C.F. 73.

Date taken out.	For what purpose.			Initials of clerk taking the paper or of attender.	Date returned.	Initials of attender.
	Department.	C. No.	Year.			

Revenue (1894) Department.

G.O., No. 781

Confidential No. 644.

DATED 4 May 1894.

[Despatch Abstract.]

Stating that he forbears no reason to modify
the previous order on the matter of the permits in of
Mr. C. Du Pre Thornton to the Asst Conservator &c

BACK PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

FURTHER PAPERS.

G.O.	No.	Department.	Date.	G.O.	No.	Department.	Date.

No 76.

1,000—21-12-93.

Rev. 1894. Dept.

Board of Revenue

(Land Revenue),

MADRAS.

Current Number 2529

To The Secretary to Government
Revenue Department

GOVERNMENT OF MADRAS
4 APR 94
REVENUE DEPARTMENT

Recd. April 4. Encls. ft 8

Proceedings, dated 2nd April 1894,
Forest No. 435 miscellaneous

Subject.

Submitting to Govt with remarks a confidential memorial from Mr C. De Brethon-ton, D.F.O. Tinnevelly, appealing against the order postponing his promotion to the 4th grade of Deputy Conservators.

Confidential

To

His Excellency
The Governor in Council
Fort St George
Madras

The humble memorial
of Claude du Pre Thornton
Asst Conservr of Forests, 1st Grade
& District Forest Officer
Tinnevelly.

Your memorialist appeals
against the order conveyed
in para 2 of Board's Proceedings
Forest No 21 Misc. (Confidential) dated
9th January 1894, that
his promotion to the
4th grade of Deputy Con-
servatorships is post-
poned, because his
"work has not given
"satisfaction" against
the order in para 1 of
those Proceedings which
promotes Three of his junior

4.6.

1894
REVENUE DEPARTMENT.
Enclosure No 1
To Current No. 2529

to that grade; viz. Messrs Mc Intosh & Bryant & Jackson.

2. The reason given for this supersession is that "their (i.e. Messrs McCarthy & Thornton's) work has "not given satisfaction". Your memorialist would ask your Excellency to enquire into the particular error or omission which has caused the Board to be dissatisfied with his work, as nothing less than gross negligence or incompetence would justify his supersession by three of his juniors, thereby blocking his promotion for many years.

3. If your Excellency calls for the Southern Circle Conservator's inspection notes on the state of the forests in the Tinnevelly District dated 17th February 1892 & 15th November 1893, and for the Forest Administration Reports of that district for the years 1891-92 & 1892-93, during which your memorialist has been in charge, it will be seen that, while the District Forest Officer has been hampered with a large division, a colossal correspondence† and an inefficient staff, he has worked with the greatest zeal* for Government in increasing the revenue, protecting & developing the forests, selecting headlands for reservation* & keeping his subordinates up to the mark.

† Paras 20, 35 of Conservator's inspection report dated 15th Feb 1893.

* Vide para 2 of Inspection note dated 17th Feb 1892 & para 92 of note dated 15th Nov. 1893

* Do para 36

If

4. The District Forest Officer's diaries and the records mentioned above will show that he has spent 77 per cent per cent* of his time in inspection, at work from dawn till nightfall, Sundays & holidays included, frequently out all day in the sun, exposed to fever and many privations; that his district is particularly advanced in technical forest matters; such as, the localisation of fellings in Coupes† worked under the "Coppice with Standard" system, the development of the hill forests by roads & buildings,* the control of the cattle grazing* in the Reserves by a system of alternate compartments, the improvement of the breed of cattle by the introduction of half-rates for agricultural cattle,* the reclamation of sandy wastes by extensive cultural operations & artificial sand dunes,* the introduction of a wire rope tramway for transporting firewood and timber,* the detection of forest offences* has improved three-fold, while crime has been reduced by better supervision & by a convenient arrangement of firewood Coupes & grazing compartments; the demarcation of the Reserved Forests & their survey has been all but completed;* & the selection of 179 new blocks for reservation in accordance with the policy laid down in G.O. n° 844 dated 20th Oct. 1890 para 24 & Dr Voelker's "Improvement of Agriculture" Chap VIII.

* Para 4 of Administration Report for 1892-93.

† Para 68 Conservator's Inspection note dated 15th Nov 1893

* Para 33 Administration Report for 1892-93.

* Para 83 of Conservator's inspection note dated 15th Nov. 1893. Tinnevelly District Gazettes for 22nd Feb 1892, 8th Feb 1893 & 7th Feb 1894 Supplemental.

* Para 81 Conservator's Inspection note dated 15th Nov 1893. & Appendix to Administration Report for 1892-93.

† Para 52 Conservator's Inspection note dated 15th Nov 1893. Appendix to Administration Report for 1892-93.

		Prosecuted	Compounded
*	1891-92	171 Cases	43
	1892-93	442 do	158

vide Administration Reports

5. Your Excellency can judge from the last para that your memorialist has given his whole time and energy to Government, and whatever may be the cause of his failing to give satisfaction to the Commissioners of Land Revenue, it cannot be alleged that he has neglected his work.

6. In Board's Proceedings dated 23rd May 1892 para 25 your memorialist's Conducted work were Commended. The only occasions on which the Board have passed any remarks showing that they were dissatisfied with his Conduct are recorded in Board's Proceedings dated

21st Nov. 1892 Forest N° 1253 Misc.
30th Jan 1893 Forest N° 79 Misc.
6th Dec. 1892 Forest N° 1321 Misc.
& 18th Nov 1893 Forest N° 1455 Misc.

7. The first three related to the Commencement of two Capital works in anticipation of sanction, and the last to the excess entertainment of certain temporary establishment.

8. In your memorialist's explanation which was supported by the Collector in his N° 6555 16.1.94 it was clearly explained that the excess establishment was not wilfully maintained by the District Forest Officer, as the Board seemed to imagine, but was on the other hand discovered & stopped by him as long ago as August 1892.

9. As to the Capital works Commenced in

1 B 27-2-94 & no 275

anticipation of sanction it was fully explained in the District Forest Officer's No 465 dated 16th Dec 1892 that the work was begun by your memorialist's predecessor with a bona fide intention of fully utilising the budget allotment before the end of the official year & the matter was disposed of in Board's Proceedings 30th Jan 1893 Forest No 79 Misc.

10. Until recently when the Board passed orders that all estimates must be sanctioned before the works they relate to, are provided for in the Budget, it was often very difficult to get the estimate prepared and sanctioned in time to complete the work within the official year. Your memorialist would therefore submit that the commencement of a work in anticipation of sanction was then sometimes necessary to get the work done at all.

11. Your memorialist feels much discouraged in that his zeal & energy in Government behalf which has been commended by his Collector and three Conservators (Messrs Campbell-Walker, Cherry & Gadd), have not been appreciated by the Commissioners of Land Revenue, while the stigma cast upon him by his supersession has pricked him to the quick.

12. In para 2 of Board's Proceedings Forest No 21 Misc. dated 9th Jan 1894 it is stated that "their promotion is "merely postponed "till they have shown "themselves fit for it", and in para 2 of G.O. 15th December 1893 No 4691 it is ordered that "the supersession of Messrs "McCarthy & Thornton is not to "be considered permanent".

a

B. Your Memorialist would submit that there were only four vacancies (Nos 21 to 24) in the 4th grade of Dy. Conservatorships on Jan 1st 1894 (vide graded list); that three of these have already been filled up by his juniors; that there is only one vacancy left, which would in the ordinary course be given to Mr McCarthy, his senior by one place; that consequently his promotion, to which he is entitled & for which he is duly qualified, will be postponed for several years; in fact, until some of his seniors retire.

Finally Your Memorialist earnestly requests Your Excellency to consider the merits of his case, and promote him to the 4th grade of Dy Conservators.

C Thornton
Asst Conservator of Forests

BOARD OF REVENUE (LAND REVENUE), TH JANUARY 1893, FOREST No.

PROCEEDINGS OF THE BOARD OF REVENUE (LAND REVENUE).

READ—the following Inspection Notes from H. A. GASS, Esq., Acting Conservator of Forests, Southern Circle, to the Collector of Tinnevelly, dated Coimbatore, 15th November 1893, No. 2408:—

I have the honour to send herewth the notes of my recent inspection of your District Forest-officer's charge.

2. I arrived in the district on the 12th October and left it on the 30th.

3. The district was last inspected in September 1891 by Mr. Cherry, and his notes are recorded in Board's Proceedings, Forest No. 252, dated 23rd May 1892.

4. My time was taken up first with an inspection of the office, and inquiry into certain subjects which are dealt with hereafter, which occupied me several days.

I then proceeded to Kuttálam, Ambásamudram and Mundenthorai and returned to Tinnevelly where I had the opportunity of discussing several matters with you; and I completed my tour by proceeding to Tuticorin.

This same ground formed for the most part a portion of Mr. Cherry's tour, but there were special subjects to inquire into which compelled me to visit it again.

The necessity I am under to visit South Malabar during my short acting period as Conservator made it impossible for me to prolong my stay in your district, which I would gladly have done, and I am especially sorry that I was eventually unable to inspect Kudiraimoliteri, and the measures being taken there to check sand drifts, &c.

5. *The office buildings.*—The two upstair rooms placed at the District Forest-officer's disposal provide ample accommodation for his office.

The space screened off by the District Forest-officer for himself might be enlarged with advantage.

