths to $\frac{7}{16}$ths.

16. The results, taking this calculation, as to the whole year's operations, are as follows :—

Plantations.

Existing Plantations.

Expenditure.

	RS.
Half Establishment...	5,971
Miscellaneous :—*i. e.*, tools, rent, etc.	2,758
Working Charges	9,385
Total...	18,114

Receipts.

	RS.
Sale of saplings...	11,162
Increased value of sapling stock	292
Total...	11,454
Excess expenditure over receipts.....	6,660

Extension of 128 acres.

	RS.
$\frac{1}{16}$ths Establishment	1,791
Working Charges	2,049
Total...	3,840

NATURAL FOREST.

Expenditure.

	Rs.
$\frac{7}{10}$ths Establishment	4,180
Miscellaneous..	1,379
Timber expenses	4,427
Total...	9,986

Receipts.

	Rs.
Timber	12,432
Bamboos	543
Firewood, etc	175
	13,150
Increased value of stock	726
Total...	13,876
Excess earnings over expenditure.....	3,890

SECTION VI.

17. *General Remarks.*—Of the Mahogany seeds sent by the Board for experimental cultivation in September last, only one germinated. The young tree is flourishing; having grown to a height of thirty inches.

PALGHAUT RANGE.

18. This range, which formed part of the charge of the Deputy-Conservator of the Annamallays, was, in July 1873, placed under the immediate superintendence and management of the Palghaut Tahsildar, under the orders of the Head Assistant Collector, whose head-quarters are conveniently situated for the purpose. The Tahsildar has been directed to go over this range, at least twice a month.

19. The range consists of two blocks, *viz.*, the Chenat Nair Forests, comprising certain escheated forest land in the vicinity of Palghaut, including Nochipully, Pulliampully, and the fuel reserve at Walliar, the purchase of which was effected at the close of 1872/73.

SECTION II.

20. *Fuel Plantations and Reserves.*—The two fuel plantations at Nochipully and Pulliampully were formed in 1870 and 1871, respectively; and, at present, their extent is computed to be about 181 acres. I have already recommended in my letter of the 24th ultimo, No. 202, that these should be abandoned as fuel plantations, and incorporated in the reserved forest of which they form part. The Walliar Reserve is a little over 1,700 acres.

21. The subjoined statement represents the cost of maintaining them :—

	Expenditure						Receipts	
	In the year.			Up to the year.			In the year.	Up to the year.
	Rs.	A.	P.	Rs.	A.	P.		
Nochipully	248	0	5	2,209	2	4	.....	.....
Pulliampully	246	2	8	1,638	1	8	.....	.....
Walliar	532	6	6	532	6	6	.....	.....

22. The receipts and disbursements of this range for the past two years are exhibited in the subjoined comparative statement :—

	1873/74.	1872/73.	Increase.	Decrease.
	Rs.	Rs.		Rs.
Receipts	832	340	....	8
Working Charges	1,496	4,811	....	3,315
Establishment and Contingencies	1,360	1,709	....	349
Total..	2,856	6,520		

The receipts have remained almost the same, and wholly appertain to the sale-proceeds of confiscated timber clandestinely felled. There is a tangible decrease under Working Charges, which is owing to the limited operations carried out during the year. The figures for the previous year cannot be reckoned upon as representing the true financial condition of this range, inasmuch as the accounts of this, and some other forests of the Coimbatore District, were in a manner blended together.

23. There is a slight decrease observable under Establishment and Contingencies, and this is explained by the fact that the Overseer in charge, who had been all the while acting, was only drawing half the sanctioned pay.

SECTION III.

24. This range has not been worked either departmentally or under the license and voucher system.

SECTION IV.

25. *Yield.*—There was no yield in this forest during the year under review; a good deal was done, however, in ascertaining its limits, and having them demarcated and surveyed, and a scheme of working has been drawn up by me, in consultation with the Inspector of Forests, which will, it is hoped, establish in future profitable results.

SECTION V.

26. *Financial Results.*—The receipts during the year amounted to Rupees 832, and the charges to Rupees 2,856, leaving an excess expenditure of Rupees 2,024. Deducting therefrom a sum of Rupees 219, being the increased value of stock on hand at the close of the year, the result is that a net balance of Rupees 1,805 stands against this range.

SECTION VI.

27. *General Remarks.*—Operations here were limited to planting in a small scale the Nochipully and Pulliampully Plantations, opening fire traces in these and the Walliar Reserve, and surveying a portion of the Chenat Nair Forest. There were two prosecutions for offences against the forest rules. The health of the establishment is stated to call for no especial remark.

SECTION I.

WYNAAD RANGE.

28. *Inspection Tour of Range Officer.*—The Deputy-Conservator, Mr. Peet, appears to have been moving in almost every direction of his charge throughout the greater portion of the year, engaged in marking trees to be felled, detecting encroachments, and examining the boundaries of portions of the forests, etc.

SECTION II.

29. RESERVES.—*Reserved Forests.*—This range is composed of three blocks of natural forests which escheated to Government on the rebellion of the owner during the last century. Felling

operations have been limited, mainly owing to the fact that a large quantity of felled timber is represented to be lying in the forests for years. The Deputy-Conservator has been turning his attention to the recovery of this; and, with the services of a couple of elephants from the Commissariat Department placed at his disposal for a few months, he has succeeded in dragging a number of these unwieldy logs to points of the forest where their carting is feasible; but, owing to the defective working of the cart contractor, their removal to the depôt has been retarded. The timber felled in the Chedleth and Koorcheat Forests are reserved for the Mysore Mart; while the fellings of Teak in the Kudricote Forest are now carted down the Peria Ghaut to the Experimental Coast Depôt at Tellicherry.

30. *Fuel Reserves.*—None.

Plantations.—Nothing has been done in this direction during the year.

31. The receipts and charges of this range for the year under review, as compared with those of the previous one, exhibit a *considerable falling* off in the revenue, which is chiefly attributable, as already mentioned, to the defective working of the carting contractor, whereby the amount of sales was materially affected. The variations in the expenditure are too trifling to call for remark.

——	In 1873/74.	In 1872/73.	Increase.	Decrease.
	Rs.	Rs.	Rs.	Rs.
Receipts	16,987	23,443	....	6,456
Working Charges	3,699	4,189	.....	490
Establishment and Contingencies	7,292	6,955	337	....
Total..	10,991	11,144	....	....

SECTION III.

32. The license and voucher system is not in force here; the operations being carried on entirely by departmental agency.

SECTION IV.

33. *Yield of Forests.*—Nearly 1,000 cubic feet of Teak were felled—535½ cubic feet of Teak, 41 of Blackwood, and 254½ of Hone were carted to the Mysore Depôt; while 2,498¾ths and 2,778½ cubic feet of Teak were carted, respectively, to Manantoddy and Tellicherry, and 93¾ths cubic feet of Blackwood to each of the above two stations.

SECTION V.

34. *Financial Result.*—The receipts of the range amounted to Rupees 16,987-6-9, and the expenditure to Rupees 10,990-6-5. The value of stock in hand at the close of the year has decreased by Rupees 4,045-9-7. The result, therefore, is a net profit to the range of Rupees 1,951-6-9. As regards writing off such of the old stock as is not forthcoming, I will address the Board after consultation with the Inspector of Forests, who is expected to visit the range shortly.

SECTION VI.

35. *General Remarks.*—The health of the establishment has been very indifferent, but, happily, no casualties have occurred.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) A. MacGREGOR,
Collector of Malabar.

ENCLOSURE No. 1.

OFFICE OF DEPUTY-CONSERVATOR OF FORESTS,
NELAMBUR,
13th April 1874.

FROM
J. FERGUSON, Esq.,
Deputy-Conservator of Forests, Nelambur,

To
A. MacGREGOR, Esq.,
Collector of Malabar.

SIR,—I HAVE the honor to forward the Annual Administration Report of this range under my charge for the official year 1873/74, prepared in accordance with the Board's Orders, dated 20th February 1874, No. 22/222, and paragraph 3.

SECTION I.

(a.) Inspection Tour of Collector.—On the 28th and 29th July, inspected current year's planting and operations in progress, and expressed satisfaction with the appearance of the seedlings planted out and operations generally. Also in December 1873 and February 1874, inspected some of the older plantations and inquired into the working of the range, etc.

(b.) Inspection Tour of the Range Officer.—In this range, supervision and direction of operations are the chief duties of the officer in charge; these being large field operations in distant centres necessarily occupy much of the officer's time, so that inspection tours will compare unfavorably with other ranges. After two months' leave, the Deputy-Conservator resumed duty on the 9th June, and continued planting and other operations in their proper seasons, respectively, and inspected repeatedly during the year Nellicottah, where floating operations were being carried on.

3. Amarapolem; where planting, weeding, thinning, marking, felling and collecting saplings were conducted under Mr. Stanbrough, Probationary Assistant.

4. Karimpoya; where the corrections and details of the Revenue Survey were being completed; Arimbracottah Mallay and the four Paramboos at Mangalasharry and one Umbala Cundi were also inspected, weeded, and seventy-five Teak trees marked for the repairs of the Tricklyur Temple; also the Calicut Market Depôt, inspected five times to encourage sales and thereby effect a clearance of stock on hand; also the other detached forests were inspected in connection with general superintendence.

SECTION II.

5. RESERVES.—*A. Reserved Forests.*—This range is strictly reserved and consists of a number of detached forests (or blocks of lesser and greater extent) scattered up and down the valley. Distance from Nelambur head-quarters to the north-east of Nellicottah farthest of point, fifteen miles, and south-west Mangalasharry, etc., in Calicut Taluq, twenty-seven miles.

6. The first and largest is the Nelambur block, containing within the demarcation boundaries 5,342·15 acres, of which there are area of 1,369·47 acres of Teak Plantations, commenced in 1842, but properly from 1844, and finished 1862. Plantation will be treated of under heading C.

7. The unplanted, and by far the largest portion is hilly laterite, poor soil, unsuited for growing Teak, with meagre crop of junglewood, *viz.*, Erul *(Inga xylocarpus)*, Poomaruda, a few Karimaruda *(Tenuanilexs)*, and Benteak *(Lagerstræmia)*, also a very few small Blackwood *(Dalbergia latifolia)*; the first-named two are found in largest numbers also size, and the three last are fewer and of small size. This forest was exhausted previous to my assuming charge, 1862; since it has been strictly reserved and requires a longer period of rest before it can be worked remuneratively. Local names of the above natural forests are Yeddacode, Perumbadum and Wallachipallai, and are each situated on the north and west of Karumpoya River; but Yeddacode Plantations commence at the western boundary, Moondanthodoo extending the junction of Karumpoya, with the Karumpoya thence along the former fully three miles.

8. The second block is comprised of Pokode, Panangode and Walloovasherri, and contain within demarcation boundaries 2,903·17 acres, of which area there are Panangode Plantations 393·73, and Walloovasherri 584, aggregating 977·73 acres, and to these properly belong Chathembudovoi (lately purchased) intersected by the Adimpoya on the west from Pokode, on the south from Walloovasherri and Panangode by the Challear and Karimpoya, respectively, and contains 763·13 acres, of which 320 acres have been planted, and a further 60 acres ready to plant when the season opens. Walloovasherri and Panangode natural forests are all but wrought out of jungle woods. Pokode Forest is entire, contains only Erul and Benteak of ordinary quality; distant from head-quarters, nearest point Panangode, two miles, and farthest off point, five-and-half-miles.

9. The third block is Kanakutta Forest; bounded west by the Adienpoya, on the east by the Eyethodoo (and Chathembudovoi on the eastern bank of Eyethodoo and Adienpoya), and ends in a narrow point at the junction of these two streams. All natural forest of 727·63 acres; this also is entire, and contains a few Benteak and other junglewoods not of good size; distant from head-quarters, five miles.

10. The fourth block is Eddumbadum, and contains 657·25 acres; bounded on the south by the Challear River, on the west by Kaderi Padom, on the north and east natural forests belonging to the Zamorin of Calicut and the Trickalyur Divaswm, respectively. Also previously wrought out with a few trees of junglewood, the most of which are Benteak, requires longer rest before it will be remunerative to work; distant from head-quarters eight miles, nearest point.

11. The fifth block is Muriot and Karien united; contains 2,795·92 acres natural forest only, also previously worked out and with a few Teak and Blackwood of small dimensions and junglewood sparsely distributed. This forest is three miles from water-carriage, and requires long rest to improve the quality of timber so as to defray the extra cost required to bring the timber into the market from a long distance inland; distant from head-quarters, ten miles.

12. The sixth block is Nellicottah, and containing 1,919·61 acres, of which 133·23 are Teak Plantations planted out during 1870 and 1871, also almost wrought out. Karimaruda is the best timber produced in this forest; there are now very few other good trees left. Bounded on the south by the Poonapoya, and has a river frontage of fully five miles; distant from head-quarters, ten miles nearest point, and farthest off, fifteen miles.

13. The seventh block is Karimpoya, all natural forest; contains 4,000 acres, and is well intersected with water-carriage. Soil excellent for Teak planting; equal at least to, if not superior to Nellicottah, and will form decidedly the most magnificient block (when planted out) in the range. This forest is worked out and requires rest; distant from head-quarters, ten miles; and takes its name from the river Karimpoya, the largest in the valley. Poonapoya, Challear, Adienpoya, Krurumpoya, two Cherupoyas, and Irivingapoya with numerous thodos, are all tributaries and fall each in succession into the Karimpoya, which runs into the sea at Beypore and is locally known as the Beypore River.

14. The eighth block is Amarapolem; contains about 288 acres, of which eighty-eight were planted when purchased last year, and to which forty-three have been added last season, and sixty more cleared; this one in all now planted about 130 acres. The situation is good, the soil fair and well intersected with water-carriage, the lower portion of the block by the Cherupoya, and the upper on the south and west by the Kutherapoya, and distant from head-quarters six miles. These eight forest blocks form a circuit round the horseshoe-shaped valley of Nelambur.

15. The ninth block is Arimbracottah Mallay, and contains 338·50 acres, of which 22·27 were planted with Teak, 1843 and 1844, but are next to useless; soil is very poor, laterite bottom, inland two miles from the main river and half-a-mile from Cherupoya, and distant from head-quarters nineteen miles.

16. The tenth block is comprised of the following Paramboos, *viz.*, Manglasharry, Puthoocottah, and Chitarikel Paramboos in Calicut Taluq, comprising about 30 acres, mostly under Teak, natural and planted; bounded on the east by the Irivingapoya and Mangalasharry and Umbalakandi in Ernad Taluq, also under Teak contains about 11 acres, the former on the eastern, and the latter, Paramba, on the western bank of the Karimpoya or Beypore River; distant from head-quarters about twenty-seven miles; gives an area of plan measurement, natural forest, etc., 16,032·44, and plantations, Teak, under cultivation 2,967·79, and Sappan-wood plantation 3· acres, aggregating 19,003·23 acres, of which 4,288 are purchased outright, and 14,715·23 on perpetual lease deeds, and in no case there is no communal or village rights attached excepting Tricklayur Divaswan, which is allowed 100 trees, each twenty years, for repairs of the temple. These and all the surrounding forests are heavily covered with firewood, so there is no need for clandestine felling, in fact, barring the expense of transport to the coast. There is now, and every reason to believe it will continue, as much firewood as would supply the Madras Railway from Beypore a long distance northwards, a few bamboos (of grase) are allowed to the cultivators within the Government boundaries, and this is seldom abused: hence no prosecutions reported. The greatest mischief done is by elephants employed in bringing timber-rafts down the rivers, and when passing plantations, allowed to forage at large; they sometimes stray into the plantations and destroy the saplings both by barking and also breaking over and pushing them down to the ground, and unless pounded in the act, no redress can be obtained; and when taken in the act, the case is taken up criminally, a small fine imposed not even 25 per cent. value of the damage done, and further redress can only be obtained by having recourse to civil action which is expensive, and inconvenient from the necessity of part of the establishment being required to prosecute and taken away from important operations which are thereby retarded.

C.—Plantations.

17. These plantations cover an area of 2,991·11 acres Teak, and 3 acres of Sappan Wood from one to thirty years of age in all the intermediate stages of growth, with about 80,000 Blackwood seedlings interspersed over this area. Of course, a large number of these will ultimately prove useless; some from being crowded in clumps, others not having had a fair start are stunted and dwarfed, consequently worthless. During my incumbency of office, these have been most carefully conserved; but previous to my assuming charge, Blackwood seedlings were cut down in weeding, like jungle underwood.

18. Regarding maintenance of this area, being large field operations and distant centres, requires incessant supervision of all operations, *viz.*, weeding, pruning, marking, felling, and collecting of saplings for consignment to Calicut.

19. Fire-tracing, afterwards keeping the traces clear during the hot or dry season to prevent the jungle-fire spreading into the plantations, and also the removal of parasites, which, if not attended to, they soon overrun everything, seriously damaging the growth of the trees infected, ultimately killing them if allowed free scope to grow unchecked. Selecting site for fresh planting, weeding, felling, cross-cutting, piling, and burning. Preparation of nursery beds, collection and sowing of seed, watering till the monsoon opens, marking of pits and planting seedlings, then weed four times during the first season, but the older the plantation and the better the soil, the less weeding needed, and in like manner the less pruning required.

Operations.

Operations compared with last year's.

Description of operations.	1872/73.	1873/74.	Explanations.
Teak seedlings planted out ... ... No.	235,000	128,000	It was not deemed advisable to plant the same area this year.
Weeded ... ...Acres.	1,540	3,200	
Hoed... ... ... „	235	128	
Pruned ... ... „	800	1,600	as in the last year,
Felled for fresh planting ... ... „	130	120	other operations ex-
„ logs of Teak and Junglewood .. „	530	840	cepting floating of
„ „ floated to Calicut . ... „	1,057	476	timber have been
„ „ sold in forest ... ... „	83	132	nearly doubled.
Saplings felled... ... ... „	29,000	47,952	Bamboos less sold than
„ collected ... ... „	12,942	39,632	felled; contractor de-
„ floated to Calicut ... ... „	11,343	12,414	bited with the value.
Bamboos felled* and floated† to Calicut Depôt ... ... „	21,811	*12,163 †8,540	
„ felled and sold in forest... ... „	.....	400	
Fire-tracing, ten feet wide ... ...Miles.	13½	15	

Receipts and Disbursements of the current year compared with previous one, and the variations explained

RECEIPTS.