A district of this importance from a forest point of view should be inspected annually by the Conservator especially when, owing to the exigencies of the department, it is in charge of a young and inexperienced District Forest-officer.

(Intld.) G. S. F.

16th Dec. 1893.

The pipes will be carried through the roof.

(Intld.) G. S. F.
16th Dec. 1893.

One and three-quarter miles.

(Intld.) G. S. F.
16th Dec. 1893.

Certainly not.

(Intld.) G. S. F.
16th Dec. 1893.

A notice board will be put up.

(Intld.) G. S. F.
16th Dec. 1893.

Will be attended to.

(Intld.) G. S. F.
16th Dec. 1893.

Will be attended to.

(Intld.) G. S. F.
16th Dec. 1893.

Will be attended to.

(Intld.) G. S. F.
16th Dec. 1893.

The unhealthy arrangement remarked upon by Mr. Cherry at his last inspection, by which the hot and foul air from a crowded office below, finds its way up certain air-pipes and empties itself into the Forest office rooms above, still exists.

The pipes are 9″ or 10″ in diameter and are carried through the floor and stop short of the roof by about 3 feet instead of being continued through it to the outside.

The District Forest-officer finds it inconvenient to have his office at Tinnevelly while he lives at Palamcottah *several miles* away and suggests that he be allowed to move his office into certain old public offices in Palamcottah.

This would necessitate his clerks who live at Tinnevelly coming daily to Palamcottah. I should not recommend any change being made.

A notice board might, I think, be put up outside to make the position of the office known to the public.

6. *The office registers, records, &c.*—The inspection of the office by an officer of the Financial Department was just commencing.

The result of my own inspection was as follows :—

7. *Form No.* 1.—All constituted reserves are entered. The proceedings relating to all the reserves in the district have been carefully collected and bound up and forms a convenient book of reference which goes a long way towards carrying out the orders which have been issued on the subject. The book is a very useful record. It should be indexed and have a proper label on the outside.

Mr. Cherry's suggestion to collect all the records with map and other information into a separate file with card-board covers for each reserve has not been put in hand, nor indeed does it appear possible to do it as yet.

8. *Form No.* 2.—Is posted up rangewar, Index is wanted.

9. *Form No.* 3.—Is posted up. There is no label on the cover.

10. *Form No.* 4.—Is not kept at headquarters.

11. The Journal is maintained at Tenkarai Sub-range office and other places where the operations justify it.

These items are really erroneous demands. The contracts were cancelled; and the sums ought not to have been entered as demands.

(Intld.) G. S. F.

16th Dec. 1893.

The matter is being looked into.

(Intld.) G. S. F.

16th Dec. 1893.

Will be attended to.

(Intld.) G. S. F.

16th Dec. 1893.

Will be attended to.

(Intld.) G. S. F.

16th Dec. 1893.

The District Forest-officer has since submitted a preliminary report, and on certain items final orders have been passed, but a further report has been called for in respect of other items regarding which the information was incomplete. In some cases the debtors cannot be traced, in some advances were given without proper security, and in a few the period of limitation has expired. In the remainder steps for recovery or adjustment are being taken.

(Intld.) G. S. F.

16th Dec. 1893.

12. *Form No.* 15.—Rupees 6,400 is shown as outstanding up to 30th September last. This sum is made up of a number of items of varying amounts accumulating in the ordinary course of business, being mostly monthly and quarterly instalments, due on contracts, &c., which will be recovered on the dates they fall due.

There are said to be only two items of Rs. 105–8–0 and Rs. 208 due by one and the same individual which may be classed as irrecoverable.

13. *Form No.* 16.—Everything is said to be entered. Some particulars are not very clear, and it is not easy to say where the things are.

14. *Form No.* 18.—Is posted up. There is no label on the cover. Pages are not numbered. The book is maintained by the Head Clerk fairly neatly. The District Forest-officer carries cash sheet about with him.

Head Clerk's cash book.—Is posted up to date.

15. *Form No.* 23.—Is posted up. The Conservator's remarks made at last inspection have been attended to.

There is much confusion regarding sanctions which I have dealt with separately in detail.

16. *Permit accounts.*—The stock of permits is very large. An account has been opened in a ruled book. The District Forest-officer should examine this account periodically himself and check it, and not leave others to do it.

17. *Form No.* 43.—Has been posted up to date. Very little attention has been paid to the Conservator's remarks made at last inspection.

Of the individuals whose names appear in the ledger, 17 contractors, to whom advances have been made from time to time, have failed to execute their contracts, and 12 disbursers, mainly subordinates to whom advances have been made, have failed to adjust their accounts. The sums involved are Rs. 834–5–11 and Rs. 352–2–2 respectively.

Of the last, some items are said to be in process of recovery, but the bulk of the money appears to be quite irrecoverable, and the District Forest-officer should be called upon to report fully on the whole matter.

Will be attended to.

(Intld.) G. S. F.

16th Dec. 1893.

The reason given for this by the District Forest-officer is the heavy strain on his office in completing the casing of the records of 1882—92 in conjunction with the special temporary establishment. The casing of subsequent records was unsystematically completed and so could not be entered chronologically in the register. But this is now being done. Last September I issued a circular to all departmental and subordinate offices insisting on the current records being methodically arranged and registered immediately on disposal.

(Intld.) G. S. F.

16th Dec. 1893.

Will be attended to.

(Intld.) G. S. F.

16th Dec. 1893.

The numbers are largely factitious, as every office-note-and-query received and issued has been shown with a separate number.

This erroneous procedure has been pointed out to the District Forest-officer. Of 1,922 receipts and issues in September, 274 are shown against the Collector, 1,369 against subordinates, and 279 as miscellaneous. A large proportion of these need not have been separately registered. These large numbers will not recur.

(Intld.) G. S. F.

16th Dec. 1893.

18. *Form No.* 50.—There are defects in the maintenance of this register, which I pointed out.

All the security deposits are said to be entered in it, which the auditing officer was about to examine.

19. *Form No.* 52.—This register is posted up to end of March last, the last case No. for 1892–93 being 397. I was very sorry to find that it has been entirely neglected since March, and not an entry made during the current official year.

The explanation given for this neglect is not at all clear. It is stated that a number of papers have been cased, and I saw a lot myself, but that others and earlier ones were still uncased, but why the cased ones have not been entered is not shown at all.

20. *Form No.* 53.—This register is posted up to date. I looked at it carefully and traced back some of the papers, sufficient to show that it has been kept badly. Back and forward numbers are frequently left out, and in a large number of places the forward number is entered in pencil.

The word "recorded" is constantly omitted and finally disposed of papers still appear as pending ones. For the first six months of the year, the hand-writing is dreadful and barely legible and most untidy.

The last general register No. for 1892–93 is 14,727. From 1893–94 up to 30th September 1893, it is 9,718, and up to 24th October 1893, 10,980; and the last issue No. on same date is 5,329.

At this rate the general register No. for the year will approach 20,000 and the number of issues 10,000.

This colossal and increasing mass of correspondence is incomprehensible to me, and shows that there is something radically wrong in the management of the office.

Mr. Thornton explains that much of the increase is due to papers going to you for approval and to large correspondence on subject of proposed reserves, and of forest offences, &c.

A great deal of unnecessary correspondence has occurred owing to Mr. Thornton's own *cacoethes scribendi*, his habit of debating orders given him, and raising irrelevant points. There has, however, been a great improvement in these respects within the last four or five months.

(Intld.) G. S. F.

16th Dec. 1893.

This irregular practice came to my notice some months ago and I issued orders putting a stop to it.

(Intld.) G. S. F.

16th Dec. 1893.

Mr. Thornton's mistake was pointed out to him. These issues related to points common to other departments. In no case did Mr. Thornton fail to receive instructions when such were needed. Papers sent "*for approval*" must necessarily have been returned to him.

(Intld.) G. S. F.

16th Dec. 1893.

Papers received from the Board must under the rules be registered first in the Collector's General office in the special register. Letters from the Conservator will be registered direct in the Forest branch for the future. In any case both Board's Proceedings and Conservator's letters are sent to the Forest office on the day of receipt or the next day.

(Intld.) G. S. F.

16th Dec. 1893.

Whatever may be the cause of it, it ought to be inquired into and reduced if any progress is made, as your District Forest-officer informs me that, in consequence of want of time on the part of his clerks, he has to draft almost all letters—even routine ones—himself.

The correspondence registers are carried about in camp, and I cannot see the object of this, and seeing that the register is of the new unwieldy pattern, it must be a very inconvenient book to take about. It appears to me to result in loss of time and causes confusion.

Mr. Thornton informed me that papers sent to you for approval are occasionally disposed of and despatched from your General office, and he is left in doubt about them and has to make references; and further that papers received from Conservator and the Board are first registered in your General office before being sent to him. This is a very unnecessary proceeding.

I inspected the records of past years which have been arranged from 1882 onwards with the aid of the extra temporary clerks appointed by you. They are very neatly done, and with the list of files pasted up inside the pigeon-hole almiras, are easy of reference.

Mr. Cherry remarked on the necessity for destruction of old records, and this has been done on a large scale.

The current year's records are as stated before, some of them properly arranged, but there is a great want of system in dealing with most of them.

The procedure to be followed in maintaining the correspondence registers is very simple and purely mechanical, and the arrangement of records is as easy as possible. It is of course most essential that these forms and this arrangement of records should not fall into arrears as they have now done, and it will be a heavy task bringing things into proper shape again.

The records of *three* reserved forests were not sent. This is now being done.

(Intld.) G. S. F.

16th Dec. 1893.

The instruction in this paragraph will be attended to.

(Intld.) G. S. F.

16th Dec. 1893.

Mr. Thornton was in charge of the Southern and Central ranges for part of the year so that supervision was exercised without an inspection report being sent.

(Intld.) G. S. F.

16th Dec. 1893.

The maintenance of a register at head-quarters would involve considerable labor. Mr. Thornton explains that, as the range is the unit charge, the Range officer on the spot is able to record in the register the monthly removals which would not be known at head-quarters without increasing the number of forms and returns.

(Intld.) G. S. F.

16th Dec. 1893.

21. *Settlement records.*—I understand that some of these are in the Forest office instead of being in your record-room.

22. *Form No.* 54.—All books and maps received have been entered. Neither books nor maps bear numbers. Corresponding to those in the register, and it would not be possible to trace out from the register where they are.

The books want weeding out, and classified lists of officers and many others could be removed from the book almyra. The balance should be properly numbered and catalogued.

A valuable book like Hooker's *Flora of British India*, which is issued in parts with paper covers, should be bound up.

23. *Inspection of Range offices.*—Mr Thornton appears to have done fairly well, but not up to code requirements.

He inspected as follows:—

Last year—

No. I, Northern range once
" II, Central " twice
" III, Southern " once

and 5 sub ranges were inspected once, and Tenkarai twice.

This year.—Since July 1st he has inspected—

No. I, Northern range once
" II, Central " twice
" III, Southern " once.

24. *Service books* have been opened for all subordinates of the permanent staff and have been verified up to 31st March 1893.

The District Forest-officer has opened an office order book which takes the place of the service record suggested by Mr. Cherry.

It is not in as useful a form as it should and will be, and needs indexing, &c., but it is nevertheless a step in the right direction.

25. *Register of coupes.*—As so much has been done in your district in the way of opening and working coupes, a register of them in their consecutive order of opening and sale, departmental and otherwise, with all essential details, might have been opened with advantage, and kept at head-quarters. It is not prescribed in the code, but Mr. Thornton has ordered a very useful record of these coupes to be kept in each range in which they are situated.

Will be attended to.
(Intld.) G. S. F.
16th Dec. 1893.

Will be attended to.
(Intld.) G. S. F.
16th Dec. 1893.

This has been done.
(Intld.) G. S. F.
16th Dec. 1893.

I noticed the want of such a check in July last. Mr. Thornton raised difficulties, but it was pointed out to him that the check was essential, and in September I prescribed a form on the lines of the minor irrigation progress report which is essentially on the lines now suggested by the Acting Conservator.
(Intld.) G. S. F.
16th Dec. 1893.

26. *License book.*—As suggested by Mr. Cherry, a license book has been opened for each range and is kept at head-quarters. In this a record of all contracts is kept. The licenses are in triplicate; the original goes to the contractor, the duplicate to the Range officer concerned, and the counterfoil remains in the Head office. It is a very useful arrangement. A separate book of licenses is maintained for each range, and should be labelled accordingly.

27. *Rainfall register.*—A register is maintained showing results of readings taken at the eight stations in the district where rain gauges are placed.

The readings are also published monthly in the Forest sheet, so that a complete record is kept.

28. *Schedule of rates.*—The rates for each taluk adopted by the Local Fund Department and the Public Works Department rates for the whole district are filed together in the office. They are very bulky and unnecessarily detailed for forest work, and consequently difficult of reference. A convenient schedule giving only necessary items should be prepared. No schedule of rates is kept in Range offices where it is very essential considering the Range officers are called upon to prepare estimates.

29. *Inspection notes.* — Mr. Thornton should after inspecting a range send a copy of his inspection notes to the Range officer concerned. This is not prescribed I am aware, but it serves a useful object in making defects known and emphasizing the orders he may have given when on tour. A note of this description for office inspections is prescribed in the Code, and the one I recommend should be similar and need not take up very much time.

30. *Monthly progress reports.*—It is not easy to know what progress is being made in works in ranges laid down in the annual plan of operations, the diaries being the only medium of information unless a special report is called for in each case. A monthly report from all ranges is a useful means of reference and need only be very short—simply enumerating the works—the sanctioned allotment, amount spent, and balance remaining, and in remarks column progress made during the month.

31. *Taluk maps.*—Mr. Thornton has had the maps of the several taluks cut out and joined together so as to form one large map of reference.

This is a most useful and complete record if properly done, but the draftsman who has only recently joined the district, to whom the work was entrusted, has not carried it out at all well. It is badly pieced and badly mounted. There should be an ample margin of clean white paper for entering names, areas, dates of constitution and other details relating to reserves, names, areas, &c., of ranges, and so on. The exact limits of the ranges should be colored in carefully; and it is desirable that the Travancore boundary—the upper line of the ghat forests—should be plotted in, as it does not appear on the taluk sheets.

The map should have a head board and roller, and be capable of being rolled up with the aid of pulleys.

32. *Village maps.*—Mr. Cherry's suggestion that a copy of each village map of villages included in, or bordering on any of the reserves, should be obtained from your office and recorded in the District Forest-office has not been given effect to.

Spare maps have been put away in tin boxes and the boxes labelled.

33. *Survey of India maps.*—Mr. Thornton's mounted folding copies of the reserve maps show signs of wear and tear and constant reference, and he keeps them up to date by entering in position of all coupes, proposed roads, and so on.

The admitted rights of way and enclosures have not yet been colored red and yellow respectively.

I should prefer to see the mounted copies of these reserve maps laid out flat on sliding shelves in an almyra instead of being rolled up in tins. This is the manner in which maps are kept in the Survey of India offices and is the proper one for easy reference and keeping in better condition. Each map should bear a number corresponding with the one entered in form No. 54. This could, of course, be done only with maps of the regulation size. In your district some of the reserves are very large, exceeding 100 square miles in one case, and the sheets have been mounted in one huge unwieldy map.

Will be attended.
(Intld.) G. S. F.
16th Dec. 1893.

The maps that have not been supplied will be supplied. The District Forest-officer will be asked to see that all such maps are on record in his office.
(Intld.) G. S. F.
16th Dec. 1893.

The enclosures have been colored yellow by the India Survey wherever they are marked, but in some places they were omitted. The omissions will now be supplied.
(Intld.) G. S. F.
16th Dec. 1893.

This will be attended to as far as possible.
(Intld.) G. S. F.
16th Dec. 1893.

Will be attended to.
(Intld.) G. S. F.
16th Dec. 1893.

A board is put up notifying large sales. Other notices will also be affixed.

(Intld.) G. S. F.

16th Dec. 1893.

I long ago pointed out to the District Forest-officer the incompetency of the men entertained in his office; and for some time he had been endeavouring to secure more efficient men, but without result. I have lately appointed a man from the Revenue department, a graduate who was employed as a Revenue Inspector and had formerly been Head Clerk of the District Board.

I agree as to this Second Clerk who is only acting and he will be replaced as soon as the new Head Clerk is more conversant with the work.

(Intld.) G. S. F.

16th Dec. 1893.

The office is no doubt bad, but Mr. Thornton's own inexperience (for which he is scarcely responsible) has also something to do with the confusion that exists.

(Intld.) G. S. F.

16th Dec. 1893.

The forest office had not been regarded as distinct. The existing clerks were men of no qualifications or inferior qualifications who could not be provided with places in other departments.

(Intld.) G. S. F.

16th Dec. 1893.

34. *Notice board.*—A board is required in the office for putting of sale notices and other information.

35. *The office staff.*—Taking all round, there appears to be marked inefficiency in the office. The Head Clerk was Second Clerk in South Arcot district office, and Mr. Thornton considers him to be useless, and certainly he is rendered so by being kept completely in the back ground and deprived of all possible control and opportunity of doing good work.

Mr. Thornton has a good opinion, which I do not share, of the present Second Clerk, Somasoondrum Pillai, and proposes to recommend him for the Head Clerk's post. He is of eight or nine years' service and is still unpassed in Translation and Accounts. He was appearing for his examination while I was in the district; but even if successful, I am convinced he is not at present competent to be in charge of the office.

I had an opportunity of asking the auditing officer what state he had found the accounts in, and learnt from him that he had found his work very hard on account of the difficulty in getting any information, and speaking generally, there is no doubt that the office wants taking thoroughly in hand, and your District Forest-officer should endeavour to familiarize himself more with the numerous Code registers.

What he needs now are really good Head and Second Clerks and better organization and more method in the work.

The office, although a branch of yours, is evidently regarded and treated as distinct from it. The clerks enter it and rise in it and remain in it as Forest clerks, without a hope or chance of getting out of it into your general branch.

I strongly recommend a complete change in the system, and that the Forest branch be brought into closer compact with the rest of your office by appointing qualified men as Head and Second Clerks who will be allowed to get their promotion out of the office in the ordinary way, the same as if they were in your general office.

I may here mention that in the next district to yours, the present Huzur Sheristadar was once in the Forest office. Another Head Clerk is now Town Sub-Magistrate and two others are Stationary Sub-Magistrates and one other is now Acting Head Clerk in the Sub-Collector's office.

Yes. I quite agree.
(Intld.) G. S. F.
16th Dec. 1893.

This has already been done.
(Intld.) G. S. F.
16th Dec. 1893.