Description of Receipts.	1872/73.	1873/74.	Explanations.
	RS. A. P.	RS. A. P.	
Timber sold in Market Depôt	7,690 7 9	9,337 10 7	Rs. 7,169 realized more than in last year; this is due to the timber supplied to Department Public Works and increased sale of saplings.
Do. in Forest do.	115 1 5	3,074 2 6	
Saplings in Market do.	7,324 15 0	11,162 1 8	
Bamboos do.	1,703 6 11	563 1 4	
Miscellaneous Receipts	311 11 0	175 3 8	
Total..	17,145 10 1	24,312 3 11	

DISBURSEMENTS.

Heading.	Description of Disbursements.	1872/73.	1873/74.	Explanation.
		RS. A. P.	RS. P. A.	
I.	Timber expenses, etc.	6,221 11 10	4,426 14 10	Not fully cleared out.
II.	Purchase of tools, etc.	276 7 4	536 15 7	Increased field operations; required increased tools for working.
III.	Feed and keep of cattle ...	.....	103 0 4	
IV.	Rent of Leased Forests ...	80 0 0	2,478 8 10	Increase caused by jenmies' rights cleared up for the past four years.
VI.	Plantations	10,062 2 5	11,434 11 7	Increased operations caused the increase.
VIII.	Forest demarcation, etc. ...	106 6 0	11 0 0	Nearly completed.
IX.	Experiments	48 11 0	6 6 0	
X.	Communications, etc.	245 12 11	992 6 10	Calicut Depôt Office, Forest Rest-house, etc.
	Office Contingencies	.....	10 0 0	
	Total ..	17,041 3 6	20,000 0 0	
	Establishment or Superintendence	9,131 4 0	11,782 8 5	Increased by the entertainment of the Probationary Assistant.
	Total ..	26,172 7 6	31,782 8 5	

SECTION III.

20. *Forests worked under License and Voucher System.*—None.

SECTION IV.

Yield of Forests.

		RS. A. P.
The yield of forest during 1873/74 has been:		
Timber removed from forest, cubic feet 15,043, realizing... ...		12,411 13 3
Saplings, 14,513,	do.	11,293 13 8
Bamboos, 8,332	do.	563 1 4
	Total...	24,265 12 3
And timber felled, cubic feet...		23,000
Saplings of classes		28,529

SECTION V.

FINANCIAL RESULTS.

Expenditure.

Heading.	——	Amount.	Total.
	A—Conservancy and Working.	RS. A. P.	RS. A. P.
I.	Timber Expenses, felling, etc.	4,426 14 10	
II.	Purchase of Tools and Plant...	536 15 7	
III.	Hire of Elephants, etc	103 0 4	
IV.	Rent of Leased Forests	2,478 8 10	
VI.	Plantations	11,434 11 7	
VIII.	Forest Demarcation and Survey	11 0 0	
IX.	Experiments	6 6 0	
X.	Communications and Buildings, etc.	992 6 10	
	Contingent Charges	10 0 0	20,000 0 0
	B—Establishment.		
I.	Pay of Executive Officer	3,600 0 0	
	(a) Probationary Assistant	1,800 0 0	
II.	Forest Conservancy Establishment	3,029 14 5	
III.	Timber Working and Depôt	930 4 0	
IV.	Travelling Allowance of Executive Officer	1,100 0 0	
	(b) Camp do. Probationary Assistant	1,323 0 0	
V.	Office Contingencies	159 10 9	
		.....	11,942 3 2
	Total disbursements during the year 1873-74	.....	31,942 3 2
	Receipts by Sales of Timber.		
	Logs in Market Depôt, 363	4,515 2 9	
	Saplings do. do. 13,715	11,162 1 8	
	Bamboos do. do. 7,932	543 1 4	
	Bandyloads of firewood, 65	130 0 0	
	Logs to the D. P. W., with 400 bamboos	7,885 5 7	
	Logs, private purchasers by removal from forest ...	31 4 11	
	Miscellaneous Receipts	45 3 8	
		.....	24,312 3 11
	Balance against the forest	.....	7,629 15 3
	Value of stock on hand, 31st March 1873	20,853 4 9	
	Add timber felled during 1873/74	23,043 12 3	
		.....	43,897 1 0
	Deduct timber sold during the year 1873/74	16,383 6 8	
	,, supplied to the D. P. W	7,885 5 7	
		.....	24,268 12 3
	Balance	.....	19,628 4 9
	Difference between nominal value and amount realized.	.....	2,243 9 2
	Actual balance remaining on hand on 31st March 1874.	.....	21,871 13 11
	PARTICULARS OF BALANCE.		
	Stock in Market Depôt.		
	Nil.		
	Stock in Forest Depôt.		
	381 Logs Teak, containing 9,407 cubic feet	7,124 5 11	
	8 ,, Blackwood ,, 120 ,, ...	90 0 0	
	145 ,, Benteak ,, 4,370 ,, ...	2,185 0 0	
	213 ,, Karimaruda ,, 6,866 ,, ...	3,433 0 0	
	28,529, Saplings	9,039 8 0	21,871 13 11

SECTION VI.

General Remarks.

21. The accompanying Statements A. B. C. D. and E. give the abstracts of all accounts, and Statement F. gives detailed areas with local names of all the plantations and natural Teak in the range. Explanations have been given as to increased receipts and disbursements of the present compared with the previous year; also variations of operations in the year under review and previous one compare favorably. I have only to add, with regard to the improvements of the plantations, that, as above stated, I have conserved Blackwood plants since assuming charge; they are slow of growth, but will, in after years, be remunerative to Government when Teak is all cleared out. I take leave likewise to mention that out of the Mahogany seeds sent, one only germinated; and, as I predicted, it is now in a flourishing state, and stands 30 inches in height, and is a fine sturdy plant, and justifies the expression to introduce Mahogany as a second crop to the Teak.

22. With regard to the health of the establishment, fever has been prevalent and few deaths have occurred as usual. The efficiency of the establishment is never better; I would particularly recommend Mr. Cabral for the consideration of Government. He has had a long service, and specially qualified in his duty; he is a most distinguished officer, and has been long neglected.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) J. FERGUSON,
Deputy-Conservator of Forests.

Enclosure No. 2.
No. 312.

From

H. T. KNOX, Esq.,
Acting Head Assistant Collector,

Malabar Head Assistant Collector's Office, Palghaut, 18*th May* 1874.

To

A. MacGREGOR, Esq.,
Collector of Malabar, Calicut.

Sir,—I have the honor to forward, herewith, the statements connected with the Administration Report of the Palghaut Forest Range for the year 1873-74, and I give below the information called for in Official Memorandum No. 22/222, dated the 20th February 1874.

SECTION I.

Inspection Tours of Range Officer.—There are no records to show that any tours of inspection were made by my predecessors. The forests were placed under the charge of the Revenue Department about the middle of the year under report.

SECTION II.

Reserves.

There are no means of comparing the current year's receipts and disbursements with those of the previous year, as the forests were not then in our charge. The past year's receipt and disbursements on account of the reserves under the headings A. B. C. are shown below:—

	Receipt.	Disbursement. Rs.	A.	P.
A. Chenat Nair	832	501	14	0
B. Walliar Reserve	...	532	6	6
C. Nochipully and Pulliampully Plantations	...	461	13	1
Total...		1,496	1	7

The receipt of Rupees 832 from the Chenat Nair Forests is the sale-proceeds of some timber clandestinely felled. The logs were collected at a cost of Rupees 115, confiscated and sold for Rupees 832.

SECTION III.

These forests were not worked either departmentally or under license and voucher system. I am therefore unable to give any opinion as to which mode of working is preferable.

SECTION IV.

Yield of Forests.—There was no yield of any kind except the confiscated timber sold for Rupees 832.

SECTION V.

Financial Results.—The financial result of the year under review is an excess expenditure of Rupees 2,023-15-3, as will be seen by the Statement G. herein enclosed.

General Remarks.—The operations were limited to the surveying of a portion of the Chenat Nair Forest, the dragging and squaring of the confiscated timber, planting in Nochipully and Pulliampully Plantations, and making fire-traces in those plantations and in the Walliar Fuel Reserve. About half the latter was fire-traced at a cost of Rupees 410. A portion of that which was not fire-traced was nevertheless burnt. The results of these are still too uncertain for me even to guess what they will be. The health and conduct of the establishment call for no remark. There were only two prosecutions for offences against forest rules.

The Government forests are so small that there is little temptation to interfere with them.

In the same reason, the people generally have no opinion regarding the forest system. No free passes are given.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) H. T. KNOX,
Acting Head Assistant Collector.

Enclosure No. 3.
No. 1.

Deputy-Conservator's Office, Manantoddy, 18*th July* 1874.

From

A. W. PEET, Esq.,
Deputy-Conservator of Wynaad Forests,

To

A. MacGREGOR, Esq.,
Collector of Malabar, Calicut.

Sir,—I have the honor to submit my Annual Administration Report on the Wynaad Forests for the official year ending on March 31st 1874.

SECTION I.

2. *Inspection Tour of the Officer in charge.*—In the early part of April, I went through the Kudricote Forests in as many directions as possible, for, although this season is considered the most feverish in Wynaad, yet it is the only time in which the forests can be seen thoroughly. The annual fires have run through the forests, and there is no undergrowth to impede one's

progress, or limit the vision. There were a considerable number of very large Teak trees, many of them past maturity, that I marked for felling. They were felled during the year; but, unfortunately, I could not get sawyers, so that a large number of these trees still lie in the forests. I wish to have them sawn in the direction of the length; for, not only is there a large waste if they are cut across with hatchets, but also the breadth and depth of some of them are too great to admit of their being carted on an ordinary bandy. My cart contractor has agreed to furnish sawyers after the monsoon of the current year.

3. I was obliged to engage a fresh cart-contractor during April 1875, for the Kudricote Division had been utterly neglected by the former contractor. This new contractor worked very well until the monsoon of the year 1873, but after the monsoon caused me great inconvenience; and, by not furnishing carts from September till January, induced a great loss of revenue. For some months I was unable to get carts at all for the Kudricote Division, but at length engaged another contractor. I have lodged a complaint against the defaulter, but the case has not yet been decided. Towards the end of April, I went out through the Chedleth Division. I visited the Pambray Forests, the possession of which is still disputed between the Government and the Numbiar. Felling here is interdicted, but I am not yet certain whether the law is not being evaded by allowing the Poolpully Temple contractor to fell in a part of the Pambray Forest bordering on Poolpully, as if the land were part of the latter property.

4. I examined the boundary cut between Malabar and Mysore, but must wait until the line can be surveyed to state whether it is cut in accordance with the terms agreed on. In some parts it appeared to me that the course taken unduly favored Mysore. The line agreed on is detailed in Lieutenant Fullerton's Report, No. 152, of the 26th March 1868, contained in Government Proceedings, No. 604, of the 27th April 1868. After examining this line, I rested at the Shegabetta tree, a very large Mango tree, forming one of the stations in the Trigonometrical Survey. I was attacked by the bees that hive under the branches of this tree, and my horse was so severely stung that he died four hours afterwards at my Chedleth hut. I was badly stung, chiefly about the hands, and returned at once to Manantoddy for medical treatment, since the inflammation was excessive.

5. In May, I went on a short tour through the heavy forests of the Dindimul Range. The greater part of the accessible sites in this direction has been already sold by Government.

6. Beyond Dindimul there is a large Cardamom tract escheated by Government, and rented out for the year to a Moplah.

7. In the middle of the month, I went through the Trinhully Valley to examine the forest there, and came to the conclusion that it was not worth working with a view to timber. There are some Cardamom tracts, however, which are worth still reserving. The Trinhully Valley timber is that termed heavy forest growth, which certainly includes some good kinds of timber, but not of sufficient quantity to work to advantage, especially when the absence of roads and the configuration of the ground are taken into consideration. Towards the end of the month, the monsoon set in. I went out during the first burst to Sultan's Battery, to try and effect a sale of the elephant caught in our forests last year. The date had been fixed beforehand on the impression that the monsoon would commence later. Under the circumstances, very few purchasers appeared, so the elephant was bought in. It was sold a month or so afterwards for Rupees 1,000.

8. During June and July, very little work can be done in the forests; carting operations cannot go on, and the Coorumbers will not work.

9. In August, I was employed chiefly in establishing the boundaries of the Kudricote Division. They are very difficult to determine, but I took the evidence of some of the oldest Coorumbers in default of documentary evidence.

10. Towards the latter end of August, I went down to Tellicherry in order to gain information as to the state of the Coast Market, and with the intention of going thence to Nelambur. I was advised not to sell any timber until a tolerably large stock had been accumulated, in which event the merchants who come periodically to Calicut would probably take Tellicherry into the scheme of their operations.

11. As I before stated, the failure of my contractor to fulfil his agreement prevented my accumulating more than about 250 logs. The average price for the timber sold at this coast depôt was Rupees 1-8-0 a cubic foot. If this average can be maintained or exceeded, the venture of establishing a depôt at Tellicherry may be said to be successful. There is a difficulty, however, in taking long beams down the zig-zags of the Peria Ghaut.

12. In September, I went to Nelambur to inspect the Teak Plantations, and to learn the system of operations there adopted. I was much struck with the extremely rapid growth of some of the plantations where the alluvial soil was deep.

13. Even where laterite crops up nearer the surface of the soil, although the growth is not so rapid, yet the plantations show few failures, and, so far as I could judge from a cursory view, do not show any signs of decline.

14. It is not in place here to enter into any account of these plantations. I went down simply to study the system. In the beginning of October, I had to stay at Calicut for my examination in the vernacular. Towards the middle of the month, I joined the Inspector of Forests at Sultan's Battery, and went through the forests with him. The end of the month, I spent at Caroth looking over the Cardamom jungle. There is much need of a survey here, for the natives are encroaching in every direction. One Moplah was convicted, and his Coffee plants plucked up by me, in obedience to the Deputy-Collector's orders.

15. In the beginning of November, I went to the Kudricote Forests to mark more trees for felling. From the 10th to the 23rd of the month, I was in the Chedleth and Koorcheat Forests, endeavouring to get all the old logs extracted from the forests, and trying to collect some forest produce. Some curious facts came to my knowledge in connection with this attempt, (which was a failure), that I will mention in the general remarks. In December, I met Colonel Morgan by appointment, and went through part of his Mudumallay Forest with him, and thence to Mysore.

16. There was very little timber in depôt, owing to the poor working of my Chedleth Forest contractor last year, as I mentioned in the annual report. The working of the Chedleth Forests is rendered very difficult on account of the position of the Poolpully Temple Forests, which shut us entirely from the main river.

17. The Cubbany, we are obliged to make a basis of operations in the Mysore territory at Gundry; thence we float to Hirnandy, and are, therefore, entirely dependent on the state of the river; and if the contractor has neglected to take advantage of the proper season, there is at present no alternative route to Mysore. Formerly, there was an alternative route through the Mysore forests by the Baigur Road, but this is, I believe, interdicted under the existing rules. It is inconvenient being thus entirely dependent on the river, since the contractor will not guarantee the safe arrival of a large quantity of unseasoned timber, which is precisely the timber that fetches the highest price in the native market. I propose to go into this question during the current year.

18. On account of the extremely large quantity of Poolpully timber in the market, the prices offered for Mudumallay timber were so low that Colonel Morgan reserved nearly the whole amount. I mention this, because the same argument applies to the question of Wynaad sales at Mysore.

19. A very large proportion of Poolpully timber is sold at the forest depôt; and, considering the difficulty of obtaining sufficient transport for working the Wynaad Forests under the present system, I question whether it would not be possible to adopt this method of sale to some extent. I propose to make a depôt for inferior timbers (such as Muthy, Benteak, Hone, etc.,) at Bavally, close to the Mysore frontier, in order to endeavour to make a wholesale deal with some Mysore merchants, and avoid the trouble of transporting the timber to Mysore; where, indeed, the price realized would not compensate for the loss that would result from diverting some of our limited means of transport from the more lucrative trade in Teak.

20. Since the above was written, both the Collector and the Acting Inspector of Forests have urged that the experiment should be on a limited scale.

21. In the early part of January, I suffered excessively from fever, as did several of my establishment. I can account for the prevalence of sickness at this period of the year only by the supposition that the east winds are in some way connected with it.

22. About the middle of the month, a native demarcator, sent by the Revenue Survey Party, arrived at Manantoddy, in consequence of repeated representations on my part of the necessity for commencing some part of the work of survey, especially in such unsafe quarters as those bordered on by the Poolpully Forests. The amount of work done by the survey party in the part of the Wynaad Forests under my immediate charge is very small. This native demarcator merely widened the boundaries cut by my own peons, and put up small posts at the stations round Padry Forest. He then fell sick, and returned to Gudalur. I believe some work of demarcation has been going on near Nellicottah, to which, according to Lieutenant Fullerton's map, the boundaries of Wynaad extend. However, all that portion of the forest, which lies to the south of the road leading from Sultan's Battery to Mysore, has for years been worked by Colonel Morgan, as if it were part of the Mudumallay Forest. I have represented this, and hope that the work of survey may be proceeded with if possible in the forest immediately worked as Wynaad, since the southern part above mentioned is worked for Government, and is worked more easily as part of the Mudumallay Forest. The question, therefore, as to whether it should continue to be so worked or be joined to Wynaad, may well be deferred until such parts of the northern division, as are at present ill-defined and are excessively liable to encroachment, have been carefully surveyed.

23. I spent the end of the month at Padry, in the endeavour to make out the correct boundaries in this direction, but was completely prostrated by fever.

24. In February, I made an attempt to teach the Coorumbers the use of the cross-cut saw. They prefer the axe, and are by no means eager to learn the use of an unwonted implement. A great saving would be effected if they could be brought to use the saw, instead of cutting a felled tree into convenient lengths with the axe.

25. I went again to Padry to see the work done by the demarcator.

26. On the 16th, I started for Tellicherry for the purpose of selling the timber there placed in depôt. According to the Collector's instructions, I applied for private tenders. None of these were satisfactory; but an offer was subsequently given by the Public Works Department of Rupees 1-8-0 a cubic foot for 2,244 cubic feet. Towards the end of the month, I accompanied the Sub-Collector (Mr. Logan) to Canouth, whence we went through the adjoining country in different directions. The whole of this land has been subjected to Raggy cultivation, here called Ponnam, but would in many parts grow Teak if regularly reserved and cultivated. At present, owing to the ruinous system hitherto adopted, there is no timber worth the expense of felling.

27. In March, I spent some time in the part of the Kudricote Forest immediately on the Coorg frontier. This is rather a dangerous quarter, since there is Teak in some of the grounds sold for Coffee plantations, and felling went on in these tracts during the year. The timber is carted to Mysore by an old road leading from our forests to Antersuntah; and it is difficult to watch this line of road with any exactitude. I shall station a peon as near as possible to the point where the road crosses the frontier. I spent a short time up the Trinhully Valley. There are a few Cardamoms towards the head of the valley. Almost all the lower slopes have been felled for Raggy cultivation. On the 21st, two elephants arrived at Manantoddy, having been lent by the Commissariat Department for work in the forests. Owing to want of gear, they did not commence work till the 5th April. It is to be hoped that the elephants may be lent again after the monsoon, for they are extremely useful in bringing logs from the forest to the cart-tracks.

SECTION II.

Reserves.

28. *A—Reserved Forests; operations and contemplated operations.*—Felling was limited during this year on account of the amount of timber entered in the books as stock in hand, but not accounted for. This year I have recovered all I could; the contractor's work being, however, defective. We shall never be able to start with fair accounts, unless we are allowed to treat such timber only as stock in hand, as is actually accounted for, by being measured in one or other of our depôts, whether medial or final. I have, therefore, made out the lists this year according to actual measurement.

29. When I came here two years ago, I took over the lists of timber under protest, for I could not verify them, when the greater part of the logs entered as "balance in hand" were lying about in the jungles in directions to be made out only by guess-work. In fact, the whole system of measurement, as shown in the accounts, was rather unintelligible.

30. So long as we go on with the old system of accounts, taking as "balance in hand" not timber actually measured, but the balance that should have been left (allowing all the old annual accounts to have been correct, and deducting from the amount therein entered the sum actually disposed of during the year), so long will the timber accounts be more or less fictitious. As the forests are now under a different régime, there is a favorable opportunity for restoring actual fact for suppositious calculations. It is impossible to account for all the damage done by fires, etc., to logs that have been lying in the jungles for years. I have measured every old log that I could find in the forests, but the whole total of cubic feet did not actually correspond with the total entered in the accounts.

31. On the subject of *Communications*, I would strongly request a grant for the purpose of making some good huts in the forests, so that one could stay out in the forests, if necessary, for three months or more together, with some convenience and without the certainty of incurring fever. At present, my huts are of a very primitive formation, and there is no adequate accommodation for my peons and servants. It is very difficult to do office work with any comfort in huts of the present type.

32. *B, Fuel Reserves.*—None. There is a great want of an introduction of some strict system of passports in the forests that were formerly styled "Revenue" in contradistinction to "Reserved" forests, for there are now no rules sufficiently stringent to enable the Forest Department to challenge timber passing along the high road. If conservancy is to be carried out, a passport from the forest officer should be necessary to cover the removal of timber even from private holdings.

33. *C, Plantations.*—None made last year.

34. *Contemplated Operations.*—If I can get any definitely surveyed boundary lines to work upon, I will commence the *aménagement* of the forest, by dividing it into convenient working blocks; but at present there are few known points to which to attach a system of interior lines.

35. *Communications.*—I intend to go over all the roads towards the end of the present monsoon, so as to render the work of carting as light as possible. At present, there are many side tracks, from which the stumps have not been properly extracted. I have already expressed a hope that sanction may be granted for an expenditure on new huts in the forests. It is impossible to over-estimate the ill-effects of bad accommodation, and I think that for peons stationed in the forests, a well-built hut should be a *sine qua non*.

36. It is very doubtful whether they would be careful enough to guard against fire, else wooden huts raised on piles would be the best form of building.

SECTION III.

37. *License and Voucher Forest Operations.*—None.

SECTION IV.

38. *Expenditure on carting, felling, and floating.—Yield of Forests.*

A—Timber felled—

At Koorcheat—6,786½ cubic feet of Teak were felled during the year.

At Kudricote—3,210 cubic feet of Teak were felled.

B—Timber carted—

To Mysore Depôt—535½ cubic feet of Teak were carted, and 254¼ cubic feet of Hone, and forty-one of Blackwood were carted also.

To Manantoddy—2,498¾ths cubic feet of Teak, and 93¾ths of Blackwood were carted.

To Tellicherry—2,778½ cubic feet of Teak, and 93¾ths of Blackwood were carted.

C—Timber floated.—Nil.

D—Timber sold—

	Rs.	A.	P.
Sale of bamboos	68	4	0
„ „ wood	7,952	8	3
„ „ „ to D. P. W.	3,941	14	6
Total...	11,962	10	9

Value of Stock on hand on 31st March 1874.

Depôts.	Description.	Quantity.	Rate.	Amount.
			Rs. A. P.	Rs. A. P.
Mysore	Teak	11¼	0 15 0	11 0 3
Do.	Hone	291	0 10 0	181 14 0
Do.	Blackwood	41	0 10 0	25 10 0
Hirnandy	Teak	1,056¾	0 15 0	990 11 3
Gundry	Do.	11,606	0 14 0	10,155 4 0
Do.	Blackwood	24½	0 6 0	9 3 0
Do.	Muthy	24¼	0 3 0	4 8 9
Panageddy	Teak	800	0 10 0	500 0 0
Kudricote	Do.	4,147¾	0 8 0	2,073 14 0
Do.	Blackwood	84½	0 6 0	31 9 6
Manantoddy	Do.	90¾	0 14 0	79 3 0
Tellicherry	Teak	845	1 8 0	1,267 8 0
	Total..		.....	15,330 5 9

MEMORANDUM.

39. I have entered as stock in hand only such logs as I have been able to account for by actual measurement. The amount entered as timber in hand at Gundry has not yet been verified by myself personally.

40. I have not yet appended Statement D., and therefore cannot state the synopsis of the financial results, for the reason that I am endeavouring to reconcile the balance as stated on the old system of accounts (that was found by deducting the amount of timber sold, etc., from the stock in hand that should have existed, provided no errors had crept in year after year) with the balance as found by actual measurement; and I have not been able accurately to reconcile the figures. We shall never be able to start with accurate accounts unless a certain amount of latitude is granted.

SECTION V.

FINANCIAL RESULTS.

Expenditure.

	Rs.	A.	P.
Conservancy and Working	3,698	13	9
Establishment	7,164	1	8
Contingencies	127	7	0
Total ...	10,990	6	5

Receipts.

	Rs.	A.	P.
Sale of Bamboos	68	4	0
„ „ Wood	7,952	8	3
„ „ „ to Department Public Works.	3,928	5	6
„ „ Saplings to „ ...	4	9	0
„ „ Bamboos to „ ...	9	0	0
„ „ Forest Produce	4,086	8	0
„ „ Elephant	938	4	0
Money in hand refunded	55	0	3
Total ...	17,042	7	0

SECTION VI.

GENERAL REMARKS.

41. *Establishment* consists of one writer at Manantoddy, one office Gumastah, one Sub-Overseer, one Assistant Overseer at the Mysore Depôt, one Duffadar, and ten Peons.

42. Some modification in the establishment would be advisable, especially the appointment of an Overseer thoroughly conversant with timber measurement and general forest work, to supervise one of the divisions of the Wynaad Forests.

43. *Health of the Establishment.*—There has been a great deal of sickness during the year, but no resignation or death.

44. *Forest Produce.*—In November 1873, I spent some time in the forests to the east of Sultan's Battery, endeavouring to collect forest produce. The timber in the direction of Marigudi is of a very inferior character, being ill-grown and sparse. The chief advantage of retaining a large portion of the forest about here is on account of the forest produce, the most remunerative produce being Kadukkay, a species of gall-nut. In order to gather this produce departmentally, a very much larger staff than that allotted to the branch of the Forest Department in Wynaad would be necessary. I have gathered through my subordinates about 200 Rupees worth of produce during the year, whereas any contractor to whom was granted the sole right of gathering would give over 1,000 Rupees a-year for that right, and the forest peons would not be taken from more useful occupations. According to the existing Government orders, no monopoly of produce is allowed to the Forest Department, partly I believe on the ground that oppression of the Coorumbers would result. I elicited, however, during my stay in this eastern part of Wynaad, the curious fact, that the very evil here deprecated actually exists to all intents and purposes, that is, no less than three several directions, at points widely separated from each other. Mysore merchants had established claims to a monopoly of the produce, stating that they derived their right of gathering from the Government, and in one case the person claiming the right produced a document of some kind to prove the genuineness of his title. Such was the story told me at two places by Chetties, and in one place by a Mulu Coorumber.

45. The fact that no monopoly was granted by Government does not influence the hearing of such a statement on the forest tribes, further than that the merchant making the false claim could not substantiate it in a Court of Law.

46. The forest Coorumbers rarely think of appealing to a Court of Law, but accept without question such a statement of sole right to the produce, and the result is that instead of one monopolist capable of taking legal proceedings against the real oppressors of the forest tribes, the interloping merchants there are virtually monopolists in several different parts of the forest. I have advisedly termed the interloping merchants the real oppressors of the forest tribes, so far as my short experience has gone; for I have had abundant instances of the fact that when a Coorumber has once taken advance from a merchant, the claims made on the strength of that advance are almost unlimited.

47. *Free Passes.*—Passes are given in the case of well-defined holdings in the vicinity of the Government forest, such for instance as the private forest belonging to the Poolpully Temple, Coffee estates, etc. But there is a large portion of Government land, formerly under the revenue authorities, over which there is no well-defined control. This is land bearing inferior timber, and therefore not included within the bounds of the old reserved forests. The rules about this land are not yet sufficiently well established, in fact the boundaries are not sufficiently well defined to enable me to know the extent of supervision which the Forest Department is required to control. In the old reserved forests, no free passes have been registered on the books, the actual requirements of a ryot for house-building generally being granted on application, subject to the supervision of a peon.

48. The subject of free passes has not been carefully defined in this range, so far as I can discover from the records.

I have the honor to be,
Sir,
Your most obedient servant,
(Signed) A. W. PEET,
Deputy-Conservator of Forests.

Revenue
857 Proc
3.3.1875

Rec'd 1498/75

I.—*Statement showing the quantity of Timber felled departmentally in the several forests of the Madras Presidency for the official year* 1873-74.

Name of Ranges.	Teakwood.		Ebony or Blackwood.		Rosewood.		Sandalwood.		Red Sanders roots or posts.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11
	C. FT.	RS. A. P.	C. FT.	RS. A. P.	C. FT.	RS. A. P.	MDS.	RS. A. P.	C. FT. AND MDS	RS. A. P.
Gumsur and Suradah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Golcondah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuddapah	.....	.....	.....	.....	.....	.....	.....	.....	mds. 77,440 cft. 972	9,201 0 8 655 14 0
Bellary	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kurnool	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Arcot	.....	.....	.....	.....	.....	.....	305	304 8 0	18,900	2,362 8 0
South Arcot	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madura	399	357 12 0	171	153 6 6	.....	.....	.....	.....	.....	.....
Trichinopoly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tinnevelly	45	33 8 0	.....	.....	.....	.....	.....	.....	.....	.....
Anamallai	13,749	11,270 10 4	.....	.....	10,800	16,900 12 0	.....	.....	.....	.....
Bhowany	.....	.....	.....	.....	.....	.....	2,710	4,742 8 0	.....	.....
Collegal	.....	.....	.....	.....	.....	.....	4,159	6,499 4 9	.....	.....
Sathiamangalam	.....	.....	7	3 10 0	.....	.....	4,360	7,331 1 4	.....	.....
Mettapoliem	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bolumputty	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mudumallai	4,382	3,286 5 0	.....	.....	.....	.....	.....	.....	.....	.....
Sigur	500	312 8 0	.....	.....	.....	.....	994	1,772 6 0	.....	.....
Salem	.....	.....	.....	.....	.....	.....	1,793	5,604 8 0	.....	.....
South Canara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wynaad	9,997	4,998 4 0	.....	.....	.....	.....	.....	.....	.....	.....
Nelumbur	19,715	15,485 0 0	530	397 8 0	.....	.....	.....	.....	.....	.....
Chennat Nair	1,207	415 0 0	.....	.....	53	13 12 0	.....	.....	.....	.....
Total...	49,994	36,158 15 4	708	554 8 6	10,853	16,914 8 0	14,321	26,254 4 1	mds. 96,340 cft. 972	12,319 6 8

Statement showing the Quantity of Timber felled departmentally in the several forests, etc.—(Concluded.)

Name of Ranges.	Other Jungle-wood used as Timber		Bamboos.		Railway Fuel.		Saplings.		Forest Produce.		Total.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	12	13	14	15	16	17	18	19	20	21	22
	C. FT.	RS. A. P.	B. LOADS.	RS. A. P.	TONS.	RS. A. P.	NO.	RS. A. P.	MDS.	RS. A. P.	RS. A. P.
Gumsur and Surada ...			.....	.....	.....	.....	.....	.....	.....	.....	
Golcondah	2,647	638 0 4	.....	.....	.....	.....	.....	.....	.....	.....	638 0 4
Cuddapah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bellary	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9,856 14 8
Kurnool	855	801 4 0	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Arcot	L. 146	93 12 0	.....	.....	.....	.....	.....	.....	.....	.....	801 4 0
South Arcot	9,685	221 12 0	.....	.....	.....	.....	.....	.....	.....	.....	2,987 8 0
Madura	2,010	700 14 2	.....	.....	.....	.....	.....	.....	17	7 5 7	708 3 9
Trichinopoly	5,847	5,246 8 9	.....	.....	.....	.....	.....	.....	.....	.....	5,757 11 3
Tinnevelly	.....	.....	.....	.....	470	625 0 3	.....	.....	.....	.....	625 0 3
Anamallay	272	210 1 7	.....	.....	.....	8 2 8	.....	.....	.....	37 7 6	289 3 9
Bhowany	1,021	532 14 8	.....	.....	1,280	1,920 0 0	.....	.....	.....	.....	28,704 5 0
Collegal	120	60 0 0	.....	.....	.....	.....	.....	.....	.....	.....	6,722 8 0
Sathiamangalam	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6,499 4 9
Mettapoliem	7	3 4 0	.....	.....	33	100 0 0	.....	.....	.....	.....	7,337 15 4
Bolumputty	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	100 0 0
Mudumallai	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sigur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,286 5 0
Salem	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,084 14 0
South Canara	10,353	7,948 9 2	1,443	7,627 12 9	.....	.....	.....	.....	280	312 6 0	21,493 3 11
Wynaad	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nelambur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Chenat Nair	18,107	7,176 9 0	400	20 0 0	.....	.....	44,750	20,818 0 0	.....	.....	4,998 4 0
	3,156	472 4 0	.....	.....	.....	.....	.....	.....	.....	.....	43,897 1 0
											901 0 0
Total...	54,106	24,110 13 8	1,443 No. 400	7,647 12 9	1,783	2,653 2 11	44,750	20,818 0 0	297	357 3 1	1,47,688 11 0

Q.—*Statement showing the sale of Timber, etc., in the several forests during the official year* 1873-74.

Name of the Range.	Teakwood.		Ebony or black wood.		Rosewood.		Sandalwood.		Red Sanders roots or posts.		Other jungle wood used as Timber.	
	Quantity.	Amount realized.	Quantity.	Amount realized.	Quantity.	Amount realized.	Quantity.	Amount realized.	Quantity.	Amount realized.	Quantity.	Amount realized.
1	2	3	4	5	6	7	8	9	10	11	12	13
	C. FT.	RS. A. P.	C. FT.	RS. A. P.	C. FT.	RS. A. P.	MDS.	RS. A. P.	C. FT.	RS. A. P.	C. FT.	RS. A. P.
Gumsur and Surada ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Golcondah ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2,647	664 8 6
Cuddapah ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bellary	.....	.....	.....	.....	.....	.....	.....	.....	1,653	1,187 11 3	1,038	632 0 0
Kurnool	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Arcot ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,206	932 14 3
South Arcot ...	.....	.....	.....	.....	.....	.....	304	1,153 2 6	306mds.	51 0 0	403	511 8 6
Trichinopoly ...	.....	.....	.....	.....	.....	.....	.....	.....	530c. ft.	631 5 0		
Madura	219	350 15 4	161	204 6 9	.....	.....	.....	.....	.....	.....	1,318	1,038 0 2
Tinnevelly ...	385	221 8 4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Anamallai ...	15,981	39,478 9 5	.....	.....	8,272	24,037 5 5	.....	.....	.....	.....	4,575	6,737 12 11
Bhowany ...	.....	.....	.....	.....	.....	.....	2,688	9,000 0 0	.....	.....	1,056	1,065 8 5
Collegal	.....	.....	.....	.....	.....	.....	4,265	15,000 0 0	.....	.....	72	101 4 5
Sigur	.....	.....	.....	.....	.....	.....	580	2,004 0 0	.....	.....	120	120 0 0
Sathiamungalum	14	16 14 0	15	18 7 0	.....	.....	2,997	10,000 0 0	.....	.....	368	528 14 6
Mettapoliem ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bolumputty ...	3,909	1,704 0 6	.....	.....	.....	.....	.....	.....	.....	.....	70	89 3 0
Mudumallai ...	31,988	41,802 1 3	.....	.....	379	355 8 0	.....	.....	.....	.....	.....	.....
Salem	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	386	321 5 10
South Canara ...	13,377	7,889 10 7	.....	.....	.....	.....	2,224	7,502 6 0	.....	.....	.....	.....
Nelumbur ...	8,116	10,028 13 3	195	185 0 5	.....	.....	.....	.....	.....	.....	9,707	8,808 4 8
Chenat Nair ...	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	No. 11	330 8 0
Wynaad	9,456	11,828 7 3	.....	.....	.....	.....	.....	.....	.....	.....	6,733c.ft.	2,197 15 7
											.....	.....
											20	15 3 0
Total...	83,445	1,13,320 15 11	371	407 14 2	8,651	24,392 13 5	13,058	44,659 8 6	c. ft. 2,183 306mds.	1,870 0 3	No. 11 29,719 c. ft.	24,094 15 9

Statement showing the sale of Timber, etc., in the several forests during the official year 1873-74.—(Continued.)