There is no doubt, the inconvenience of a change of Head Clerk, but this may be obviated by appointing of good Second Clerk always, who will be qualified in every way to succeed a promoted Head Clerk. The work is technical, and the orders are numerous and special, but there is nothing in the code or accounts or the orders that a clerk of ordinary intelligence could not pick up in a few weeks.

If you are able to make suitable arrangements for the office work, your District Forest-officer must give the necessary control of the office into the hands of the Head Clerk and place the requisite responsibility on his shoulders; and I am sure things will work better than they do at present with Mr. Thornton trying to do everything himself.

One innovation urgently required is the registering of papers at head-quarters. Routine papers can be disposed of in camp, and the fair copies can, with your permission, be signed by the Treasury Deputy Collector, whose office is just below that of the Forest office, and a great saving in time and also postage can be effected.

36. *Proposed new reserves.*—To make my remarks on this subject clearer, I append a statement A which I had compiled in the Forest office.

The procedure now followed is as follows:—

The village karnams under your orders are giving assistance to the Forest Range officers in preparing lists of waste lands wherever situated, whenever the area is fairly large, say 200 acres or more.

The subordinates then prepare sketches from the village maps and send to the District Forest-officer who revises and straightens the boundary, where necessary, with a blue pencil. Though every effort is made to avoid it, this process may possibly mean the inclusion of land held on patta which will be left to be dealt with at settlement. The revised sketch goes then to the Survey office in Madras for the preparation of a map on the 16″ or 8″ scale by joining village maps. It then comes back to the District Forest-officer for check and return again to Madras for preparation of final maps on the 8″ scale—in accordance with Board's Proceedings, Forest No. 168, dated 20th April 1891.

The District Forest-officer is having these corrected.
16th Dec. 1893. (Intld.) G. S. F.

This was owing to the District Forest-officer not distinguishing assessed waste from unassessed waste. I pointed out the distinction to him sometime ago.
16th Dec. 1893. (Intld.) G. S. F.

The District Forest-officer commenced operations on far too large a scale. I subsequently directed him to confine himself at first to securing only few large blocks in each taluk.
16th Dec. 1893. (Intld.) G. S. F.

The delay is mainly due to the number of missing village demarcation stones. In several instances Revenue Inspectors have been placed on special duty for this work.
16th Dec. 1893. (Intld.) G. S. F.

The surveyor explains that the plotting in the old maps on the 16-inch scale is incorrect in some cases.
16th Dec. 1893. (Intld.) G. S. F.

As noted above operations were commenced on too large a scale.
16th Dec. 1893. (Intld.) G. S. F.

I saw some of the completed maps as finally returned and note that the outer boundaries of the proposed blocks are colored green instead of red—*vide* Board's Proceedings, Forest No. 253, dated 7th May 1890.

The District Forest-officer takes every opportunity of inspecting the proposed blocks, and, according to the statement, has actually inspected 83.

The Range officers reported in each case the nature of the waste land with remarks as to growth, &c.

There is no preliminary demarcation whatever in the shape of special forest marks, and as the line usually follows village and field demarcation stones, all that is being done is to replace and number missing stones (of which there appears to be a vast number in your district) by a surveyor who is employed under Mr. Thornton's orders. There is a want of system in connection with this work which is more likely to retard than to advance it, and as in a large number of cases assessed waste will be included, which, by the way, under the existing rules under section 26 of the Forest Act, is not allowable, unless the same has been unoccupied for 18 months previously, you intend to send the District Forest-officer's proposals to Divisional officers for report, which arrangement stands in the way of finality. The delay is already very great and though the work of selection has been in progress for about two years, in not one case has notification under section 4 been submitted. I cannot trace any delay in the Madras Survey office. On the contrary the work has been done expeditiously, and in all 12 final maps have been received back from them, though of these 4 only may be said to be quite complete and ready to be sent up with the notifications under the Forest Act; the remaining 8 need further corrections. Missing stones have been replaced by the surveyor, and, on being checked in Madras, the distances from stone to stone are found to differ from those shown in the original field book; who is now to put these errors right is not clear.

Mr. Thornton has done his best in the way of pushing things, but there must be a change of working. Board's Proceedings, Forest No. 321-F., dated 8th May 1893, lays down that the District Forest-officer should ordinarily inspect all blocks proposed for reservation, and this should be the initial work.

I had already instructed Mr. Thornton to confine his attention at first to securing a few large blocks in each taluk. To carry out the Government policy literally will take years.
16th Dec. 1893. (Intld.) G. S. F.

I have already issued instructions on the subject.
16th Dec. 1893. (Intld.) G. S. F.

I agree.
16th Dec. 1893. (Intld.) G. S. F.

This has been done.
16th Dec. 1893. (Intld.) G. S. F.

I inspected the taluk map in which most are inserted, and I saw a good many on the ground.

There has been a very literal observance of the orders contained in Board's Proceedings, Forest No. 707, dated 16th December 1890; but in my opinion, a large number of the blocks selected should be rejected. Many are far too scattered and too small in extent to be of any practical value. In all these cases it must be borne in mind that not merely is a protective staff necessary, but a supervising one also; and your district, instead of being a fairly easy one with its 34 existing reserves mostly situated together on the western side, would become an almost impossible one with the additional 170 Mr. Thornton proposes, for though 144 only are entered in the statement, Mr. Thornton informs me there are 25 to 30 more to be added, to say nothing of what may be done in the way of tank bed reservations. I should therefore suggest that the number be greatly reduced and efforts made to confine the selection to good sized areas with straight boundaries in central parts of the taluks where such reservations are likely to be beneficial to the people. It must always be remembered that these scattered blocks with the restricting staff are liable to cause considerable irritation to the ryots.

In some cases I saw the proposed extensions to existing reserves are not good ones and mean a much longer and more tortuous boundary than already exists with no corresponding advantages. I regard the completion of this selection work as the most urgent work in the district at present, and advise that Mr. Thornton be kept at it in preference to any other; and in order that it may be pushed on rapidly to completion, it will be desirable, I think, to send back Extra Assistant Conservator of Forests, Mr. Moss, to assist Mr. Thornton in it, or else to let him relieve Mr. Thornton of a portion of the district work. With few exceptions the lists of waste land areas have come in, and it should be Mr. Thornton's task to inspect each one in detail, and, if necessary, with the Divisional officer, and send in his original plan of the block and report with the Divisional-officer's remarks to you for approval, and only after obtaining it, take

Yes.
16th Dec. 1893. (Intld.) G. S. F.

These areas are merely the suggestions of the District Forest-officer. I have not approved them yet as "proposed reserves;" and I agree that a large number of his original suggestions cannot, at any rate for the present, be undertaken.
16th Dec. 1893. (Intld.) G. S. F.

The first three applications for Rupees 19,000 were sent by the District Forest-officer in my name without my authority and contrary to my instructions; and I had no knowledge of them till the Conservator returned them.

The last application was for Rs. 5,000 and was sent by me for transfer from B "Establishment" to A "Conservancy."
16th Dec. 1893. (Intld.) G. S. F.

This is a mistake. All the Collector did was to sanction the estimates in view of inclusion in the budgets of future years. The District Forest-officer was directed to apply for appropriation of funds to work off his current budget allotments. Instead of that he proceeded to carry out without sanction some of the works for which only estimates were approved as above, and some "incomplete" works.
16th Dec. 1893. (Intld.) G. S. F.

This is correct so far as regards "roads;" but in respect of "buildings" expenditure was incurred on some works which were not strictly "incomplete" works of the previous year, being only works for which estimates were sanctioned but which were not entered in the budget of the previous year.
16th Dec. 1893. (Intld.) G. S. F.

steps to get the mapping work done in the Madras Survey office. Many of the proposed areas are unsuitable for reservation for various reasons and a large reduction of the present proposals should render it possible to complete everything in 3 or 4 months' time.

37. *Capital works and applications for funds.*—Four applications were received from you asking for additional funds, amounting in all to nearly Rs. 24,000, comprising a request for Rs. 8,000 by which amount your District Forest-officer erroneously stated the Board and Government had reduced the sums provided in your budget for certain works and which should therefore have been held to be disallowed. The amount cut down was however Rs. 6,000 and not Rs. 8,000. Another for the cost of completing the incomplete works of last year; a third and fourth for large allotments to meet the cost of a lot of new works not provided in the budget, some of which had been sanctioned by you without Mr. Cherry's approval though apparently prior to receipt of Board's Proceedings, Forest No. 543, dated 19th July 1893.

The application for funds for the incomplete works of last year was received in this office on the 29th August 1893, instead of within the 15th April as ordered in Board's Proceedings, Forest No. 434, dated 11th August 1892.

Meanwhile the expenditure had been incurred, and it remains now only to sanction it by curtailment of expenditure on other works within your district.

I was at some pains to endeavour to ascertain clearly the exact state of affairs with reference to works and sanctions, and I append two statements, B and C, which, I think, make it clear. B relates to buildings and C to roads.

I was not able to ascertain that any unauthorized expenditure had been incurred excepting on urgent incomplete works of last year, but I learn in the office that there is reason to believe that this is incorrect.

If this prove to be so, it will be dealt with separately hereafter.

38. B will show you that out of 12 proposed works estimated to cost Rupees 10,750 (6,000 of which was disallowed),

This is not altogether accurate. The 13 new works referred to were not really substituted. The estimates were sanctioned by the Collector, so as to be ready for future use. The District Forest-officer's letters asking for funds in respect of these and other works were, as explained above, sent without authority. The District Forest-officer has been instructed not to carry out these 13 works so no additional funds will be required except in respect of two for which separate application may be made.

(Intld.) G. S. F.
16te Dec. 1893.

The remark on the preceding paragraph applies to this paragraph also.

(Intld.) G. S. F.
16th Dec. 1893.

This proposal has been subsequently sanctioned by the Conservator.

(Intld.) G. S. F.
16th Dec. 1893.

This was so; but Mr. Thornton was warned time after time both by myself and the Conservator that nothing was to be done which was not previously sanctioned and the distinction between mere budget approval of estimates and appopriation was clearly explained to him.

(Intld.) G. S. F.
16th Dec. 1893.

I agree and this is now being done.

(Intld.) G. S. F.
16th Dec. 1893.

one work only is identical in description and amount with the original proposal, and 13 new works are substituted, 2 of which actually appear in your budget for 1894–95.

The incomplete works have cost Rs. 4,829 and this may be nearly exactly met from your budget sanction of Rs. 4,744, leaving out maintenance costs which must be met, so that you have nothing left, and if sanction were accorded for the 13 new works an additional allotment of Rs. 7,990 would be required by you.

39. C shows that out of 7 proposed works not one remains, and 14 new ones are substituted.

The incomplete works absorb Rs. 1,612, and you are left with Rs. 3,788. The proposed new works will, if approved of and sanctioned, cost Rs. 5,328, but Mr. Thornton says that 7 to 11 (inclusive) may be postponed, and, as a fact, 4 of them re-appear in the works proposed for 1894–95, so that no additional allotment would be required by you at all.

40. There has been a complete change of programme and Mr. Thornton explains that he based his plan of operations for 1893–94 on his budget figures instead of following the reverse course, and that at the time his knowledge of the district was insufficient, and that his proposals had all to be recast. However this may be, the result is very confusing, though I am not prepared to call the necessity of the works he now proposes into question, and I shall approve of all the roads you have sanctioned and shall support the proposed expenditure of Rs. 893 in the Papanasam road in sending it on to the Board, but as regards the expenditure on buildings, I do not propose to take any steps at all and shall leave it to Mr. Cherry to decide what should be done, and whether Mr. Thornton should be allowed to give any attention to them when his time can, for the present, be so much better employed in pushing on the important work of selection of proposed reserves.

As regards the application for additional allotments under A I a., A II, A VI c, A VII c., &c., I went over it with Mr. Thornton, and there is not one single item that may be described as urgently required, and I do not propose to take any action now.

41. *The Reserved Forests—Nallankurichi.*—217·6 acres surveyed by Survey of India. This hill is about 15 miles from

Tinnevelly, reserved in 1889, but has been under protection for about 7 years. Growth very poor, contains some Albizzia amara, Albizzia lebbek, Melia, Acacia Cucophlœa, and a good deal of Euphorbia which the watcher should cut out. In one part there is a group of inferior teak coppice. The outer boundary is not cleared at all and only one stone pillar is visible on the Alankolam side.

Signs of cattle grazing said to be due to semi-wild cattle. Regid protection is very necessary. The adjoining waste land running down to the public road, which has been selected for reservation, has some scattered Acacia planifrous and Albizzia amara on it. The area is about 200 acres. The addition may make Nallankurichi worth the money spent on it in the shape of protection.

42. *Okaninranpottai*,—1 mile west of Alankolam; 83 acres; steep conical hill, bulk of which belongs to Uttamalai zemindari; growth very poor with a large sprinkling of Euphorbia. Adjoining lands proposed for reservation 400 acres, which are almost bare.

43. *Kuttalam*.—Area 14·86 square miles. Surveyed by Survey of India. I was only able to see the portion in the neighbourhood of Kuttalam. The outer boundary is not cleared, and the demarcation consists of large sized khandam stones. The line is a very tortuous one. The slopes facing Kuttalam are better worked than I expected to find in some parts, but very sparsely in others, and there is much sheet rock. There is a good deal of teak, some vengai *Anogeissus latifolia*a; good deal of large sized *Phyllanthum emblica*, *Albizzia eugenia*, *Terminalia*, *Dalbergia paniculata*, *&c.*

This reserve has been under fire-protection for 6 or 7 years, and till this year when three large fires have occurred, it has been very successful. The outer boundary includes the famous bathing place which I hear was not dealt with at settlement.

The line should be altered here and the necessary area disafforested. There are numerous pathways including a broad one leading to Tekmalai and Mr. Thornton tells me there are other pathways leading to abondoned estates which might be opened out again and repaired. I went along the inspection path known as Shembagadevi about 3 miles in length. It is very narrow and hardly rideable in some

parts, and steps are now being taken to blast some of the protruding rocks. It is a pity some sort of trace was not originally made or a better line than the present irregular one selected, as the possibility of converting such inspection paths into cart-tracks should always be kept in view. The portion of forest through which this path runs must have been very fine at one time. There are large numbers of pollards now and improvement fellings are much needed.

44. It is proposed to add on six new blocks with a total of 1,800 acres. They are intended to round off boundaries and will, on the whole, answer the purpose, though one small rocky hill I saw to the east of the Government tope would be better left out than otherwise. The new proposals take in the grazing grounds of Mel-Agaram, Aiyiraperi and Madalamperi, the inclusion of which for settlement Government has sanctioned recently.

Several of the new sign-boards are set up. I observe the name of the reserve is given on them as Courtallam, whereas the notification and map make it Kuttalam.

45. I inspected several of the coupes and was much pleased with the coppice growth. This system of working over areas by selection has been in existence for some years, and so much information has been obtained that the experimental stage has been passed and the time has certainly come for developing the old, existing and future coupes into working circles and a definite plan of working must be introduced which I discussed with Mr. Thornton; otherwise the supply will be impaired, in fact, I foresee difficulties in this direction already, though, no doubt, a considerable demand can, for some time, be met by means of improvement fellings extending over a considerable area.

The practice here is to work the coupes by means of charcoal-burners who cut trees and trim stools and are paid 4 annas for every sack of charcoal they produce which, in its turn, is sold to contractors. 20 to 25 standards are left to the acre though they appeared to me to be much more numerous. The demand for firewood is met entirely in the shape of head-loads, and carts never come to the coupes. The coupes are well defined by means of cleared boundaries and the corners are stoned out.

The cutting is done well; grazing is not allowed anywhere in the neighbourhood of coupes and no special precautions are

Working circles will be decided on as soon as possible. The District Forest-officer explains that Colonel Campbell Walker told him to wait until the working plans branch was started.
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therefore necessary to protect them. Thirteen coupes have been opened in all since 1886, and, taking the figures for 11, I find the averages to be—

Area 33 acres.
Net profits of working per acre Rs. 16.

So if the rotation be taken at 20 years which, I believe, will be necessary, and debit proportionate cost of establishment, the profits per acre per annum almost vanish though the encouraging remembrance is left that the forests are greatly improved by the cutting and the future stock will be far more valuable than the previous one.

46. I inspected Mr. Thornton's charcoal kiln in coupe No. 13. It was 32 feet in diameter and 8 feet high and was built with 45¼ tons of wood, most of which was newly cut.

It was lit on the 11th September and having burnt out was relighted on the 12th. It was closed after 16 days of burning and left to cool. It was finally opened for removing the charcoal on the 20th October. The actual costs of cutting, stacking and making charcoal amounted to Rs. 79-8-0. Add to this Rs. 45 as lowest value of wood, total Rs. 124-8-0, the results have been—

4·8 tons of charcoal.
7·7 tons of half charred wood.

The charcoal is valued at Rs. 7 per cart-load of 16 sacks 4′ by 2′ by 2′, and 4 sacks were weighed and were found to be 120, 130, 130 and 135 pounds, respectively, average 129, so the result of this burning would be—

	Rs.	A.	P.
5¼ cart-loads	36	12	0
Add value of 7·7 tons of wood	7	10	0
	44	6	0
Net loss ...	80	0	0

The site selected for the kiln being in a windy gap at a windy time of the year, was a bad one. The ground does not appear to have been raised in centre, sloping outwards all round.

The kiln was defective in shape and much too flat. The flue and vent appear to have been faultily constructed, accounting for the difficulty in lighting.

Wind screens, of primary importance, were not put up.

The kiln was closed far too soon. A month at least was required.

Mr. Thornton states that the Ambasámudram mills are willing to purchase charcoal at Rs. 17 a ton.

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In cooling off, the cover should have been removed in sections, thoroughly sifted and thrown on again.

47. It would have been better for Mr. Thornton to have burnt a few small kilns first to instruct his subordinates, and he would have himself gained thereby the experience he stands in need of before trying his hand on such large kilns as the one here and that at Mundanthorai, which I shall refer to hereafter.

I collected some interesting statistics regarding the native method of charcoal burning which I give below.

First, some figures which were got from the forest guard and which I cannot regard as very reliable :—

Weight of wood used.	Charcoal.	Unburnt wood.	Number of sacks.
lb.	lb.	lb.	
1,780	351	80	3½
1,750	375	25	5½
1,120	235	40	2½
1,320	370	35	3½
5,970	1,331	180	15

An average of about 22 per cent. and 88¾ pounds of charcoal to the sack.

While on the spot, I took one sack of charcoal from a native heap, weighed it, and found it to be 80 pounds only.