Name of the Range.	Railway Fuel and Firewood.		Bamboos.		Forest produce.		Saplings.		Total amount realized.
	Quantity.	Amount realized.	Quantity.	Amount realized.	Quantity.	Amount realized.	Quantity.	Amount realized.	
	14	15	16	17	18	19	20	21	22
	TONS.	RS. A. P.	NO.	RS. A. P.	MDS.	RS. A. P.	NO.	RS. A. P.	RS. A. P.
Gumsur and Surada	.....	.....	.....	.....	.....	.....	.....	.....	664 8 6
Golcondah	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuddapah	.....	.....	.....	.....	.....	.....	.....	.....	1,819 11 3
Bellary	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kurnool	.....	.....	.....	.....	.....	.....	.....	.....	932 14 3
North Arcot	b. l. 204	340 14 0	.....	.....	.....	.....	.....	.....	2,687 14 0
South Arcot	tons. 6	18 6 0	.....	.....	163	141 4 0	.....	.....	1,197 10 2
Trichinopoly	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madura	.....	.....	.....	.....	.....	.....	.....	.....	7,293 3 0
Tinnevelly	.....	103 11 3	.....	.....	.....	69 15 6	.....	.....	1,460 11 6
Anamallai	.....	.....	.....	.....	.....	.....	.....	.....	63,617 3 3
Bhowany	997	5,989 3 0	.....	.....	.....	.....	.....	.....	15,109 3 0
Collegal	.....	.....	.....	.....	.....	.....	.....	.....	15,528 14 6
Sigur	.....	.....	.....	.....	.....	.....	.....	.....	2,004 0 0
Sathiamungalum	.....	.....	.....	.....	.....	.....	.....	.....	10,124 8 0
Mettapoliem	.....	.....	.....	.....	.....	.....	.....	.....	.....
Bolumputty	.....	.....	.....	.....	.....	.....	.....	.....	2,380 14 4
Mudumallai	.....	.....	.....	.....	.....	.....	.....	.....	41,802 1 3
Salem	.....	.....	B. l. 1,421	8,299 5 4	138	204 1 1	.....	.....	24,814 1 1
South Canara	3½	13 0 0	20,583	532 4 0	.....	.....	.....	.....	8,765 6 7
Nelumbur	.....	.....	8,332	563 1 4	.....	.....	14,513	11,293 13 8	24,268 12 3
Chenat Nair	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wynaad	.....	.....	.....	.....	.....	4,086 8 0	.....	.....	15,930 2 3
Total...	tons 1,006½ b. l. 204	6,465 2 3	By. Lds 1,421 No. 28,915	9,394 10 8	301	4,501 12 7	14,513	11,293 13 8	2,40,401 11 2

3.—*List of the Fuel Reserves.*

Name of the Range.	Name of the Reserve.	Year in which the reserve was formed.	Area.	Charges.		Receipts.	
				During the year.	Up to the year.	During the year.	Up to the year.
			ACRES.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Gumsur and Surada ...	.....	...	.....	.....	.....	.....	.....
Vizagapatam	.....	...	.....	.....	.....	.....	.....
Cuddapah	Baulapulli No. I.	1867	1,000	144 0 0	1,492 2 0	.....	.....
	Baulapulli No. II...	1871	1,730	.....	692 4 0	.....	.....
	Sullaguntachanoo...	1871	2,000	216 0 0	1,050 10 11	.....	.....
	Codoor Hill	1874	1,500	.....	.....	.....	.....
	Yerragunta Cottah	1873	3,000	84 0 0	84 0 0	.....	.....
	Total...	...	9,230	444 0 0	3,319 0 11	.....	.....
Bellary	.....	...	.....	.....	.....	.....	.....
Kurnool	.....	...	.....	.....	.....	.....	.....
North Arcot	Mamandoor	1871	2,560	181 3 0	2,323 10 11	.....	.....
	Amboor...	1872	3,840	19 2 6	222 10 6	.....	.....
	Total...	...	6,400	200 5 6	2,546 5 5	.....	.....
South Arcot	Moota Cadoo...	1869	2,500	720 0 2	1,667 0 6	334 2 2	342 7 2
	Siroovady	1872	710	342 8 1	641 10 10	.....	.....
	Cottamangalam	1869	2,000	302 15 6	428 4 10	.....	.....
	Padepallam	1869	2,500	312 7 10	825 15 6	.....	.....
	Periamur	1869	3,840	443 13 9	863 7 4	.....	.....
	Gungavarum...	1872	8,000	.....	.....	.....	.....
	Mudenai	1869	4,000	218 6 9	438 8 11	.....	.....
	Chinnasamudram...	1869	6,400	295 8 5	1,617 13 2	6 14 0	6 14 0
	Peringalathoor	1869	4,800	38 4 8	43 8 8	.....	.....
	Total...	...	34,750	2,674 1 2	6,526 5 9	341 0 2	349 5 2

List of the Fuel Reserves.—(Continued.)

Name of the Range.	Name of the Reserve.	Year in which the reserve was formed.	Area.	Charges. During the year.	Charges. Up to the year.	Receipts. During the year.	Receipts. Up to the year.
			ACRES.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Trichinopoly	Lalapettah	1871	105	739 9 1	1,611 0 3	1,066 11 9	1,066 11 9
	Tanimalei	1871	153	90 0 0	718 9 9	.....	.....
	Total...	...	258	829 9 1	2,329 10 0	1,066 11 9	1,066 11 9
Madura	Punjathanghy and Meenakarodoo.	1871-72	1,000	427 8 9	1,285 8 9	.....	.....
	Sirumallais	1872-73	.....	.....	216 5 1	.....	.....
	Allageri Covil mallai	1871-72	16 sq. mls.	.....	.....	.....	.....
	Shengadagavendon mallai	1873-74	6 sq. mls.	.....	.....	.....	.....
	Total...	...	15,080	427 8 9	1,501 13 10	.....	.....
Tinnevelly	Kaliavoor Tank	1872	665				
	Kaliavoor Block	1872	200				
	Rajancolam	1872	120				
	Mutturcolam...	1872	240				
	Kuttukalcolam	1872	130				
	Odaiarcolam	1872	1				
	Naraiginaru Tank	1873	130				
	Agilandapuram	1872	125				
	Kutticolam	1872	20				
	Parachicolam	1872	105				
	Sengalamudiarcolam	1872	45				
	Karisalcolam	1872	120				
	Manurcolam...	1873	1,180	1,204 4 4	3,192 0 3	103 11 3	103 11 3
	Rustacolam	1873	20				
	Ramasamipuram	1873	20				
	Sirucolam	1873	5				
	Kalakudicolam	1873	130				
	Puducolam	1873	100				
	Seedakurichicolam	1873	55				
	Neremenicolam	1873	485				
	Mudithalai	1873	200				
	Periaperali	1873	110				
	Ondipulinaikanum	1873	105				
	Puducolam	1873	245				
	Sinnaperali	1873	40				
Tanjore	.....		4,596				
Mettapoliem	H. Reserve No. I.	1872	8 sq. mls.	290 7 8	642 9 8	.....	.....
	K. Reserve No. II.	1872	6 ,,	5 9 8	5 9 8	.....	.....
	M. Reserve No. III.	1872	5 ,,	5 8 8	1,412 2 8	.....	.....
	Total...	...	12,160	301 10 0	2,060 6 0	.....	.....
Bolumputty	Wallair...	1868	1,010	753 2 8	10,976 3 10	20 0 0	20 0 0
Salem...	A. Reserve	1866	2,560	265 5 4	2,365 4 2	27 5 4	37 5 4
	B. or Moroor Reserve	1866	964	243 8 1	2,049 11 0	27 5 4	37 5 4
	C. Reserve	1866	320	610 8 7	5,258 14 4	27 5 4	27 5 4
	D. Reserve	1867	1,600	75 0 0	1,480 1 7	.....	.....
	E. Reserve	1867	2,400	78 0 0	2,168 10 0	.....	.....
	Ummanary	1872	1¼ sq. mls.	72 0 0	731 8 7	.....	.....
	Pellapully	1873	4 ,,	210 1 10	210 1 10	.....	.....
	Kuriyappa Rombay	1873	3 ,,	72 8 4	72 8 4	7 0 0	7 0 0
	Utengherry	1874	1 ,,	239 8 0	239 8 0	.....	.....
	Total...	...	13,764	1,866 8 2	14,576 3 10	89 0 0	109 0 0
South Canara	.....	...	.....	.....	.....	.....	.....
Palghaut	Poolambarai...	1873	1,712½	532 6 6	532 6 6	.....	.....
	Grand Total...	...	98,960	9,233 8 2	47,560 8 4	1,620 7 2	1,648 12 2

4.—*List of the existing plantations.*

Name of the range.	Name of the plantation.	Year in which the plantation was formed.	Area.	Description of the trees.	Number of trees.	Cost. During the year.	Cost. Up to the year.	Receipts. During the year.	Receipts. Up to the year.
			ACRES.			RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Ganjam	Gumsur	1869-70 ..	3¼	Tectona Grandis, etc.	280	36 0 0	165 0 4	... ...	... ...
			3¼		280	36 0 0	165 0 4	... ...	... ...
Vizagapatam ...	.....	.....	.....	.....	.....	... ...	... ...	... ...	... ...
Cuddapah ...	Codoor... ...	1865	50	Pterocarpus Santalinus, Cassia Florida, Melia Azadirachta, etc...	21,438	441 12 0	5,093 2 4	... ...	... ...
	Ooperapulli ...	1868.....	105	Albizzia Lebbek, Melia Azadirachta, Acacia Arabica, etc.	58,159	640 8 0	6,591 11 7	... ...	... ...
	Reddipulli... ...	1869.....	924	Albizzia Lebbek, Acacia Arabica, Tamarindus India, etc.	31,835	650 7 6	11,310 5 11	... ...	... ...
	Pullempett ...	1871.....	402	Albizzia Lebbek, Melia Azadirachta, Acacia Amara, Acacia Arabica, etc.	33,986	654 13 0	6,181 14 6	... ...	... ...
	Camalapoor ...	1869.....	247	Casuarina Equestifolio, Acacia Arabica, Albizzia Lebbek, etc...	75,385	283 1 0	7,927 7 6	... ...	... ...
			1,728		2,20,853	2,670 9 6	37,104 9 10	... ...	... ...
Bellary	Ghooty	1868.....	404½	Acacia Arabica, Melia Azadirachta, Albizzia Lebbek, etc.	64,600	563 2 0	9,114 9 0	... ...	... ...
			404½		64,600	563 2 0	9,114 9 0	... ...	... ...
Kurnool	Woncaram... ...	1869-70...	15	Mango, etc.	1,250	479 3 4	1,411 9 8	... ...	... ...
	Muttikonda ...	1866-67...	½	Teak...	132	... ...	52 12 0	... ...	... ...
			15½		1,382	479 3 4	1,464 5 8	... ...	... ...
North Arcot ...	Trivellum... ...	1868.....	435	Casuarina	1,36,498	813 0 11	10,290 6 11	353 2 0	353 2 0
	Viringipuram ...	1870.....	260	Do.	1,91,247	1,428 1 0	6,179 0 0	... ...	... ...
	Thengal	1872.....	110	Do.	3,000	86 4 0	121 2 0	... ...	... ...
	Keelminnel ...	1873.....	150	Do.	7,000	803 10 1	853 10 1	... ...	... ...
	Chaynoor... ...	1871.....	130	Acacia, Cassia, Casuarina, etc.	81,000	1,450 7 6	3,874 7 6	... ...	... ...
	Gazerlamandum.	1871.....	45	Casuarina...	44,000	435 3 0	1,621 1 10	... ...	... ...
	Vannivedu... ...	1873.....	30	Do.	5,000	151 15 8	151 15 8	16 0 0	16 0 0
	Ammoordy... ...	1873.....	160	Do.	.....	237 10 2	237 10 2	... ...	... ...
	Ammerdy... ...	1867.....	25	Indigenous and Exotic trees	11,000	162 0 0	2,617 11 9	... ...	... ...
			1,345		4,78,745	5,568 4 4	25,947 1 11	369 2 0	369 2 0
South Arcot ...	Trinomally... ...	1871.....	1	Katvalai, Illupey, etc.	260	10 3 6	42 4 0	... ...	... ...
	Chengum	1871.....	3	Satin, Sandal, Casuarina, etc....	3,240	82 13 3	345 10 1	... ...	... ...
	Chengum	1873.....	13	Casuarina, Purasu, and Valum	600	52 7 6	72 1 6	... ...	... ...
			17		4,100	145 8 3	459 15 7	... ...	... ...
Trichinopoly ...	Elamanore ...	1871.....	72	Casuarina, Inga Dulcio, Acacias Arabica and Amara, Cassia Florida, etc.	1,50,250	1,654 2 4	5,834 14 8	159 1 1	435 13 0
	Kulitalei	1871.....	48	Casuarina, Inga, Dulcio, Acacias Arabica and Lencophylaca, etc.	77,100	1,456 7 9	2,928 12 10	26 4 0	149 10 0
	Chithalivai ...	1871.....	107	Acacias Arabica and Lencophylaca, Albizzia Lebbek, Inga Dulcia, etc.	86,242	1,338 13 2	1,781 4 3	202 11 9	202 11 9
	Chickonum ...	1874.....	122	.....	.....	.....	.....	532 9 3	532 9 3
	Kutlei	1871.....	73	Acacias Arabica and Lencophylaca, Albizzia Lebbek, Cassia Florida, etc.	11,601	883 13 9	1,742 9 11	31 0 0	31 0 0
			422		3,25,193	5,333 4 0	12,287 9 8	951 10 1	1,351 12 0
Madura	Vunnathiparai...	1869-70...	5½	Teak...	4,315	186 5 10	1,202 2 11	.....	.....
	Kodikannel ...	1870-71...	10·3	Eucalyptus and Acacia...	7,975	461 14 3	2,023 3 5	.....	.....
	Palani	1870-71...	2 3/64	Teak...	2,112	137 14 4	531 5 9	.....	.....
	Sathungoody ...	1873-74...	32·4	Babool, etc.	.....	189 5 5	189 5 5	.....	.....
			50		14,402	975 7 10	3,946 1 6	.....	.....
Tinnevelly... ...	.....	.....	.....	.....	.....	.....	.....	.....	.....
Annamallai ...	Moodi	1870.....	8	Teak...	8,439	788 10 0	1,598 9 11	.....	.....
	Toomacadavoo...	1873.....	8	Teak...	3,580	866 12 0	999 12 0	.....	.....
			16		12,019	1,655 6 0	2,598 5 11	.....	.....
Sathiamangalam.	Tullamallay ...	1863.....	65	Sandalwood	61,800	1,633 1 9	10,796 14 7	.....	.....
	Do. ...	1873.....		Anatti	2,600				
			65		64,400	1,633 1 9	10,796 14 7	.....	.....
Collegall	Bylore	1870.....	56	Sandalwood	38,000	2,975 7 3	11,509 0 6	.....	.....
			56		38,000	2,975 7 3	11,509 0 6	.....	.....
Bhowany	Bhowany	1871.....	Sq. yds. 64	Firewood...	.....	233 10 0	608 5 10	.....	.....
			64		.....	233 10 0	608 5 10	.....	.....
Bolumputty ...	Mettapolliem ...	.....	Acres.	.....	.....	.....	.....	.....	.....
Seegur	Seegur	1873.....	14	Sandalwood	14,000	1,386 4 10	3,467 8 11	.....	.....
			14		14,000	1,386 4 10	3,467 8 11	.....	.....
Mudumallai ...	Mudumallai ...	1863.....	20	Teak	20,000	2,404 13 7	17,928 14 6	.....	.....
	Bonni	1869.....	50		50,000				
			70		70,000	2,404 13 7	17,928 14 6	.....	.....
Salem	Putchoor	1870.....	9	Babool and Neem	.....	55 5 9	433 14 2	.....	.....
	Shevaroy Hills..	1867.....	3 or 4	Teak and Soolu	685	173 4 7	3,235 1 8	.....	.....

List of the existing Plantations.—(Continued.)

Name of the range.	Name of the plantation.	Year in which the plantation was formed.	Area.	Description of the trees.	Number of trees.	Cost. During the year.	Cost. Up to the year.	Receipts. During the year.	Receipts. Up to the year.
			ACRES.			RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Salem	Denkencotta ...	1873.....	.....	Sandalwood	153	47 14 10	59 12 10	.....	.....
	Kanaganava Sundram ...	1873.....	3	Do.	2,385	256 9 6	256 9 6	.....	.....
	Yalaigherry ...	1873.....	3	Do.	.....	.....	.....	.....	.....
			18		3,223	533 2 8	3,985 6 2	.....	.....
South Canara ...	Parapah	1864-65...	75	Teak...	64,300	698 12 0	6,421 3 8	.....	.....
			75		64,300	698 12 0	6,421 3 8	.....	.....
Nelumbur	Nelumbur... ...	.....	2,990	Teak and Blackwood	.....	21,954 0 0	2,00,118 0 0	11,280 0 0	94,250 0 0
			2,990		.....	21,954 0 0	2,00,118 0 0	11,280 0 0	94,250 0 0
Palghaut... ...	Nochipully ...	1870.....	167½	Teak, Tamarind, Mangoe, etc.	20,500	240 0 5	2,209 2 4	.....	.....
	Pulliampully ...	1871.....	13½	Do. do. do. etc.	26,000	246 2 8	1,638 1 8	.....	.....
			181		46,500	486 3 1	3,847 4 0	.....	.....
Wynaad	Wynaad	.....	.....	.....	.....	.....	.....	.....	.....
		Acres...	7,471						
		Sq. yds...	64	Grand Total...	*14,21,997	49,731 13 2	3,51,770 5 7	12,600 12 1	95,970 14 0

* Exclusive of Bhowany and Nelambur

5.—*Statement showing Timber, etc., disposed of under License and Voucher System in the several Forests for the official year* 1873-74.

Ranges.	Teakwood. Quantity.	Teakwood. Value.	Ebony or Blackwood. Quantity.	Ebony or Blackwood. Value.	Rosewood. Quantity.	Rosewood. Value.	Other Junglewood used as Timber. Quantity.	Other Junglewood used as Timber. Value.	Firewood and Railway Fuel. Quantity.	Firewood and Railway Fuel. Value.
1	2	3	4	5	6	7	8	9	10	11
	C. FT.	RS. A. P.	C. FT.	RS. A. P.	C. FT.	RS. A. P.	C. FT.	RS. A. P.	TONS.	RS. A. P.
Gumsur and Suradah	...	.....	...	.....	...	.....	36,560	2,094 8 0	313	109 8 6
Golcondah	...	.....	...	.....	...	.....	1,920	230 12 0	...	.....
Cuddapah...	...	.....	...	.....	...	.....	80,180	9,490 0 0	17,757	39,776 7 2
Bellary	...	.....	...	.....	...	.....	..	.....	...	.....
Kurnool	...	.....	...	.....	...	.....	2,02,270	23,913 0 0	55	96 13 6
North Arcot	...	.....	...	.....	...	.....	69,980	3,726 14 0	2,114	3,563 11 6
South Arcot	...	.....	...	.....	...	.....	31,499	1,710 7 0	77	138 10 0
Trichinopoly	...	.....	...	.....	...	.....	...	.....	...	392 7 4
Madura	...	.....	...	.....	...	.....	41,635	2,867 0 4	3,325	5,315 9 2
Tinnevelly	...	.....	...	.....	...	.....	54,968	{ 3,589 14 3 / 525 13 3 }	2,549	3,948 2 8
Anamallay	...	.....	...	.....	...	.....	192	25 0 0	346	769 9 9
Bhowany	2,660	665 0 0	20	5 0 0	...	.....	11,580	1,613 0 0	134	197 11 0
Collegal	480	120 0 0	...	.....	...	.....	3,920	588 0 0	...	.....
Sathiamangalum	1,700	425 0 0	180	45 0 0	...	.....	23,143	3,475 8 0	...	.....
Mettapoliem	240	60 0 0	...	.....	80	20 0 0	2,560	466 0 0	55	49 14 4
Bolumputty	..	.....	...	.....	...	.....	3,700	409 0 0	1,076	1,195 4 6
Mudumallay	...	.....	...	.....	...	.....	10	1 0 0	...	.....
Seegur	...	.....	...	.....	...	.....	...	.....	...	.....
Salem	...	.....	...	.....	...	.....	34,744	3,473 11 0	8,112	14,094 8 11
South Canara	...	.....	...	.....	...	.....	3,820	1,318 12 10	229	5,050 1 3
Wynaad	...	.....	...	.....	...	.....	...	.....	...	.....
Nelambur	...	.....	...	.....	...	.....	...	.....	...	.....
Chenat Nair	...	.....	...	.....	...	.....	...	.....	...	.....
Total...	5,080	1,270 0 0	200	50 0 0	80	20 0 0	6,02,681	59,518 4 8	36,142	74,698 7 7

5.—*Statement showing Timber, etc., disposed of under License and Voucher System in the several Forests for the official year* 1873-74.—(Concluded.)

Range.	Charcoal.		Bamboos.		Forest produce.		Palmirah.		Total.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	12	13	14	15	16	17	18	19	20
	TONS.	RS. A. P.	B. L.	RS. A. P.	MDS.	RS. A. P.	TREES.	RS. A. P.	RS. A. P.
Gumsur and Suradah	...	.....	...	.....	...	.....	...	.....	2,204 0 6
Golcondah	...	.....	301	94 1 0	...	.....	...	.....	324 13 0
Cuddapah	44	99 14 0	1,183	607 12 0	5,280	260 0 0	14	27 8 0	50,261 9 2
Bellary	...	.....	...	.....	...	.....	...	.....	.....
Kurnool	1,584	2,224 3 11	9,061	3,216 15 6	600	45 0 0	...	.....	29,496 0 11
North Arcot	458	1,027 4 0	9,667	4,833 8 0	... 190	515 12 6 190 0 0	...	.....	13,857 2 0
South Arcot	25	69 10 0	1,673	1,317 11 6	33,120	643 12 0	..	.....	3,880 2 6
Trichinopoly	...	.....	...	.....	...	.....	...	.....	392 7 4
Madura	175	492 6 0	1,089	2,528 9 6	28	1 5 0	...	.....	11,204 14 0
Tinnevelly	1,405	2,429 8 0	165	135 7 2	...	6,860 1 9	...	.....	17,488 15 1
					No.				
Anamallay	16	113 14 0	3,993	2,911 3 5	1,200	12 0 0	...	.....	3,831 11 2
Bhowany	...	.....	1,124	791 4 0	120	15 0 0	...	.....	3,286 15 0
Collegal	...	.....	...	.....	...	.....	...	.....	708 0 0
Sathiamungalum	...	.....	...	.....	640	40 0 0	...	.....	3,985 8 0
Mettapoliem	1	3 0 0	161	161 0 0	1,000	25 0 0	...	.....	784 14 4
Bolumputty	42	52 14 0	756	567 0 0	480	12 15 2	...	.....	2,237 1 8
Mudumallay	...	.....	...	.....	...	.....	...	.....	1 0 0
Seegur	...	.....	...	.....	480	60 0 0	...	.....	60 0 0
Salem	1,178	2,639 3 0	11,055	8,793 2 11	14,940	480 5 0	...	.....	29,480 14 10
			No.						
South Canara	10	50 0 0	1,93,700	2,905 8 0	1,993	31 4 0	...	.....	9,355 10 1
Wynaad	...	.....	...	.....	...	68 4 0	...	.....	68 4 0
Nelambur	...	.....	...	.....	...	.....	...	.....	.....
Chenat Nair	...	.....	...	.....	...	.....	...	.....	.....
Total...	4,938	9,201 12 11	40,228 No. 1,93,700	28,863 3 0	58,871	9,260 11 5	14	27 8 0	1,82,909 15 7

6. *Yield of Forests.*

Ranges.	Timber.				Firewood for Railway and other purposes.		Bamboos.		Charcoal on License.	Forest produce Departmentally and on License.	Palmyras on License.
	Departmentally.		On License.	Free.	On License and Departmentally.	Free.	On License and Departmentally.	Free.			
	C. FT.	MAUNDS.	C. FT.	C. FT.	TONS.	TONS.	CART-LOADS.	CART-LOADS.	TONS.	MAUNDS.	TREES.
Gumsur and Suradah...	2,527	...	36,560	2,39,780	313	61,532	...	...	...	...	...
Golcondah	...	...	1,920	...	...	...	301	...	...	...	...
Cuddapah	972	77,440	80,180	27,200	17,757	734	1,183	160	44	5,280	14
Bellary	...	...	...	...	...	...	...	...	...	...	...
Kurnool	855	...	2,02,270	29,020	55	16,674	9,061	99	1,584	600	...
North Arcot	9,831	19,205	69,980	11,400	2,114	5,134	9,667	268	458	190	...
South Arcot	2,010	...	31,499	1,810	77	97	1,673	23	25	33,137	...
Trichinopoly	...	...	...	...	470	...	...	...	...	...	...
Madura	6,417	...	41,635	42,468	3,325	2,095	1,089	632	175	28	...
Tinnevelly	317	...	54,968	1,201	2,549	...	165	...	1,405	...	...
Annamallai	25,570	...	192	2,368	346	28	3,993	467	16	No. 1,200	...
Bhowany	120	2,710	14,260	3,960	1,414	6	1,124	69	...	120	...
Collegal	...	4,159	4,400	1,120	...	80	...	200	...	...	...
Sattiamungalum... ...	14	4,360	25,023	200	...	...	..	...	...	640	...
Mettapolliem	...	...	2,880	540	88	3	161	36	1	1,000	...
Bolumputty	...	...	3,700	...	1,076	35	756	86	42	480	...
Mudumallai	4,382	...	10	...	...	...	...	...	...	...	...
Seegur	500	994	...	...	...	...	...	...	...	480	...
Salem...	10,353	1,793	34,744	52,480	8,112	4	12,498	1,573	1,178	15,220	...
							No.				
South Canara	...	...	3,820	...	229	...	1,94,100	...	10	1,993	...
Wynaad	9,997	...	...	logs 2,385	...	...	...	1,537	...	...	...
Nelambur	38,352	...	...	...	...	...	...	...	...	...	...
Chenat Nair	4,416	...	...	...	...	...	...	...	...	...	...
Total...	1,16,633	1,10,661	6,08,041	4,13,547 logs 2,385	37,925	86,422	41,671 No. 1,94,100	5,150	4,938	Ms. 59,168 No. 1,200	14

7.—*Detailed Statement of Receipts and Charges under etc.,*—(Concluded.)

Budget Classified Items.	Salem.	South Canara.	Malabar.			Grand Total.
			Wynaad.	Malabar.	Chenat Nair.	
	21	22	23	24	25	26
Receipts.						
I. Sale of timber brought to depôt by Government Agency.	Rs. 15,646	Rs. 7,487	Rs. 7,943	Rs. 16,370	Rs. ...	Rs. 1,35,158
II. Do. of timber, Firewood, Bamboos, Charcoal removed from Forest by purchasers including seignorage	37,717	9,355	68	...	...	1,82,780
III. Duty on Foreign Timber	...	..	...	...	...	...
IV. Permit fees and rent of Jungles and Priviliges	4,123	2,398	...	...	...	11,446
V. Grazing dues	...	...	...	...	...	38
VI. Sale of fruits, Babool pods and other minor Forest produce	6,360	43	4,088	...	...	19,444
VII. Sale of confiscated drift and waif timber	469	161	10	...	832	4,340
VIII. Fines and forfeitures	...	1	...	...	...	32
IX. Miscellaneous Receipts	180	190	1,041	137	...	3,782
Value of timber supplied to Department Public Works and other Public Department	734	1,279	3,917	7,885	...	92,521
Total Receipts...	65,220	20,914	17,067	24,392	832	4,49,541
Expenditure.						
I. Timber expenses for felling, cutting, clearing, sawing, and the transport of timber by land or water to depôts, also charges for storing, securing, watching, piling arrangements for selling timber	13,883	3,297	3,279	4,427	265	83,113
II. Purchase of Elephants, Cattle, Dead Stock, Tools and Plant	...	52	...	537	4	1,572
III. Feed and Keep of Elephants and Cattle	...	1,718	159	103	...	13,825
IV. Rent of leased Forests and seignorage paid for timber felled in leased Forests, shares of Villagers and others in the Revenue of Forests	...	...	...	2,479	...	7,550
V. Charges connected with the collection of revenue on grass, fruits and Miscellaneous Forest produce	296	48	5	...	...	890
VI. Plantations	1,166	1,201	10	11,435	536	47,001
(a.) Reserved tract Railway Fuel	1,464	...	...	...	...	4,623
VII. Forest work, viz., cutting of creepers protection of forests or trees against fire and other work for the Conservancy and improvement of the Forests, charges for selecting, marking and girdling of trees to be felled	...	213	...	...	465	3,209
VIII. Forest Survey, Topographical and Valuation Survey to ascertain the contents of Forests and annual rate of timber production	27	...	84	11	146	1,436
IX. Experiments to test the value of timber of different kinds.	...	...	...	6	...	57
X. Communications, buildings and minor works, fences, boundary pillars and posts and boundary paths, etc.	772	211	163	1,002	89	12,093
Total of Conservancy and Working...	17,578	6,740	3,700	20,000	1,496	1,75,370
B. Establishment.						
I. Salaries—						
1. Pay of the Inspector of Forests	...	...	...	...	...	14,600
2. Do. of the Executive Officers	1,619	4,200	3,000	3,600	...	36,451
Military pay of do.	...	...	...	...	...	7,691
Supernumeraries	...	...	...	...	...	2,800
Pay of Probationary Forest Assistants	...	...	...	...	...	5,324
Do. of Forester in charge	...	...	...	1,800	...	1,100
3. Office Establishment—	...	...	...	...	...	4,209
(a.) Direction	...	...	...	...	...	3,600
Uncovenanted Assistant	1,145	372	990	744	144	8,657
(b.) Executive	6,006	3,578	1,264	2,285	811	45,476
4. Forest Conservancy Establishment	...	...	...	930	...	3,573
5. Timber depôt and work establishment	1,080	...	...	...	...	2,765
6. Deputation and Special allowances	...	...	...	...	...	327
7. Dresser's pay and batta						
II. Travelling allowances including Travelling expenses and Tentage—						
1. Inspector of Forests	...	...	...	...	...	3,423
2. Executive Officers	2,202	1,800	1,800	2,423	...	24,792
3. Subordinate Establishment	859	573	80	5	360	6,611
III. Contingencies	247	108	158	144	46	6,325
Total Establishment and Contingencies...	13,158	10,631	7,292	11,931	1,361	1,77,814
Total of Expenditure...	30,736	17,371	10,992	31,931	2,857	3,53,184

8.—*Statement showing the particulars of Stock in hand at the commencement and close of the official year 1873-74.*

Ranges.	Teakwood.		Ebony or Black-wood.		Rosewood.		Sandalwood.		Red saunder roots or posts.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11
	C. Ft.	Rs. A. P.	C. Ft.	Rs. A. P.	C. Ft.	Rs. A. P.	Mds.	Rs. A. P.	C. Ft. Mds.	Rs. A. P.
Gunnur and Suradah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Golcondah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuddapah	.....	.....	.....	.....	.....	.....	.....	.....	mds. 19,328	2,296 6 3
Bellary	.....	.....	.....	.....	.....	.....	.....	.....	cubic ft. 1,453	981 12 0
Kurnool	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
North Arcot	.....	.....	.....	.....	.....	.....	.....	.....	mds. 3,136	682 12 0
South Arcot	.....	.....	.....	.....	.....	.....	.....	.....	cubic ft. 530	530 0 0
Trichinopoly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madura	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Tinnevelly	.....	.....	.....	.....	17,938	22,042 0 0	1,256	2,197 14 0	.....	.....
Anamalay	.....	.....	.....	637 4 6	.....	.....	1,347	2,021 4 3	.....	.....
Bhowany	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Collegal	.....	.....	.....	82 4 0	.....	.....	7	10 14 0	.....	.....
Metupoliom	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sathiamungalum	.....	.....	.....	94 2 0	1,552	1,326 12 11	.....	.....	.....	.....
Bolumputty	.....	.....	.....	.....	.....	.....	1,559	4,996 15 0	.....	.....
Mudumalay	.....	.....	.....	297 4 6	.....	.....	.....	.....	.....	.....
Sigur	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Salem	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
South Canara	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wynaad	.....	.....	.....	.....	698	1,168 12 0	.....	.....	.....	.....
Nelambur	.....	.....	.....	1,110 15 0	20,178	24,539 8 11	4,169	9,226 15 3	mds. 22,464	4,490 14 3
Cheenat Nair	.....	.....	.....	.....	.....	.....	.....	.....	cubic ft. 1,983	.....
Total...	2,21,194	2,76,309 12 6	.....	1,322	.....	.....	.....	.....	.....	.....

8.—*Statement showing the particulars of Stock in hand at the commencement and close of the official year* 1873-74.—(Continued)

Ranges.	Other Junglewood used as Timber.		Bamboos.		Railway Fuel.		Forest produce.		Saplings.		Total.
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	12	13	14	15	16	17	18	19	20	21	22
	C FT.	RS. A. P.	NO.	RS. A. P.	TONS.	RS. A. P.	MDS.	RS. A. P.	NO.	RS. A. P.	RS. A. P.
Gumsur and Suradah	3,825	810 8 0	.....	.....	.....	.....	.....	.....	.....	.....	810 8 0
Golcondah	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cuddapah	1,038	986 13 7	.....	.....	.....	.....	.....	.....	.....	.....	4,264 15 10
Bellary	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kurnool	488	486 4 0	.....	.....	.....	.....	.....	.....	.....	.....	486 4 0
North Arcot	257	172 0 0	.....	.....	.....	.....	.....	.....	.....	.....	1,384 12 0
South Arcot	1,002	740 4 5 331 9 11	.....	.....	6	36 14 0	147	119 10 3	.....	.....	1,228 6 7
Trichinopoly	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Madura	13,912	14,814 6 8	.....	.....	.....	.....	.....	.....	.....	.....	15,858 14 9
Tinnevelly	8,923	12,676 0 5	.....	.....	.....	.....	.....	.....	.....	.....	12,676 0 5
Anamallay	831	463 0 0	.....	.....	.....	.....	.....	.....	.....	.....	1,62,261 1 6
Bhowany	.....	.....	.....	.....	1,402	4,206 12 0	.....	.....	.....	.....	6,404 10 0
Collegal	1,847	923 9 0	.....	.....	.....	.....	.....	.....	.....	.....	3,080 13 3
Metapolliem	.....	.....	.....	.....	100	300 0 0	.....	.....	.....	.....	300 0 0
Sathiamungalum	717	358 10 0	.....	.....	.....	.....	.....	.....	.....	.....	482 4 0
Bolumputty	2,887	1,327 12 4	.....	.....	.....	.....	.....	.....	.....	.....	4,598 14 3
Madumallay	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1,05,693 9 4
Sigur	4,193	1,717 9 11	.....	.....	.....	.....	.....	.....	.....	.....	3,535 14 5
Salem	3,078	2,280 4 9	.....	.....	.....	.....	.....	.....	.....	.....	7,277 3 9
South Canara	56,926	31,117 3 6 8 13 6	24,300	1,004 9 4	.....	.....	.....	.....	.....	.....	32,130 10 4
Wynaad	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19,514 7 1
Nelumbur	7,033	1,772 0 9	.....	.....	.....	.....	.....	.....	8,724	5,952 8 0	15,027 4 9
Chenat Nair	552	182 8 0	.....	.....	.....	.....	.....	.....	.....	.....	1,351 4 0
Total	1,07,454	71,169 6 9	24,300	1,004 9 4	1,508	4,543 10 0	147	119 10 3	.....	5,952 8 0	3,98,367 14 3
Add increase in the valuation of timber											26,367 1 9
Add valuation of timber felled as per Statement No. I.											1,47,589 0 0
Total Stock											5,72,424 0 0
Deduct total valuation of timber, etc., sold during the year											1,87,522 0 0
Wastage											10,638 0 0
Balance of stock at the close of the year 1873-74											3,74,264 0 0

FOREST No. 235A.

Proceedings of the Board of Revenue, dated 8th December 1874, No. 3,551.

Read the following letters:—

From the Officiating Inspector of Forests, dated 24th April 1874, No. 33.
" the Collector of Ganjam, dated 26th Sept. 1874, No. 1,945.
" " of " " 2nd Oct. " " 1,996.
" the Principal Assistant Collector of Vizagapatam, dated 12th May 1874, No. 719.
" the Collector of Cuddapah, dated 30th Sept. 1874, No. 226.
" " of Bellary, " 20th May " " 160.
" " of Kurnool, " 2nd Sept. " " 341.
" " of North Arcot, " 26th " " " 499.
" " of South Arcot, " 6th Aug. " " 407.
" " of Trichinopoly, " 22nd Sept. " " 234.
" " of Madura, " 6th July " " 193A.
" " of Tinnevelly, " 19th Aug. " " 411.
" " of Coimbatore, " 18th July " " 169.
" Commissioner of the Nilgiris, " 24th June " " 53.
" Collector of Salem, " 11th " " " 238.
" " of South Canara, " 19th Sept. " " 1,896.
" " of Malabar, " 9th " " " 217.

The Board resolve to submit to Government the Annual Report of the Forest Department for 1873-74.