This was of some soft wood probably vendale (*Grivotia rottleriformis*) very inferior charcoal.

48. Under my instructions Forester Mr. Jackson made some tests and sent the following information which may be accepted as accurate :—

Species.	Weight of wood.	Charcoal.	Percentage.	Unburnt.	Number of sacks.	Number of sack per 100 lb. of charcoal.
	lb.	lb.				
Albizzia lebbek	980	178	18·2	50	2	1·12
Acacia leucophlœa	1,895	205	10·8	..	3	1·46
Terminalia tomentosa	1,510	354	23·4	25	3½	1·06
Anogeissus latifolia	1,490	345	23·1	50	3	·9
Grivotia rottleriformis	820	125	15·2	40	2⅓	2·
Total ..	..	1,207	..	..	14¼	..

The average percentage on the five different kinds of wood works out to 18·02 and the average weight of each sack is 85 pounds, the karamardu and vekkali yielding by far the highest percentage.

49. The native method of burning is extremely primitive, but it suits the requirements of the people apparently. The method followed by Mr. Thornton, which is in vogue in Germany, undoubtedly yields a far higher class of charcoal, and, as stated above, the weight of the charcoal per sack 129 against 85 by the native method—the same species of wood being used; but as at present sales are by bulk and not by weight. Careful enquiry must be made as to possible value of the better class of charcoal before any attempt is made to introduce a new method of burning, and I may add here that success in this depends on its being done on a large scale, as the trained employés, while one kiln is charring, should be engaged in constructing others in the same locality, and a single kiln is a poor test of what the financial results may be.

50. *Kuttalam rest-house*, which cost, I understand, Rs. 884 in 1890, is well built, but faulty in design, and there are too many small rooms to make it comfortable for a European. The roof stands in need of repair here and there, and that of the kitchen and godowns is very uneven. A pandal at the west end must be very necessary during the monsoon.

Pegs and shelves might have been introduced with advantage here as in other rest-houses in the district.

The levelled road in front is on the very edge of the reserve boundary. The road leading to the house and the stabling and an experimental garden are all on private land.

51. There is a rain-gauge set up here and built into a brick and chunam stand, though one of the defects in the forest differential rain-gauges is that water accumulates in the tin box containing the bottles, there being no outlet, and the box can only be emptied by turning the tin upside down. Here accumulated rain water can only be removed by soaking it up with a cloth or a sponge.

52. *The wire shoot.*—The slopes here are exactly adapted to the use of the wire-rope shoot, and while I fully agree with your action in objecting to any expenditure whatever being incurred on the unproposed and unsanctioned experiments made by Mr. Thornton, still I think it desirable not to lose the chance of purchasing a cheap rope and runners if your District Forest-officer will submit a clear

Will be attended to.
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The matter is under correspondence. The Forest department took up the land without sanction, proposing to give the owner some grazing ground porambóke in another village by way of exchange.
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A hole and tap will be made to let the water out.
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The instructions of the Conservator and myself, which Mr. Thorton disregarded, recognized the value of this mode of transport, but directed that experiments should not be undertaken here pending the results of the Madura experiments and in view of the state into which his other work had lapsed.
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statement dealing with the purchase question only.

I inspected the rope and its working. It is set up a little to the west of the forest bungalow, and the sketch I append gives particulars of length of rope, fall and dip, and the class of runner used.

The rope starts by the side of a coupe above the bungalow and terminates in private land below it at the back of the stabling. Mr. Thornton appended a long description of it to his last annual report. I am not prepared to follow him into all his figures and speculative conclusions which are over-sanguine, but there can be no question of the enormous saving in cost of transport, provided always there is a ready demand for the wood conveyed down. I hear from Mr. Thornton that these shoots are largely used in Travancore by planters for shooting down tea, manure, &c.

53. The rope is one inch in circumference and without a hemp core. It is in good order and about 500 yards in one length. Mr. Cameron, from whom it was obtained, wants 4 annas a yard for it and Rs. 2–4–0 for each runner. According to Crowder and Co.'s catalogue, Bullivant's rope of 1 inch circumference cost As. 8–6 in Bombay. The runners are very neatly made though it appears to me they are costly at Rs. 2–4–0, but still I am told this is less than they cost at Colombo where they come from. I do not approve of the design as they are liable to tumble off the rope and would do so if the load in running touched any obstacle, as the branch of a tree.

However, I saw some 20 loads run down without any accident, though I was told such had occurred previously.

The little Mr. Thornton has done has convinced me more than ever of the importance of largely introducing this means of transport for forest material. The success with firewood is certain, for though there is a considerable jar at the end of the journey it could be overcome with a buffer of branches, twigs and grass, or the automatic arrangement proposed by me in my report embodied in Board's Proceedings, Forest No. 441, dated 10th June 1893, should be erected, which would effectually check the impetus.

? Mr. Knight.
16th Dec. 1893. (Intld.) G. S. F.

I believe Mr. Knight made a mistake about the price.
16th Dec. 1893. (Intld.) G. S. F.

The land has been planted up with margosa trees.

(Intld.) G. S. F.

16th Dec. 1893.

A well will be dug when funds admit.

(Intld.) G. S. F.

16th Dec. 1893.

An avenue has already been planted and the whole compound will be planted up as funds admit. There is a well within 200 yards which can be used.

(Intld.) G. S. F.

16th Dec. 1893.

Rent will be paid for the future.

(Intld.) G. S. F.

16th Dec. 1893.

The District Forest-officer has been asked to report on this.

(Intld.) G. S. F.

16th Dec. 1893.

This is receiving attention.

(Intld.) G. S. F.

16th Dec. 1893.

Mullimalai.—Area 457 acres; not surveyed. Growth slightly better. The portion of Mudalamparai grazing ground visible from this part is almost entirely denuded.

56. *Sivasaialam rest-house* passed and inspected *en-route* to Ambásamudram. Cost Rs. 875; built last year. Good bungalow and well built and finished. Tiled roof with a small flat pointed tile peculiar to these parts. Compound might be extended and planted up. Shade is badly needed. Wall of mud but incomplete. Wire fence would probably be cheaper. A well is much needed.

57. *Ambásamudram.*—I inspected the site proposed for the forest bungalow there, and think it a good one and probably the best available. Shade is badly wanted and the ground should be planted up without delay. There will be a difficulty about water at this place. Sub-Assistant Conservator Mr. Gurunatha Pillai in charge of the range met us here and I inspected his office.

It is an old Police building with tiled roof, kept very clean and tidy by the Sub-Assistant with a neat garden in front. The situation of the building is bad and very hot. This building is occupied by the Sub-Assistant Conservator as a residence and the office is a small detached one room building. No rent is paid by him although he has lived here for over one year. A watcher is employed who is in charge of property, but has given no security, nor does it appear that any other watchers in the district have ever been called upon to do so.

58. The Sub-Assistant Conservator's office is in a very indifferent state and he evidently pays next to no attention to it. There is little or no furniture, even necessary articles. There is no taluk map of the range hung up with the position and names of reserves marked on it. No schedule of rates is kept up. There is no notice board in office for putting up sale notices, &c. The records of the past two years are said to be carefully arranged. I doubt it. Prior to that they are admittedly in confusion.

The cash book is not labelled. The pages are unnumbered. Headings are omitted. There are many pencil entries; many corrections not initialled.

54. I ascertained that a load of 70 lb. takes 20 seconds to descend and, allowing for the time required for carrying up the runners to the starting point, it is no over-estimate to say that 10 or 12 tons of wood could be run down with ease daily, requiring three coolies to work the rope at 4 annas each and perhaps six in all to bring the wood in bundles from the adjacent coupe. Whereas by testing a cooly's capacity, I found a man who worked hard the entire day was only able to carry 1,125 lb. in 11 trips and this at a place where there is a good bridle path, and the saving would be infinitely greater in a place difficult for coolies and the rope could of course be used easily in many places impracticable to them altogether.

As you objected to any expenditure on this rope, Mr. Thornton transferred it and the runners to a charcoal contractor at the same prices he was asked to pay, with the proviso that he could have them back on the same terms if necessary.

I do not know if the contractor is bound by such a proviso, but if so, I certainly think steps should be taken to acquire this cheap rope.

I included a provision for the purchase in the budget of 1894–95.
16th Dec. 1893. (Intld.) G. S. F.

55. *Pápanásam reserved forest.*—Area 148·90 square miles; surveyed by Survey of India. The lower slopes at the junction of Ambásamudram and Tenkási taluks are very badly wooded and need careful protection. The demarcation here consists of stone pillars which are not firmly set in ground. The line follows the survey line of stones and is most tortuous. The number of pillars to the mile must be very great indeed as every stone has one.

The stone pillars will be firmly fixed. The tortuous boundary is due to the adoption of the revenue survey line as the eastern boundary of the reserves. Proposals for straightening the line wherever possible by the addition of new lands are under consideration. Missing stones are being replaced.
16th Dec. 1893. (Intld.) G. S. F.

Turanamalai proposed reserved forest and waste lands adjoining connect with Pápanásam at this part. It is not demarcated and the replacement of missing demarcation stones is still far from complete. The growth is very poor and consists mainly of scattered stunted *Stereospermum chelanoides*.

Kalaianamankoilpotai, Koviladiporai and Sulapapotai are three small reserves touching each other and it is not clear why they were not notified as one block. Area is 500 acres. They are very bare indeed; the principal growth is stunted *Stereospermum chelanoides*. Not surveyed by Survey of India.