2. The subject will as usual be treated under the following sections:—

Section I.—Inspection-tours of the Inspector of Forests.

Section II.—Reserves.

A.—Reserved Forests.

B.—Fuel Reserves.

C.—Plantations.

Section III.—Forests worked under the license and voucher system.

Section IV.—Yield of forests.

Section V.—Financial results.

Section VI.—General remarks.

3. Section I.—Colonel Beddome visited the Anamallay Range in June, and proceeded thence to Madura and Tinnevelly, returning to his head-quarters at the end of July. In September he visited Coimbatore and Madras, and in October and November, inspected Wynaad and South Canara.

4. From the 15th November to the 14th December, he was in the North Canara Forests and at Bombay, visiting the dockyards, etc., in accordance with G. O., No. 1,087 of 10th October 1873. In the latter part of December, he visited the Ghooty and Cuddapah Plantations.

5. On the 16th January 1874, he proceeded to Coimbatore and Madras, and he left the Presidency on furlough for two years on the 2nd February 1874.

6. From the 3rd to the 6th February, Captain Campbell Walker who had taken charge of the Office of Inspector on Colonel Beddome's departure was at Coimbatore, and he proceeded thence to Salem and Madras, where he arrived on the 10th and remained till the 26th, consulting with the Board and making himself acquainted with general arrangements. He then proceeded on a tour in the South Arcot District, and subsequently visited Trichinopoly and Coimbatore, returning to head-quarters on the 19th March.

7. It will be thus seen that out of twenty-three Forest Ranges, comprising fifteen Revenue Districts, ten were visited. Those not visited were Gumsur and Suradah, Golcondah, Kurnool, North Arcot, Bhowany, Collegal, Sathiamungalum, Mudumallai, Sigur, Mettapoliem, Bolumputty, Sholacarray, Nellumboor and Chennat Nair (Palghaut).

8. SECTION II.-A.—*Reserved Forests.*—The Board endeavored in vain to ascertain the superficial area of the forests in which timber is felled by departmental agency. In the first place, forests are not strictly reserved in all the districts for departmental felling, the same tract being in several cases worked as regards some trees by departmental agency, and as regards other trees by the license and voucher system, and even where tracts are set apart for one system or the other, it has been difficult to estimate their area with any accuracy. The accompanying Statements Nos. 1 and 2 show the timber, etc., felled and sold by departmental agency during the year under report, and subjoined is an abstract thereof in comparsion with the results of the preceding year. The Board regret that they are not able to give a uniform standard measure for each of the descriptions of timber, etc., as directed by Government in their Order, dated 27th July 1874, No. 133; but the instructions will be attended to next year.

—	TIMBER, &c., FELLED				TIMBER, &c., SOLD.			
	Quantity.		Value.		Quantity.		Amount realized.	
	1872-73.	1873-74.	1872-73.	1873-74.	1872-73.	1873-74.	1872-73.	1873-74.
1	2	3	4	5	6	7	8	9
			Rs.	Rs.			Rs.	Rs.
Teak in ... ... C. ft.	19,466	49,994	11,842	36,159	42,421	83,345	78,788	1,13,321
Ebony or blackwood. do.	3,745	708	2,819	554	598	871	697	403
Rosewood ... ... do.	6,462	10,853	3,776	16,915	Not given.	8,651	886	24,393
Sandalwood in ... Mds.	15,329	14,321	29,491	26,254	17,228	12,758	57,637	44,660
Red Sander roots or posts. C. ft. / Mds.	4,082 / 83,447	19,872 / 77,440	13,252	12,220	593 / 24,071	2,183 / 306	23,947	1,870
Other Junglewood used as timber in- C. ft.	34,634	54,106	19,662	24,111	38,871	29,719	26,242	24,695
Bamboos ... ... No.	16,900	No. 400 / Bdy. loads 1,443	430	7,648	54,366	28,915	3,188	9,595
Railway fuel and firewood. Tons.	120	1,783	360	2,653	586 / Bdy. loads 126	1,006 / Bdy. loads. 204	3,765	6,465
Saplings ... ...Loga.	531	44,750	398	20,818	11,229	14,495	7,379	11,294
Forest produce ... Mds.	365	297	794	357	160	391	660	4,502
Total...	.....	.....	82,874	1,47,689	.....	.....	2,02,619	2,40,401

9. From the above it will be observed that there has been an increase both in timber felled and in timber sold. The variations in the several forests are shown below :—

		Felling. Rs.		Sales. Rs.
Gumsur...	+	58	—	2
Kurnool	+	801	+	515
Cuddapah	—	2,196	—	20,064
North Arcot	+	1,497	—	2,716
South Arcot	+	121	—	144
Trichinopoly	+	625		.....
Madura	—	1,560	+	3,197
Tinnevelly	—	443	—	2,151
Anamallay	+	22,057	+	55,336
Bhowany	—	3,719	—	8,379
Collegal	—	1,010	—	1,620
Sathiamungalum ...	+	1,922	—	4,772
Mettapolliem	—	200		.....
Bolumputty		.....	+	2,378
Sigur	+	2,085	+	2,004
Mudumallai	+	3,286	—	4,141
Salem	+	7,582	+	14,132
South Canara... ...	—	10,825	+	3,523
Wynaad	+	1,818	—	5,632
Nelambur	+	43,499	+	7,158
Chennat Nair... ...	—	583	—	841
Total increase...		85,351		88,243
Total decrease...		20,536		50,462
Net...		64,815		37,781

10. The felling operations are generally proportioned to the stock on hand. As regards the sales, the variations are conspicuous in the forests of Cuddapah, Anamallay, Bhowany, Salem, Wynaad and Nelambur. The large decrease in Cuddapah is due to a great fall in the demand for redwood posts and stumps; that in Wynaad to the defective working of the contractor, of which the Collector has no doubt taken due notice, and that in Bhowany to the curtailment of the Budget and the consequent small progress made in felling sandalwood, and to the non-payment within the year of the price of certain timber supplied to the railway. The increase in Anamallay is owing to a large supply of rosewood to the Gun Carriage Factory, and in Salem to the establishment of depôts for the sale of bamboos, etc., and to the high prices realized by Atcha logs felled on the banks of the Cauvery. In Nelambur, the increase is due to larger sales of saplings from the plantations. The variations in the other ranges are comparatively small and call for no remark.

11. *Fuel Reserves.*—The accompanying Statement No. 3 shows the area of each reserve, the amount expended on it, and the receipts obtained therefrom up to date.

12. The following is its abstract :—

No.	Ranges.	Area in acres.	Charges.		Receipts.	
			During the year.	Up to the end of the year.	During the year.	Up to the end of the year.
			Rs.	Rs.	Rs.	Rs.
1	Cuddapah	9,230	444	3,319	...	...
2	North Arcot	6,400	200	2,546	...	...
3	South Arcot...	34,750	2,674	6,526	341	349
4	Trichinopoly	258	829	2,330	1,067	1,067
5	Madura	*15,080	428	1,502	...	...
6	Tinnevelly	4,596	1,204	3,192	104	104
7	Anamallay	Particulars not given				
8	Mettapoliem	12,160	302	2,060	...	...
9	Bolumputty	1,010	753	10,976	20	20
10	Salem	13,764	1,867	14,576	89	109
11	Palghaut	1,712	532	532	...	...
	Total...	98,960	9,233	47,559	†1,621	1,649

* This does not include the area of the Sirumallai Reserve.

† It is not known how much of this is from the Railway. Collectors have been requested to give the information next year as required by Government in paragraph 4 of their Order, dated 29th April 1874, No. 503.

13. *Cuddapah.*—There are five Railway Fuel Reserves, comprising 9,230 Acres (in 1872-73 there were three comprising 4,133 Acres), and it is said that they are eminently successful, but that more are wanted. Each finished reserve has a nursery, and open spaces are planted from the nurseries or sown with the seed of useful trees.

14. *North Arcot.*—The Mamundoor Railway Fuel Reserve (2,560 Acres) continued to improve. The question whether the proposed Amboor Reserve (3,840 Acres) should be established is still under the consideration of Government.

15. *South Arcot.*—A detailed and interesting description is given by Mr. Wooldridge of the twelve reserves, with regard to which the Board have recently submitted a report to Government, and he seems to make out his case for the necessity of a second or Sub-Forester. The Inspector of Forests will give this point due consideration in preparing his proposals for a revision of establishments.

16. It is reported that a fire occurred on the southern slopes of Tenmallai for the first time since 1869, but no estimate is given of the damage that occurred.

17. *Trichinopoly.*—There are two fuel-reserves, one of which Lalapettai was called a plantation in the reports for 1871-72 and 1872-73, but it seems properly speaking to be a reserve.

18. *Madura.*—The fuel reserve at Punjathanghy Mallai (1,000 Acres) was being fenced. A large portion of Sirumallai and a tract of 16 square miles in Allaghiricovil Mallai were kept as open reserves. A fenced reserve of 6 square miles, Shengadagavundum Mallai was kept untouched; thirty-three Acres out of 135 set apart for a railway fuel-plantation at Sathengadu were sown with babool and other seeds.

19. *Tinnevelly.*—The thorn jungles along the line of railway are successful. They comprise 4,596 Acres of tank-bed, but Mr. Hayne calculates that 25 per cent. of this must be deducted for area covered by standing water. A lac of trees, two of which fill a cart are ready to be cut. Mr. Hayne thinks that Mr. Theobald, a forester, who is now employed on the Anamallays, paid too little attention to mere fuel reserves and too much to Jungle Conservancy; but Mr. Puckle speaks highly of Mr. Theobald, and says the thorn jungles require very little attention. A square mile of country covered with the umbrella thorn has been reserved near Tuticorin.

20. *Anamallay.*—A fuel-reserve, which promises to be most useful, has been established on a piece of ground long disputed between Coimbatore and Malabar, which has been finally assigned to Coimbatore. Mr. Douglas considers that it must be fenced, and that the fencing will be very expensive, especially if a right of way from the Numbudri Forest through the middle of the reserve is allowed. The Collector talks of making it an open reserve, and this is approved by the Inspector of Forests.

21. *Mettapoliem.*—There are three fuel-reserves in Mettapoliem. The M. Reserve contains 5 square miles and is protected by hills on one side. The H. Reserve contains 8 square miles and is protected by the river Bhowany on one side. The K. Reserve contains 6 square miles. The boundaries of all these reserves require to be rectified, and the fencing to be renewed or completed before they can become reserves in fact.

22. *Salem.*—The nine fuel-reserves which comprise about 13,764 Acres were carefully attended to, but the long-continued drought prevented much progress being made. There was an accidental fire confined to the clumps of bamboos which had seeded and dried up on the Pellaputty Reserve.

23. *South Canara.*—There are no fuel-reserves in the district yet, but there should be some, and the Board hope that the next administration report will show that considerable progress has been made in this direction.

24. Section III.—*Plantations.*—The accompanying Statement No. 4 shows the extent of plantations in each range, the number and description of trees contained

Ranges.	Description of Trees.	Number of plantations.	Area in Acres.	Cost.		Receipts.	
				During the year.	Up to the end of the year.	During the year.	Up to the end of the year.
				Rs.	Rs.	Rs.	Rs.
Gumsur and Surada	Teak	1	3½	36	165	...	...
Cuddapah	Babool, Albizzia Lebbeck	5	1,728	2,671	37,105	...	...
Bellary	Babool, Melia Azaderacta	1	405	563	9,115	...	...
Kurnool	Teak and Mango	2	15½	479	1,464	...	...
North Arcot	Casuarina, Babool, etc.	9	1,345	5,568	25,947	369	369
South Arcot	Do. Satin, etc.	3	17	146	460	...	...
Trichinopoly	Do. Babool, etc.	5	422	5,333	12,288	952	1,352
Madura	Eucalyptus, Teak, etc.	4	50	975	3,946	...	...
Anamallay	Teak	2	16	1,655	2,598	...	...
Sathiamungalum	Sandalwood and Anatti	1	65	1,633	10,797	...	...
Collegal	Sandalwood	1	56	2,975	11,509	...	...
Bhowany	Firewood	1	Sq. yds. 64	234	608	...	...
Mudumallai	Sandalwood and Teak	5	18	533	3,985	...	...
Salem	Teak	2	70	2,405	17,929	...	...
Seegur	Sandalwood	1	14	1,386	3,468	...	...
South Canara	Teak	1	75	699	6,421	...	...
Nelambur	Teak and blackwood	1	2,990	21,954	2,00,118	11,280	94,250
Palghaut	Teak Tamarind	2	181	486	3,847	...	...
	Acres	...	7,471	...	...	...	...
	Square miles	...	64	49,731	3,51,770	12,601	95,971

in them, and the cost and receipts during the year and up to date. The following is an abstract :—

25. The above statement has been prepared from the figures given by the Collectors.

26. With the exception of the Collector of Malabar, Collectors do not appear to have taken into account the proportionate general establishment charges debitable to Plantations, and in some cases the figures now given by the Collectors slightly differ from those entered in the monthly returns. It is important that there should be a separate account of receipts and charges prepared as accurately as possible for each plantation. The Officiating Inspector of Forests will be requested to examine the correctness of the plantation and fuel-reserve statements annexed to this report in his next official tour, and after examination submit a statement showing the annual cost per Acre of each plantation, including the proportionate general establishment charges.

27. He will consider and report how the latter should be apportioned on fuel-reserves and plantations, on departmental working, and on working under the license system.

28. The only method which occurs to the Board is to distribute establishment according to —

(1.) Sale-proceeds of timber felled, etc., departmentally.
(2.) Receipts under the license and voucher system.
(3.) The sum spent during the year on plantations and fuel-reserves.

29. He should also add columns to the statements to show the probable future expenditure necessary for each of the plantations and reserves, and the probable yield per annum, and the number of years within which the yield is likely to commence.

30. The Board will now notice the plantations of each district separately.

31. *Gumsur and Surudah.*—There is a small experimental teak plantation comprising 2½ Acres, and containing 160 teak trees, besides 120 of other sorts. In the dry weather, water has to be brought from a place a mile away. The Board are inclined to think the plantation must be simply useless.

32. *Cuddapah.*—There are five plantations comprising 1,728 Acres, one of them as an experimental Red Saunders wood-plantation at Coodur, which is thriving and contains 21,438 established plants. The Collector says he cannot understand what experiment was to be tried, as it was well known that that Red Saunders wood would grow there. The experiment, however, is meant to show whether Red Saunders wood can be grown at a profit artificially. Colonel Beddome believes that the plantation will be very remunerative. The four fuel-plantations were attended to, as well as they could be, with reduced allotments. The Collector again expresses his opinion that they are expensive and will be comparatively useless. He has been authorized to work by broadcast sowing instead of planting, and expenditure is being reduced to a minimum.

33. *Bellary—Giwoty Plantation.*—The great want in this district is water, and to meet this want, seven wells have been cleared and deepened. There are 62,000 plants established, but the history of the plantation reveals a continual struggle with an uncongenial soil and climate.

34. *Kurnool.*—The Wonkaram Plantation is again reported to be a great failure. Much of the soil is poor. The growth of trees is extremely slow. It is twelve miles from head-quarters. Expenditure has increased. The trees which have been fairly established already cost Rupees 2 each. The Inspector has been asked to give his opinion as to abandoning the plantation, but has deferred doing so till he visits the district. Unless the visit is likely to take place soon, the Board think it desirable that his opinion should be given at once. There is an appreciable expenditure, and it seems to be thrown away. The Muttikonda teak-plantation was successful so far as it went, and there was no expenditure on it, but it is very small.

35. *North Arcot.*—The nine fuel-plantations comprising about 1,345 Acres, and containing about 470,000 casuarinas, suffered severely from the drought, but continue to be successful. Receipts accrued for the first time and amounted to Rupees 369.

36. *South Arcot.*—The three plantations are very unimportant. It would be interesting to know the results of the experimental plantations of different sorts of trees at Chengum. The plantation at Trinomalai contains only 246 trees, and hardly deserves the name. The Chengum anicut plantation seems to be a great failure, and the Board doubt the expediency of keeping it up for Purasu trees.

37. *Trichinopoly.*—Operations such as clearing, planting, sowing, weeding, and improving wells, etc., were carried on vigorously in the plantations, but the season was so unusually hot and dry that the number of casualties and the expense of watering were great.

38. The Deputy-Conservator says "two hills close to the southern extension of the G. S. I. Railway, an open plain of 200 Acres near Trichinopoly, the Cauvery padugu measuring about 63 Acres at Kristnaroyapuram, two breached tanks about two miles from the same, measuring about 122 Acres, and the padugus on the northern bank of the Coleroon in the Udeiyarpoliem Taluq, measuring about 1,800 Acres, were recently made over" to the Forest Department on his requisition.

39. *Madura.*—The teak plantation at Vunnathiparai (5½ Acres unfenced) progressed. Acacia and Eucalyptus seedlings were transplanted at Kodikanel in tracts fenced and drained comprising 10 Acres. The Collector seems to be right in proposing not to extend this plantation. No new planting was carried out at the Palani Plantation (2¾ Acres), but it contains 2,112 teak trees.

40. *Anamallay.*—There were heavy casualties in the teak plantation at Moodi and Toonacadavoo. They cannot be compared with the plantations at Nelumbur, but it is suggested that slower growth may produce better timber. Mr. Douglas seems to anticipate improvement in the future. The Board observe that the Inspector has recommended that there should be no further extension of teak planting where there are indigenous forests in which it can be reproduced.

41. *Sathiamangalem.*—The plantation where there is a great deal of sandalwood and a few Anatti plants is thriving.

42. *Collegal.*—Active progress was made with the Bylore sandalwood plantation. Altogether 56 Acres are planted with 38,000 plants, and 10 Acres more are ready for planting. An anicut and channel, which will reduce the cost of watering were being made.

43. *Bhowany.*—An experimental fuel-plantation was kept up, and is in a flourishing condition. A substantial well was dug.

44. *Sigur.*—The new sandalwood plantation at Sigur, which already contains 14,000 plants, flourished. Seven Acres were cleared and ready for planting.

45. *Mudumallai.*—There is a flourishing teak-plantation at Benni, which is to be rapidly extended, and another, not so fortunate, at Mudumallai. Altogether 70,000 trees are planted out, and 10 Acres are cleared and ready for planting. Colonel Morgan attaches great importance to this part of his work.

46. *Salem.*—The plantation at Putchoor has been abandoned, and that at Yelagiri, a most unhealthy place, seems to be a failure. The Kanaganavasoondrum Plantation which only contains 3 Acres at present, but which will be extended, was successful, and so was the experiment in growing sandalwood plants, which is being conducted in the compound of the office at Denkincottah. The little garden on the Shervaroys was in the same condition as in former years, but it is not given up, because the gardener is a forest watcher whose services could not be dispensed with.

47. *South Canara.*—Work seems to have been carried on actively in what is called the Parapa Plantation which is rather a reboisement than a plantation Teak planting was extended, undergrowth and inferior trees were cleared out, and good trees were pruned. Work was also done at the Hospett Plantation, but no details are given. Casurina planting on the beach south of Mangalore failed, and the Collector attributes the failure to neglect, though the Deputy-Conservator holds an entirely different opinion.

48. *Palghaut.*—A little planting was done in the Nochipully and Puleampully forest plantations (181 Acres) which the Collector proposes not to plant further. Fire traces were opened through them.

49. *Nelumbur.*—This range consists of some 35,000 Acres of natural forest, through a great part of which it is intended to plant teak, and of 2,990 Acres actually planted. The Deputy-Conservator gives an interesting description of he tract which he divides into ten blocks. Most of the natural forest requirest long rest. Work was vigorously p rosecuted. 128,000 teak seedlings were planted out, and this is in excess of the standard number, though less than the number planted out in 1872-73 by 107,000. The receipts and charges both increased. The number of saplings felled and collected was nearly half as large again as in 1872-73, and the Collector observes that this is satisfactory, as the proceeds are a direct return from the plantations obtained by judicious thinning. The seigniorage due for four years was paid in a lump. The cost of weeding the large extent of land planted out in 1872-73 was great. The Probationary Assistant added to the cost.

50. As the Collector distributes the cost of establishment, there was an excess of expenditure over receipts of Rupees 6,660 in the existing plantation, an expendi-

ture of Rupees 3,840 in extending them by 128 Acres, and an excess of receipts over expenditure of Rupees 3,890 in working the natural forest.

51. Section III.—*Forests worked under the Licence and Voucher System.*—Statement No. 5 shows the collections in each forest under this head, and the following is an abstract of it in comparison with the results of the preceding years:—

Description of Timber, etc.	Measurement.	Quantity.		Amount realized.	
		1872-73.	1873-74.	1872-73.	1873-74.
				Rs.	Rs.
Teak	Cubic feet.	56,209	5,080	5,183	1,270
Ebony or blackwood	Cubic feet.	261	200	85	50
Rosewood	Cubic feet.	240	80	60	20
Junglewood	Cubic feet.	472,876	602,681	58,541	59,518
Firewood	Tons.	35,990 c. l. 4,673	38,139	79,510	74,698
Charcoal	Tons.	935 c. l. 27,664	4,938	5,091	9,202
Bamboos	C. loads.	45,080 No. 205,100	40,228 No. 193,700	27,848	28,863
Palmyras	No.	74	14	147	28
Forest produce	Maunds.	59,383	25,751	2,535	9,261
	Total...	...	...	1,79,000	1,82,910

52. Section IV.—*Yield of Forests.*—The accompanying Statement No. 6 shows the total yield of each forest, *i. e.*, the quantity of timber, etc., sold or removed free of payment; and subjoined is an abstract thereof:—

Description of timber, etc.	Quantity removed by Departmental Working.		Quantity removed on Licenses.		Quantity removed on Free Pass.	
	1872-73.	1873-74.	1872-73.	1873-74.	1872-73.	1873-74.
Timber ... Cubic feet.	68,588	116,633	529,586	608,041	93,446	413,547
Timber ... Maunds ...	97,776	110,661				Logs. 2,385
Firewood... Tons ...	120	1,783	35,990 c. l. 4,673	36,142	970	86,422
Bamboos... Cart loads.	No. 16,000	1,443 No. 400	45,080 No. 205,100	40,228 No. 193,700	2,302	5,150
Charcoal ... Tons ...	...	...	935 c. l. 27,664	4,938	...	...
Forest produce. Maunds ..	365	297	59,383 c. l. 84	58,871	...	...
Palmyras... No. ...	...	...	74	14	...	...

53. The large increase in the aggregate taken is chiefly due to the greater accuracy of the present returns with regard to the timber, etc., removed free of payment.

54. Section V.—*Financial Results.*—The accompanying Statement No. 7 shows the receipts and charges during the year, and the following is an abstract:—

Head.	Receipts.	Amount.	Head.	Charges.	Amount.
		Rs.			Rs.
I.	Sale of timber, etc., removed by Government agency.	2,27,679	1.	Timber expenses for felling, etc.	83,113
II.	Proceeds from do. removed on license.	1,82,780	II.	Purchase of tools	1,572
III.	Duty on foreign timber.	...	III.	Feed and keep of cattle, etc.	13,825
IV.	Permit fees	11,446	IV.	Rent of leased forests ...	7,550
V.	Grazing dues	38	V.	Charges connected with the collection of revenue on grass, etc.	890
VI.	Sale of fruits, babul pods, etc.	19,444	VI.	Plantations	47,002
VII.	Sale of confiscated timber	4,340	VI(a).	Railway fuel Plantations...	4,623
VIII.	Fines and forfeitures ...	32	VII.	Forest work, cutting of creepers, etc....	3,209
IX.	Miscellaneous receipts ...	3,782	VIII.	Forests Survey...	1,436
			IX.	Experiments to test the value of timber, etc.	57
			X.	Communications	12,093
				Total...	1,75,370
				Establishment and Office contingencies.	1,77,814
	Total...	4,49,541		Grand Total...	3,53,184

55. Excluding the receipts (14,222) and the cost (69,915) of plantations and fuel reserves, most of which have not yet commenced to pay, the transactions of the year show a working profit of Rupees 1,52,050, which seems to the Board very satisfactory.

56. The Collectors have not shown the estimated profits derived by working departmentally, as compared with those by working under the license and voucher system, as required by paragraph 27 of the Board's Administration Report for 1872-73.

57. The Board however estimate it as follows, apportioning the cost of the general establishment on the principle suggested in paragraph 28 *supra*.

Receipts.	Rs.	*Charges.*	Rs.
1. From the departmental working exclusive of the receipts from Plantations and reserves	2,26,180	Working charges...	1,23,278
		Establishment	82,665
		Total...	2,05,943
2. From Plantations and reserves ...	14,222	*Working charges...	51,202
		Establishment	18,713
		Total ..	69,915
3. From working under the License system	1,82,910	Establishment	66,850
		Other charges	890
		Total...	67,740
4. Miscellaneous...	26,229	Establishment	9,586
Total ..	4,49,541	Total...	3,53,184

*Exclusive of Rupees 7,762 debited by the Collector of Malabar on account of establishments.

58. The Board are not quite certain whether the above apportionment of establishment charges is quite correct, and the Inspector of Forests will be requested to offer his opinion on the matter.

59. The total income and cost in each forest is shown below :—

Ranges.	Working charges.	Establishment and contingencies.	Total cost	Receipts.	Difference.	Add or deduct the increase or decrease of stock.	Net results.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Gumsur and Suradah ...	464	2,574	3,038	2,876	— 162	— 27	— 189
Golcondah...	...	488	488	325	— 163	...	— 163
Cuddapah	11,912	8,675	20,587	52,657	+ 32,070	+ 7,753	+ 39,823
Bellary...	303	336	639	...	— 639	...	— 639
Kurnool	2,660	8,406	11,066	31,854	+ 20,789	— 369	+ 20,420
North Arcot	7,962	10,218	18,180	16,899	— 1,281	+ 1,452	+ 171
South Arcot	3,823	6,351	9,974	5,669	— 4,305	— 357	— 4,702
Trichinopoly	6,769	3,268	10,037	1,227	— 8,810	+ 625	— 8,185
Madura	11,020	9,658	20,678	18,977	— 1,701	+ 657	— 1,044
Tinnevelly...	2,803	10,250	13,053	18,978	+ 5,925	— 1,171	+ 4,754
Anamallay...	23,599	12,282	35,881	67,825	+ 31,944	— 19,332	+ 12,612
Bhowany	15,400	3,426	18,826	18,609	— 217	+ 584	+ 367
Collegal	7,100	2,384	9,484	17,581	+ 8,097	— 417	+ 7,680
Sathiamungalam	5,000	1,928	6,928	15,904	+ 8,976	+ 1,996	+ 10,972
Mettapoliem	724	5,951	6,675	2,409	— 4,266	+ 100	— 4,166
Bolumputty	1,717	992	2,709	4,598	+ 1,889	— 2,076	— 187
Mudumallai	22,300	17,129	39,429	41,823	+ 2,394	— 29,181	— 26,787
Sigur...	2,500	300	2,800	2,194	— 606	+ 1,142	+ 536
Salem...	17,578	13,158	30,736	65,220	+ 34,484	— 561	+ 33,923
South Canara	6,740	10,631	17,371	20,914	+ 3,542	— 5,020	— 1,478
Wynaad	8,760	7,293	16,993	17,067	+ 6,075	— 812	+ 5,263
Nelambur	20,660	11,931	31,931	24,392	— 7,539	+ 20,662	+ 13,123
Chennat Nair	1,496	1,361	2,857	832	— 2,025	+ 219	— 1,806
Central Office	...	28,825	28,825	771	— 28,054	...	— 28,054
Total...	1,75,370	1,77,814	3,53,184	4,49,541	+ 96,357	— 24,104	+ 72,253

60. The stock on hand at the commencement and close of the year is shown in the Statement No. 8. An abstract is given below :—

Ranges.	At the commencement of the year.	At the close of the year.	Difference. In favor of the year.	Difference. Against the year.
	Rs.	Rs.	Rs.	Rs.
Gumsur and Suradah...	811	784	...	27
Golcondah	...	...	...	...
Cuddapah	4,265	12,018	7,753	...
Bellary	...	...	...	...
Kurnool	486	126	...	360
North Arcot	1,385	2,837	1,452	...
South Arcot	1,228	891	...	337
Trichinopoly...	...	625	625	...
Madura...	15,859	16,516	657	...
Tinnevelly	12,676	11,505	...	1,171
Anamallay	1,62,261	1,42,929	...	19,332
Bhowany	6,405	6,989	584	...
Collegal	3,081	2,664	...	417
Sathiamungalum	482	2,478	1,996	...
Mettapoliem	300	400	100	...
Bolumputty...	4,599	2,523	...	2,076
Mudumallai	1,05,694	76,513	...	29,181
Sigur	3,536	4,678	1,142	...
Salem...	7,277	6,716	...	561
South Canara	32,131	27,111	...	5,020
Wynaad...	19,514	18,702	...	812
Nelambur	15,027	35,689	20,662	...
Chennat Nair	1,351	1,570	219	...
Total assets...	3,98,368	3,74,264	35,190	59,294
Add increase in the valuation of timber	26,367	...	...	...
Add valuation of timber felled as per Statement I.	1,47,689	...	...	...
Total stock...	5,72,424	...	...	...
Deduct total valuation of timber, etc., sold during the year	1,87,522	...	...	...
Wastage...	10,638	...	...	...
Balance of stock at the close of the year 1873-74...	3,74,264	...	...	...

61. From the above it will be observed that the stock on hand is but slightly less than at the commencement of the year.

62. *General Remarks—Ganjam.*—In Ganjam, the Gumsur and Suradah Forests are under conservancy. The quantity of departmental felling is small. Most of the wood cut is cut under the license and voucher system.

63. As in previous years, the Government department was undersold by the Zemindars of Korada and Konata, but the Overseer in charge thinks that the forests of those Zemindaries are being rapidly denuded, and that if a few more watchmen are allowed to protect the Government Forests where they touch the Zemindaries, traders will soon be compelled to resort to the Government Forests.

64. The forests are described by the Overseers as interspersed with villages and cultivation and subject to frequent encroachment.

65. *Cuddapah.*—No forests in Cuddapah are absolutely reserved, and the local officers think that reservation is not feasible, but there are railway fuel reserves which are tracts of forest, guarded and replanted in bare spots and kept untouched to meet future demand, and Red Saunders wood is always cut departmentally. There are similar complaints to those in previous years as to the encroachments of Shrotriemdars, and the drainage caused by fires and the depredation of cowherds. The Collector has been called upon to report as to the boundary dispute with Shrotriemdars. Patches of forests containing large quantities of Red Saunders wood should certainly be fenced and absolutely reserved as he proposes.

66. In the working of the forests under the license and voucher system, the Shrotriemdars who have private forests undersell Government, and the revenue is reduced accordingly, and will continue to be reduced till their forests are denuded. The Railway Company get their wood from contractors and pay Rupee 1 out of the price of each 1,000 lbs. as seigniorage into Government Treasuries. They took 17,430 tons and paid Rupees 39,043.

67. There was a very small demand for the Red Saunders wood in depots. This was partly because Shrotriemdars were underselling Government, but it seems to have been partly owing to a disturbance in trade. In the adjoining district of North Arcot, it is observed that there was a great demand for Red Saunders wood. In 1872-73, Rupees 17,920 was realized by the sale of Red Saunders wood alone in Cuddapah Depots. In 1873-74, the total realizations from all wood in depots amounted to only Rupees 1,819. The possibility of sending wood out of the district for sale must be considered. In the meantime, the collection of Red Saunders wood has been stopped.

68. The Collector thinks that very little wood was taken by the people without payment, though as much as was taken in head-loads (which require no passes) or clandestinely as with free passes. Mr. Yarde thinks the people are using free passes more as they get to understand the system better.

69. *Bellary.*—In this district the operations of the Forest Department are confined to the railway fuel plantation at gooty.

70. *Kurnool.*—There are 300 square miles of reserves on the Nullamallais between the Nundikanama and Elgode Ghauts. The whole had been kept open for five months in 1872-73, but they have been properly conserved since September 1872. The Basarapuram Block, which contains the best forest and had been kept open during the whole of 1872-73, was closed in August 1873. The Elgode Block was thrown open for a short time to enable merchants to recover advances they had made to Wudders for felling and carting wood. The Bakkipuram Block was opened for cutting and firewood stakes, apparently because the people in the neighborhood are so circumstanced that they would cut the wood surreptitiously if they could not get it in a legitimate manner. A block outside the reserves called Kistam Chetti Palley was also opened. Mr. Boileau expresses himself in favor of the voucher and license system as compared with departmental felling. His views as to the places where depôts should be established for wood felled departmentally, and as to the possibility of floating wood down certain rivers, will of course be examined by the Inspector when he visits the district. A complete description of the blocks into which these reserves seem to be divided, indicating the number and the value of the trees contained and so forth, is much wanted.

71. The only "minor" forest product on which seigniorage is collected seems to be bark, and the amount is trifling. There is no obvious reason why this product should not be collected and sold by the Forest Department, though the levy of seigniorage is questionable. From Mr. Boileau's report it appears that the question involves considerations with regard to the Chentsuvars. The Board await the separate report promised by the Collector.

72. The purchase of Achayya's land has evidently had a great effect; but according to Mr. Boileau, there are numerous other cases in which what he calls obnoxious durkhasts" should be bought up. The Collector will report on the subject. Mr. Boileau also thinks that the grant of land in the forests to ryots should be absolutely prohibited, but this was done no doubt long ago.

73. Mr. Boileau believes that half of the revenue Government ought to get from wood cut in the forests is lost, and proposes that all officers of Government whether on the village or revenue establishment should assist the Forest Department by guarding bridges over canals and checking wood-carts. He thinks that more forest stations, a forest law, and the imposition of heavier penalties are wanted. He is further of opinion that the free passes' system works badly, that holders of free passes cut reserved as well as unreserved wood, and that the village authorities who issue the passes demand bribes in a way which prevents ryots from taking passes at all. The Collector doubts the existence of these evils, at all events to any great extent. There is one point, however, which seems to reduce the present system of checking passes to a farce. Mr. Boileau says that his peons cannot read or write and are unable to read passes, so that they cannot check them in any way. This seems to demand a remedy, and the Collector will report whether it is impossible to obtain the services of men who can read and write to some little extent as peons.

74. *North Arcot.*—There was no reserved forests in North Arcot, but under recent rulings the Tripetty Hill will probably become one.

75. All the forests were worked partly under the departmental system and partly under the license and voucher system, but it is intended to extend the former and restrict the latter. The private forests (Zemindari and other) embarrass operations. It is suggested that the list of reserved woods in North Arcot and the neighboring districts ought to be assimilated. The Inspector will be good enough to see if any change need be made.

76. Most of the firewood is taken without license in head-loads. This is contrary to the orders in force, and the Collector should endeavor to put a stop to it, as soon as he can, without causing hardship. Smuggling is still very prevalent, but perhaps less so than formerly.

77. *South Arcot.*—Operations in South Arcot seem to have suffered from a sickly season and drought, but the District Conservator was evidently most energetic.

78. His report is full of evidence, confirming the opinions expressed in Board's Proceedings, 1st September 1874, No. 2,470-150.

79. Most of the reserves and plantations ought clearly to be Imperial works. It is imperatively necessary that the whole of the district should be placed under Jungle Conservancy Rules. The practice of letting head-loads go free has had the effect the Board feared; seven bandy-loads a day are taken into Trinomalai in this way. The amount for the whole district is said to be 20,000 tons. The quantity cut on free passes is only enough for ninety families.

80. There is a gratifying increase in receipts under the license and voucher system, due to better conservancy. In South Arcot only the second-class jungle-wood and bamboos are felled under this system, and Mr. Wooldridge thinks it should be further limited to firewood and Avaram bark, but that this is impossible unless the same limit is in force in adjoining ranges. First and second-class wood is cut departmentally.

81. The three plantations are very unimportant. It would be interesting to know the results of the experimental plantation of different sorts of trees at Chengum.

82. The attention of the Collector should be directed to the reckless felling which Mr. Wooldridge asserts is going on under countenance from the Tahsildar of Tindivanam on the Pakkam Hill. If, as Mr. Wooldridge says, this tract is the only one within a moderate distance of the coast which contains trees fit for building purposes, it should be placed under the Forest Officer and carefully conserved.

83. *Madura.*—The Periacolum and Palani Forests were worked departmentally.

84. Measures to prevent the firing of jungles are said to be much required, and the Collector thinks that as fencing in such extensive tracts is impossible, he should be empowered to punish cattle-owners when fires occur, it being impossible to discover the cooly who caused the fire. This of course cannot be done without penal legislation, and the Board are disposed to think that it is impracticable to prevent fires in tracts which are not worth fencing or guarding with fire traces.