Form No. 16.—Badly kept and most confused.

Form No. 52 is not kept at all.

Form No. 53.—Numerous errors. The Sub-Assistant Conservator does not appear to understand it himself and leaves it mostly to his writer. No headings. No label. Back and forward numbers often omitted. Numerous pencil entries. Last general number from 1st July is 1359 which is far too high. The register is posted up to date.

Form No. 54.—Books and maps all lumped together in a very confused fashion. Maps in office not kept properly. Number of office text books were destroyed in the Mundanthorai fire. Steps should be taken to replace them.

Coupe Register—Not well and neatly kept.

Plantation Journal appears to me to be very unnecessary but is kept in a way.

Rainfall Register is posted up to end of September. A suitable leather bound book is necessary. Places where ganges are set up are spelt wrong.

Lease Register.—All contracts are entered. No label.

Fire Occurrence Register.—This is well done and the area burnt over is marked on tracings of the reserves and kept up to date.

Forest Offence Register.—Bears no label. There are numerous errors and omissions. This wants careful check and attention.

Establishment Book.—Establishment regularly and punctually paid. The Sub-Assistant Conservator pays himself last of all.

59. There is a depôt at back of Sub-Assistant Conservator's house with a considerable quantity of Kongu, *Hopea Wightiana*, in it in planks and joists of varying lengths and sizes. Timber comes from beyond Mundanthorai, altogether some 18 miles. Sales are usually held here and not at foot of hills.

The departmental costs are—

	Per cubic foot. A.	P.
Cutting and squaring	4	6
Carrying	3	0
Carting	3	0
Total ...	10	6

Average selling price is Rs. 1-6-0 to Rs. 1-8-0.

These will be provided.

(Intld.) G. S. F.

16th Dec. 1893.

These will be procured.

(Intld.) G. S. F.

16th Dec. 1893.

Vide explanation under paragraph 55.

(Intld.) G. S. F.

16th Dec. 1893.

The pillars were purposely not numbered until all the additions have been settled. The field stones at the side of the pillars give the numbers corresponding with the map.

(Intld.) G. S. F.

16th Dec. 1893.

The timber here as at Mundanthorai depôt is much exposed to the sun and needs proper pandals to protect it. The timber is brought from one depôt to the other with insufficient check and far more method is required. Steel digits are badly wanted for stamping numbers and dimensions on logs.

Form No. 7 is very badly kept by the depôt-keeper at Mundanthorai and it is very difficult to say from it what timber is in stock.

60. The portion of Pápanásam reserve to be seen on the way to Mundanthorai is much better wooded. The proposed extension near the river is a good and suitable one, but the boundary of the reserve in this direction is most defective.

Along the section of road between Pápanásam and the foot of the hills, it is sometimes on one side and sometimes on the other in the most extraordinary fashion and it is possible to find oneself in a circle of boundary pillars, the line being only ascertainable by the numbers on the field stones and not by the forest pillars.

61. I inspected the work done on the new trace of the Pápanásam road. It is almost identical with the line selected and marked by Mr. Eber Hardie some years ago, and is an infinitely better one than the existing road which crosses a high hill with a number of most dangerous zigzags and a very steep gradient, that of the new trace nowhere exceeds 1 in 15. The ground is, however, most difficult and will need a vast amount of blasting and revetment.

Work has been done so far for a distance of about one mile in several sections with breaks of difficult ground in between.

It shows good work.

The total length of the new trace is about $2\frac{1}{2}$ miles where it connects on again to the existing road to Mundanthorai.

Expenditure up to date has been Rs. 3,691-12-0 during 1891-92 and 1892-93. The total estimate amounts to Rs. 12,300 and the work will require the sanction of Government.

No proposals regarding this road were made in the plan of operations or the budget for 1893-94 for reasons not explained to me. Mr. Thornton, however, proposes to spend Rs. 890 odd on it if the

The estimate was not ready when the budget was prepared. Special proposals were subsequently submitted and the

financial statement suggested by the Conservator is being prepared for submission to the Board. The opinion of the Executive Engineer will be asked before the proposals are finally forwarded.

16th Dec. 1893. (Intld.) G. S. F.

This will be procured.

16th Dec. 1893. (Intld.) G. S. F.

Will be done.

16th Dec. 1893. (Intld.) G. S. F.

The garden has been taken in hand and a hydraulic ram will be obtained on receipt of Government sanction.

16th Dec. 1893. (Intld.) G. S. F.

Mango seedlings have been put down. *Grevillea robusta* will be tried.

16th Dec. 1893. (Intld.) G. S. F.

Will be erected as funds admit.

16th Dec. 1893. (Intld.) G. S. F.

money can be allotted by transfer, treating it as a new work. The expenditure hitherto incurred is unsanctioned and held under objection by the Accountant-General, and your District Forest-officer must obtain special sanction for what now actually has been spent pending sanction for the whole work, the estimate for which should be expedited; and as the sum required is very large for a comparatively short length of road, I think the estimate and work itself so far as it has gone should be examined by an officer of the Public Works Department and his opinion obtained, and under any circumstances it will be necessary to append a carefully prepared financial statement showing that the interest on the heavy outlay is likely to be recouped in the way of increased annual profits.

The road to Mundanthorai and beyond after the plateau is reached is in fairly good order and sufficiently so for easy transport.

The road is kept in order by maistries, each of whom has a section in his charge, and these maistries are classed as monthly laborers on monthly wages of Rs. 6, and their cost being a recurring one, needs the sanction of the Board of Revenue.

62. *Mundanthorai bungalow.*—I halted here three days and was much pleased with the bungalow. The reconstruction of the bungalow has cost Rs. 2,224. It is an upstair and well-built house with Mangalore tiles, the lower line of which should be fastened down with an iron band running from end to end.

The bungalow stands on the bank of the fine river Serviar just above its junction with the Tambraparni.

There is a very poor attempt at a garden here. It is a good site for an experimental garden and water could be easily raised to the level of the bungalow by means of a hydraulic ram at a small cost. Some mahogany trees were planted out here in 1887, but taken all together have not done well.

The Australian gum trees are not in the right place here. *Grevillea robusta* would do better. Mangoes would grow well here.

The guard, watchers, ferry men and others comprising the forest staff here live in detached thatched buildings. It would be best to construct regular lines with tiled roofs.

The plan which I have separately proposed for the approval of the Board is to make a charge of 4 annas a cart for the use of the Forest department boat, treating the arrangement not as a toll but as a private agreement with the cart-owners who are not bound to use the boat unless they choose. The proprietor of the Kattalaimalai estate, whose carts alone cross the river, is quite willing to pay this charge.

The high and varying charges were ordered by me to be discontinued some time ago.

16th Dec. 1893. (Intld.) G. S. F.

Th has been stopped.

16th Dec. 1893. (Intld.) G. S. F.

The estate came into the market on a court sale a year before it was anticipated, and unfortunately at the time the District Forest-officer was on leaves, so that nothing was heard of the sale till it was over.

16th Dec. 1893. (Intld.) G. S. F.

63. The ferry is in good working order though the landing stages need considerable improvement. It is very little used by the outside public. An average of only five or six carts passes monthly against formerly as much as 130 in 1891, when considerable cutting was in progress in Kattalaimalai estate which is now stopped. The road through Mundanthorai is a public right of way for carts and it would not be possible to institute a toll, but this ferry arrangement offers a simple and I think a fair solution to the difficulty. Carts cannot get over the river without the ferry and a charge for its use is quite legitimate, but it ought to be a fair one and not an attempt to block the entire traffic in forest produce of what happens to be a private estate. The toll charges have fluctuated in a most curious manner and I could not get at any authority whatever for the changes made. The figures are—

	Per trip. A.	P.
Up to October 1891	6	0
Part of October 1891 ...	4	0
Latter part of October 1891 to June 1892	10	0
June 1892 up to date	9	0

The dhoniman receives fixed pay of Rs. 6 a month, and levies for himself 1 anna for each cart which passes. This last arrangement is quite unauthorized and very irregular. I think a fee of 4 annas would meet all requirements and should cover everything and would probably never be objected to by private individuals. The road is thoroughly workable with this ferry and a bridge need never be constructed over these difficult rivers.

64. The Pápanásam reserve over 140 square miles in extent is a very fine one, and all the forests in the Tambraparni and Serviar valleys are of great value from every point of view. It is a great misfortune that the fine evergreen forests on the south bank of the Tambraparni protecting so many of its sources now belong to Singampatti and it would be a serious matter if kumari cultivation, of which there are many signs, were started again on a large scale.

65. An opportunity of purchasing the Kattalaimalai estate, 10 square miles in extent, which cuts right into this reserve appears to have offered last year, but was lost, and I understand that the property was purchased by the Roman Catholic Mission for Rs. 17,000, a trifling sum for

Government to expend considering the importance of acquisition. A section of the public road passes through this estate and I hear the mission are opening up land expensively there.

66. I ascended the Tambraparni valley by passing through the Kattalaimalai as far as Kannikatti bungalow, a distance of 11 miles, and was much struck with the fine forest. The cart track is a very good one. The Ulara forester's house, 2,000 feet, is a small dark thatched building, the out-houses being better than the bungalow itself. The forester is, however, rarely there now and lives at Mundanthorai. The forests showed that the fire-protection has been effective, but the fire line cleared along Kattalaimalai boundary is not nearly broad enough to be of any practical value and the grass is now so high and dense that the next fire will probably be a very serious one to deal with.