85. *Tinnevelly.*—All felling has been stopped in the forest which "clothes the heads of the streams that drain the hills between Courtallam and Papanasanam, and a path and fence are being made between this closed forest and the jungles on the lower slopes which are left to the villagers." Felling without passes is allowed in ten or twelve villages. The village jungles are controlled by Tahsildars and watched by village watchmen. The Deputy-Conservator thinks the system is a failure and has a bad opinion of the watchmen; but the Collector is satisfied, and so are the people. The operation of the system must be carefully watched to see whether the villagers are sufficiently far-sighted to prevent the jungles left to them from being denuded. North and south of the closed forest are forests in which the pass system is at work.

86. Both the Collector and the Deputy-Conservator think it of extreme importance that the Saptur Zemindar's boundary should be demarcated, but Mr. Puckle says the Zemindar cannot be forced to attend and will not show his boundary. The Board do not see why demarcation should not be forced on the Zemindar under the Boundary Act. The matter must be attended to at once, for vast tracts of forest have already been lost to the State in Tinnevelly for want of timely action in matters of this kind. The Collector will submit a special report on the subject.

87. *Trichinopoly.*—The jungles of this district are managed under the Jungle Conservancy Rules, and the Forest Department are in immediate charge only of the fuel reserves and plantations.

88. *Coimbatore.*—The Collector has been over all the forests of his district except those on the higher Anamallays, which are inaccessible; and has reported on such of them as are under conservancy.

89. Teak forests on the Anamallays are worked departmentally, but the slopes of the hills in that range are worked on the license and voucher system, which prevailed also throughout the Mettapoliem, etc., ranges and in the taluqs of Bhowany, Collegal, and Sathiamungalum under Colonel Morgan's charge except as regards sandalwood.

90. Where the license and voucher system prevails, the collections are either made through the Village Monigars, who issue the vouchers and get a commission of 5 per cent., whilst the Overseers issue the licenses, or are leased out to contractors.

91. The Collector has received no complaint with regard to free passes. The very moderate extent to which such passes are used seems to suggest that wood is often taken without passes, but few instances have come to notice.

92. The Board observe that the Collector's report would have been clearer if he had dealt with each forest range separately.

93. *Anamallay Range.*—The Government reserved forest contain about fifty and the leased forest about 30 square miles.

94. A large quantity of rosewood was felled and supplied to the Gun Carriage Factory. Much teak and other timber was secured by collecting logs lying hidden in the forest and utilizing trees which had been blown down, etc. The work was difficult, but the results were satisfactory. The best of the teak was obtained from trees abandoned after being partly cut up, which shows the need of supervising working parties carefully.

95. A great deal of dragging and slipping was done with Government elephants and a little with hired elephants. The cost per log dragged and slipped was for Government elephants Rupees 1-2-6 and Rupees 0-15-6, and for hired elephants Rupees 3-12-6 and Rupees 2-10-1.

96. The Government cart establishment, which was employed above ghaut, did work in collecting scattered logs which no contractor would have undertaken. Below the ghaut, it is cheaper to hire.

97. The greatest credit is due to the Deputy-Conservator, Mr. Douglas, and the Assistant Superintendent of Revenue Survey, Mr. Baber, for the judicious

energy shown in the demarcation and survey of part of the district boundary between Coimbatore and Malabar, and of the leased forest which is situated west of Toonacadavoo in Malabar. The Collector bears testimony to the difficulty of the work and the way in which it has been done. It is interesting to find that twenty Khadirs who placed themselves under the Deputy-Conservator in December 1872, and have worked well ever since, rendered invaluable assistance to the survey party. The work was both good and cheap. Operations began in September and continued till the middle of December.

98. The revenue derived from the reserved forest was Rupees 63,617, or Rupees 55,337 more than in 1872-73. This resulted from a settlement of accounts with Bombay, and the large sale of rosewood to the Gun Carriage Factory.

99. The programme of the year, which is given in the last report, was successfully carried out.

100. Good but inexpensive buildings were constructed six miles from Anamallay, two from the foot of the ghaut, and ten from Toonacadavoo, which will greatly facilitate supervision.

101. In the current year, well-considered experiments are being made with a view to discover the best places for depositing and selling timber, and a consignment is being sent to England at the price of Burmah Teak to determine whether a market can be found there.

102. The reports from the Collector and the Deputy-Conservator contain interesting information regarding the hill tribes in the reserved forest. The Chetties were allowed to go into it under certain restrictions, having filed a formidable set of documents supposed to represent claims against the Khadirs before the Deputy-Conservator. The Khadirs made no complaint. Some of them, as already stated, are working cheerfully and well under the Deputy-Conservator. They have been assured of their rights of ingress and egress and as to forest produce. Mr. Douglas has considered himself precluded from purchasing forest produce even when it has been offered to him.

103. The receipts under the license and voucher system in the lower slopes and less valuable forests of the range are increasing, but very slowly.

104. Mr. Douglas makes a careful comparison between the departmental and license systems. He thinks that the opinion expressed by Government that one system will be found to suit one class of forests and the other another class, summarizes all that is known of the subject at present. Great good is said to have resulted from orders issued by the Collector placing revenue and forest officials on proper terms with regard to each other, and prohibiting the alienation of jungle land for cultivation without the permission of the Collector who first consults his forest subordinates. An experiment is being tried with the view of restricting Kumari cutters from virgin forests.

105. *Sathiamungalum.*—The forest comprizes 500 square miles and is open for felling on the license and voucher system, though sandalwood and roots are worked departmentally.

106. The usual work was done in the way of felling sandalwood, digging up sandalroots, preparing and stacking in depôts, etc.

107. The sandalwood is said to be being gradually worked out, but the Board presume this only means that the mature trees are disappearing. There must be plenty of unripe trees. The tree is being grown artificially in the Tallamalai Plantation where there is a great deal of sandalwood, etc., and a few Anatti plants. It is thriving. The receipts of the forest are less than in 1872-73, but only apparently so, because of stock in hand procured from other forests which was sold in that year.

108. The right of collecting seigniorage is leased out, and the Collector *hopes* that communal rights are respected. The receipts were nearly four times what they were in 1872-73, and the Collector thinks this shows that the people were better supplied, though it may only prove greater activity on the part of the contractor. The Deputy-Conservator, Colonel Morgan, expresses an opinion that enormous loss to Government and damage to the forest is caused under the license and voucher system, and is in favor of exclusive departmental working with a depôt at Sathiamungalum, but the Collector remarks that the locality, a stretch of forest with a base of forty miles, is such that departmental working could not be economical, and that the wood under this system would be so dear, that the people would not be able buy it, and smuggling and widespread dissatisfaction will be the result.

109. *Collegal.*—This forest also comprises about 500 square miles, and is said to contain amongst other trees 5,000 teak, 3,000 blackwood, and 100,000 sandalwood. It is managed on the license and voucher system, except as regards reserved trees. The departmental system would be impossible.

110. Only sandalwood was felled, enough wood of other descriptions being in stock. It had to be carted thirty or fifty-five miles to the main depôt at Collegal. Some sandalwood and timber was sawn up.

111. Timber felled departmentally meets with no demand.

112. *Bhowany.*—This forest is about 400 square miles in extent and is estimated to contain 5,000 teak, 10,000 vengay, 20,000 achawood, and 100,000 sandalwood trees. It is managed in the same way as the Collegal Forest, but the supply of fuel to the railway is one of the most important operations.

113. Sandalwood was felled, carted thirty-five miles to the depôt at Bhowany, prepared and stacked.

114. A large quantity of fuel was cut, sawn, and stacked on contract for the railway. 1,280 tons were carted to Nerinjeepett and Cauverypuram and carried on boats to the sawing depôts. The cost of floating was enormous, owing to mismanagement by the floating Overseer, and want of supervision by Overseer Grant. The floating Overseer has been dismissed, and an arrangement has lately received the sanction of Government, which will relieve Mr. Grant from the excessive work which seems to have prevented him from supervising the floating Overseer sufficiently.

115. Owing to this failure in floating, and the small quantity of fuel delivered to the railway in consequence, and to want of funds, the management of the forest was not a financial success.

116. The right of collecting the seigniorage on firewood has been leased out for a year with the consent of the Collector.

117. *Mettapolliem and Bolumputty Ranges.*—The Deputy-Conservator, Mr. Ross, thoroughly inspected his charge in all directions. His report on the subject is submitted to Government in Board's Proceedings, dated 23rd February 1874, No. 401. He says that the Copanairy Forests disappointed him, and are valueless without a ghaut which will be expensive and far more beneficial to Rajah Arracoorchy Nair than to Government. The Sholacarray Forest has been overworked and wants rest, but a small quantity of teak is to be felled in the current year. The Bolumputty Jungles contain some valuable timber, but roads are wanted. Planting has been tried in the Walliar tract, but has not been successful, and Mr. Ross thinks it should be stopped. Some fuel was cut departmentally in the Mettapolliem Forests when under Colonel Morgan's charge, and stacked at Mettapolliem for the Railway Company without making any previous arrangement with them, and they declined to take it.

118. The license and voucher system was in force even in the Sholacarray Forest which is now allowed to rest. In Mettapolliem, the collections were leased out to contractors, but this is no longer the case.

119. *Mudumallai.*—This forest which Government have secured on a ninety-nine years' lease, and the tract in the Wynaad which is worked with it, comprise about 300 square miles, and are estimated to contain amongst other trees, 40,000 vengay and 150,000 teak. The country is almost uninhabited, and there are no free passes.

120. Felling was limited with the view of getting rid of stock, but some teak was felled, dragged by elephants, and carted to the depôts at Karkana and Tippacadoo, and sawn up.

121. A small office and store-shed were built at Ootacamund.

122. Colonel Morgan states that the Collector of Malabar ruled, whilst the forest was under his charge, that Government had no right to lease out bamboos, but that all they could do was to cut them, and then give notice to the Rajah, and if the Rajah had not removed them three months afterwards, they might then (but not before) remove them and sell them. The Board wish further information on this subject.

123. The market for timber was dull, but the stock was reduced in value from Rupees 1,05,694 to Rupees 76,513, and Colonel Morgan anticipates that it will be exhausted, *i.e.*, the Board presume the *old* stock, by the end of 1874-75.

124. *Sigur.*—This forest comprises about 70 square miles, and is estimated to contain amongst other trees, 50,000 teak and 100,000 sandalwood.

125. Sandalwood was felled and sandalroots dug and carried to the depôt and cleared and prepared for sale. A little teak was also cut.

126. The seignorage on firewood, bamboos and velam bark was leased out to contractors. All timber was worked departmentally. There were no free passes.

127. *Salem.*—The Acting Deputy-Conservator, Mr. Brougham, was as usual energetic and judicious, and the Collector bears strong testimony to his qualification as a forest officer. Overseer Mahomed Alli Sahib seems also to have done extremely well.

128. The Denkencottah and Tripatore Ranges are looked on as reserved, but the License system is adopted for bamboos, fire[illegible]d charcoal, pending the establishment of convenient depôts. There was a [illegible]emand for bamboo, and some Acha logs sold extremely well.

129. The Salem, Ahtur and Namkul Jungles were worked chiefly on the license system. Some attempts were made to introduce departmental felling, but were stopped by contractors who, with the distinct intention of stopping it, combined to get wood from Mittadars and undersell Government.

130. The Collect[illegible] deplores the delay in making the ghaut from Pennagaram to the Cauvery, which will open a new tract of forest. The questions as to the fuel supply of the railway are of the greatest importance in this district.

131. The season was most unhealthy.

132. *South Canara.*—In South Canara, the Deputy-Conservator was only on circuit for seventy-three days, and it is clear that too much writing was done, and too little forest work. The relations between the Conservator and the Deputy-Conservator were bad, and the report, like others which have been before the Board, leads them to fear that Mr. Cherry, disapproving of the recent change in Forest Administration, tried to make the worst of it and not the best. His conduct has been brought to the notice of Government in recent Proceedings, so that nothing more need be said about it here.

133. It is clearly necessary that the reserved tracts of forest between the mountains and the coast should be named and defined. Mr. Cherry calls them all reserves, but it is evident that many, if not most of them, cannot be so treated. The recent order of Government on the subject of proprietary rights in South Canara will settle the question in most cases. Little felling was done, but a large quantity of wood was carried from the forests to the coast.

134. There was a great falling off in the seigniorage on firewood, sandal farms and catechu. The decrease in firewood is said to be a consequence of the decrease in sandal-farms, and this results from the restrictions imposed on contractors to prevent reckless felling. The catechu tracts are exhausted and need rest, which must be secured by fencing and strict conservancy. The necessary orders have been issued, and the Board hope that energy will be shown in carrying them out.

135. The results of auctions of timber, etc., are said to have been satisfactory. 2,324 cubic feet of wood and 100 bamboos were supplied to the Public Works Department.

136. The financial results seem to have been very unsatisfactory. Mr. Cherry has prepared two statements, showing the results of forest work from as far back as possible, and net results from 1863-64. The statements are carefully drawn out, and Mr. Cherry's review of the results is very interesting. The Board will be glad to have the Inspector's views with regard to this part of the report.

137. The establishment evidently requires strengthening, but this will be of no use unless the Deputy-Conservator ceases to regard the Collector as an official altogether ignorant of forest matters, and belonging to an antagonistic department.

138. *Palghaut.*—This range was taken from the Deputy-Conservator of the Anamallays and placed under the Malabar authorities in July 1873. It is super-

vised by the Palghaut Tah[illegible] under the orders of the Head Assistant Collector. The forests were not w[illegible] They require rest and need not be disturbed, because there is an aban[illegible] forest belonging to private owners in the neighborhood. The only receipts [illegible]ived were from the sale of timber felled clandestinely and confiscated. A portion of the Chennat Nair Forest was surveyed. Fire traces were opened through the Walliar Reserve (1,712 Acres). A system of working has been drawn up by the Collector in consultation with the Inspector of Forests.

139. *Wynaad.*—The Deputy-Conservator, Mr. Pee[illegible]ms to have been continually on the move throughout all parts of his range, and good work was done though the difficulties arising from a defaulting cart-contractor, indeterminate boundaries, the search for large quantities of timber felled years ago and still lying in the forests, and the position of the Poolpully Temple Forests were very great. At the end of the year, two elephants were lent for forest work by the Commissariat Department, and it is hoped that they will be of the greatest use in bringing the logs which lie scattered in the forests to the cart tracks.

140. Mr. Peet thinks the stock accounts as now kept are simply fictitious and should be revised, and he strongly urges the desirability of a grant for making huts in the forests, so that officers and peons may be able to live there for some time without the certainty of getting fever. These points have no doubt attracted the Collector's attention. With regard to forest produce, Mr. Peet adds his testimony to that of most forest officers, that the forest tribes are grievously oppressed by the Chetties who deal with them.

141. *Nelamboor.*—The operations at Nelamboor have been already noticed.

(A true Extract.)

[illegible]
Secretary.

To the Acting Secretary to Government, Revenue Department,
with eight statements and a file of letters from Collectors.
" the Inspector of Forests, with do.
Copy to all Collectors in charge of Forests, with do.

Received 11th Feby

No 351

Proceedings, 8th December 1874, No. 3,551.

DECEMBER.
Forest No. 235A.

Forest Department.—Annual Report of — for 1873-74, submitted to Government with certain remarks.

Proceedings of the Madras Government, Revenue Department, 3rd March 1875.

No. 44. Read the following Proceedings of the Board of Revenue, dated 8th December 1874, No. 3,551, Forest No. 235A:—

ABSTRACT.—Submitting to Government, with certain remarks, Annual Report of the Forest Department for 1873-74.

No. 45. ORDER THEREON, 3rd March 1875, No. 351.

Forests, No. 5.

RECORDED.

2. The Board's well-drawn résumé and review of the district reports leaves nothing for the Government to notice, and their observations should receive the careful attention of the Conservators and Deputy Conservators.

(True Extract.)

(Signed) D. F. CARMICHAEL,
Secretary to Government.

To the Board of Revenue.
" the Officiating Inspector of Forests.

Exd. F. R. Bantleman.

REVENUE DEPARTMENT.

No. 498

From Bd of Rev.

Dated 8th December 1875.

FOR ORDERS.

See September Vol. pp

Govt. of India, March 1876.

REVENUE.

To

THE BOARD OF REVENUE.

&c., &c., &c.

Dated March 3rd

Read

Encl.

G. O., 3rd March 1876, No. 351.

MARCH.

Nos. 44-45.

Forest Department.—Reporting annual report of the Board of Revenue on the — for 1873-74, and desiring that their observations should receive the careful attention of the Conservator and Deputy Conservators.

FOR ORDERS.

Annual Report
of the Chief Engr
for 1875.

I have carefully
Examined this Volume
=nous reports. The Board's
admirable paraphé &
review seem to me
to leave nothing for
Government to notice
in a general way and
they have issued instruc
=tions on all points
needing further report

There has been an
increase of Revenue
& whilst it is Evident that
the Railway who should
be our principal fireword

Consumers take comparatively
little from Govt. The
observations of the Conservator of Forests
who has been their largest supplier shows
that the Competitions
Consumption of the people
is light compared with the
effect of their demand
in denuding the Country.
But the matter of Railway
work will shortly come
before Govt. in another
form.

There has been a
decrease in receipts
from Reserved Forests
and the reserves
from Fuel reserves
are as yet small

As regards accounts
in reference to Plantations
I would affirm the
views of the Board (Para 28)
and express a hope
that really profitless
works will be abandoned.
This point should engage
the Board's special attention.
The Majority. The Majority
seem most uncertain
Speculations.

There is a great
deal of difference
of opinion about the
Licence & Voucher
system. Several
forest officers would
substitute Departmental work and

c with apparently a strong
l desire of the Contractors'
ol System, but most
C of the Collectors and
W General Superintend
ls Officers are in favour
th of the Existing System
C in large unreserved
s forests. It is clear
th that the alterations
u Could not be resorted
B to without Enormous
ch increase of Establish
he ment & wholesale
fo introduction of the
Contractors System,
d the evils of which are
fo pointed out by
an Mr Chedesterton.
fo There can be now
an question that the

the more favorable
b the people.

I would simply
accept the Board's
Review & direct the
attention of Conservators
and Inspectors of Forests
to their observations.

19/2 WL

X

I concur in
this
Sol.
19/2

X The amount realised
on account of "Fuel Reserves"
since the original (Rs 6456)
I did like to see a detailed
showing the aggregate (Rs 6456)
and of these "Fuel Reserves" (including dues pursuant
X what is the object of declattlements only
maintaining them.
In the meantime we could do better
than is proposed about Fuel Reserves.

23/2