The ever green forests around Ulara and Kannikatti, 2,500 feet, with a rainfall of about 100 inches, are exactly adapted to the growth of cardamoms, and I think efforts should be made to induce people to take up some of it on lease for this cultivation.

67. *Kannikatti bungalow* is a large tiled building of good design and nicely placed. The cost of reconstruction has been Rs. 737. The tiles and rafters look as if the place leaked very much, but the inside showed no signs of it. The bank at the back should be cut back more and a deep drain dug.

The kitchen and stabling are thatched and very tumble down. They should be repaired and tiled.

There is a detached building below the bungalow for forest guards, &c., with a shingled roof. The shingles are quite rotten. It wants early attention, and if shingles are to be used the wood of *Acrocarpus fraxinifolius*, of which I saw a good many, is well adapted.

There is a rain gauge here, another at Karavilaipil, 5 miles higher up, a third at Ulara, 2 miles lower, and a fourth at Mundanthorai. All are built into the stand, the same as at Kuttalam.

I do not know the object of 3 rain gauges in one valley at such short distances apart.

The District Forest-officer generally clears fire lines from 20 to 30 feet broad, but Mr. Cherry has remarked that 18 feet is enough.

16th Dec. 1893. (Intld.) G. S. F.

Attempts will be made to introduce cardamom cultivation, but the low prices and the abundant supply in Travancore close by are, in Mr. Thornton's opinion, likely to deter contractors from coming forward.

16th Dec. 1893. (Intld.) G. S. F.

The Conservator's instruction will be attended to.

16th Dec. 1893. (Intld.) G. S. F.

The rainfall is quite different at each place; after 2 years' reading have been recorded, it is proposed to move some of them elsewhere.

16th Dec. 1893. (Intld.) G. S. F.

Vegetables do very well here.

16th Dec. 1893. (Intld.) G. S. F.

The *Grevillea robusta* should be tried at Kannikatti. Fruit and vegetables would probably do well there.

The bungalow has never been molested by elephants, but apparently they move about all round and close to it.

A number of roads are proposed to be opened up in this most valuable reserve. There is a large supply of Kongu (*Hopea Wightiana*), a very fine timber which is at present cut by selection.

The native market in your district as elsewhere prefers small-sized timber and does not want it usually in large logs or beams, and a portable circular saw to be worked by water and capable of cutting up small scantlings will soon become a matter of necessity.

A circular saw was applied for this year, but the Conservator preferred to postpone its introduction until it had been tried in Madura.

16th Dec. 1893. (Intld.) G. S. F.

68. *The Coupes at Mundanthorai.*—I was greatly struck with the above which are the best I have seen.

The coppice growth all round is excellent and it is most gratifying to see the splendid teak growth coming on, and considering its abundance it appears to me it would have been better to have greatly reduced the number of standards.

It is proposed to cut out the least useful standards at the time of the first thinning.

16th Dec. 1893. (Intld.) G. S. F.

The coupes are all situated on one upland or plateau around Mundanthorai. In all 19 coupes have been opened from 1886 onwards with a total area of 764 acres and a total net profit of Rs. 12,399, the average works out to 40 acres per coupe and Rs. 16–8–0 net profit per acre, and taking the probable rotation at 20 years and debiting proportionate cost of establishment, it is interesting to note how almost entirely the profits per acre per annum disappear.

Will be done.

16th Dec. 1893. (Intld.) G. S. F.

The rides dividing the coupes require keeping quite clear of stumps and roots, &c. The coupe corner stones should be better placed with cut faces for dates on them.

There is here also a very large sprinkling of *Dalbergia paniculata* in these coupes, a tree of no value, and a good deal of *Bauhinia racemosa*.

Vide remarks on paragraph 45 (*a*).

16th Dec. 1893. (Intld.) G. S. F.

The demand for cutting in coupes is increasing every year and there is ample ground with suitable material for opening them; still the experimental stage has been passed and a definite plan of working this interesting and valuable plateau should be framed without delay.

Grass cutting will be encouraged by the grant of free permits. I offered these last year [for the reserves generally but without result.
16th Dec. 1893. (Intld.) G. S. F.

Draft declarations for the acquisition were sent to Government in July 1893. The Government called for further particulars (Government Order, dated 2nd August 1893, No. 1536 R). These have now been obtained and will shortly be forwarded.
16th Dec. 1893. (Intld.) G. S. F.

This is correct.
16th Dec. 1893. (Intld.) G. S. F.

The coupes at the time of my visit were very dry and with a good deal of grass in them which renders them very inflamable.

Every precaution is however taken and it would not be difficult with the cleared rides to confine an accidental fire to one coupe. No grazing whatever is allowed in this part. These coupes are all worked departmentally. The demand is mainly for charcoal and small firewood in head-loads. Here charcoal burners cut over a coupe clearing everything except standards and cut the stools flush with the ground and afterwards make charcoal, paying As. 2-8 per sack for it and carrying it away for their own profit. Firewood head-loads sell first at 6 pies and after the larger wood is gone at 3 pies.

69. I inspected Mr. Thornton's charcoal kiln here: 43 tons of wood were used in its construction. The remarks made regarding Kuttalam kiln apply for the most part here also. The species of trees used here were principally Vengai, Vekkali, *Albizzia lebbek*, nelli (*phyllanthus emblica*) Vendale (*Givotia rottleriformis*); some alteration was made in the shape and it was finally 30 feet in diameter and 9′ 6″ in height. It was lighted on the 25th October and should be allowed to burn at least one month. The vent and flue were here badly made. Wind screens have been put up.

There are a number of large and small enclosures in the Pápanásam reserve and every effort should be made to acquire them. Under any circumstances they should be properly demarcated out and this important work should not be delayed.

70. *Melavittan.*—The notice boards and map spell it Milavittan.* I do not know which is correct. Area 711 acres. Is about a mile from Tuticorin. Map prepared from village map. No special survey necessary. The principal growth is odai, *Acacia planifrons*. I regard this from its proximity to Tuticorin as likely to be a very useful reserve and a valuable one to Government. Four coupes have been marked out each of $22\frac{1}{2}$ acres, two of which have been cut over. The work has not been done well. Rs. 15 an acre obtained. Rs. 17 an acre has been offered for the remaining two. There are no

Has since been done.
16th Dec. 1893. (Intld.) G. S. F.

corner stones to these coupes and the dividing rides want keeping clean. A working plan is much needed. There are large bare spaces all over the block, and these should be taken in hand and planted up. Something has already been done in this direction with casuarina and palmyras, but there are many other rapid growing varieties which could be successfully introduced as *Melia*, *Albizzia*, *Inga dulsis*, *Inga saman*, *Dalbergia sissu*, and so on. There are a lot of semi-wild cattle running about and no progress can be made till they are got rid of. If the owners do not come forward to remove them after notice and they cannot be caught, they ought to be destroyed. The coppice growth in the coupes has already suffered much from these animals. The outer boundary of this reserve is most erratic and the question of straightening it is now under consideration, and under the proposals 70 acres will be disafforested and 106 acres will be added, bringing the total area of the block up to 747 acres.

The supervisor in charge was not present when I was there and the watcher appeared to be a very useless man. A nursery with casuarina seedling I saw was very badly laid out. The main road to Palamcottah dividing the block into two requires fencing on either side, and this Mr. Thornton can do this year as he has sufficient funds.

The odai comes up more readily here from seed than might be supposed and on the other hand it does not appear to coppice well.

In the working plan the retention of a considerable number of the large seed-giving trees must be provided for. None of the admitted enclosures appear to be demarcated.

The District Forest-officer, Trichinopoly, has been asked to send seed.
16th Dec. 1893. (Intld.) G. S. F.

Trees for seed will be retained in future coupes.
16th Dec. 1893. (Intld.) G. S. F.

The enclosures have not been demarcated as the owners are willing to exchange them. Proposals went to the Board which have been approved and sub-division accounts are under preparation.
16th Dec. 1893. (Intld.) G. S. F.

I proposed only one island, which is quite enough for the present. I have not however received yet any detailed description.
16th Dec. 1893. (Intld.) G. S. F.

71. Mr. Thornton, I understand, wishes to propose seven islands near Tuticorin for settlement with a total area of 1,240 acres and a large area comprising and leading up to the head land of 750 acres and a further block in Melavittan of 820 acres. The head land block I saw and it seemed to be traversed by cattle in all directions. I cannot imagine a more useful work than securing a growth of trees on this barren

Has since been done.
16th Dec. 1893. (Intld.) G. S. F.

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sandy shore; but to do it successfully will take many years and most careful protection, and I am sceptical of its being possible in the large areas given above, and I recommend that they be reduced in size and the boundaries be very carefully selected on the ground in long straight lines by your District Forest-officer instead of following the exact limits of what happens to be waste land. I only saw some of the islands from the distance and cannot say how far their reservation may be beneficial. At all events they are protected naturally.

I agree.
16th Dec. 1893. (Intld.) G. S. F.

72. *The Survey of India.*—I went through the file of papers relating to the charge of inaccuracy in working brought against the Survey of India by Mr. Thornton and I discussed the matter with him freely. His contention is that in many places the outer boundary of some of the reserves is incorrectly shown and does not correspond with the notified lines, for example in Srívilliputtúr reserve in one part the notified boundary follows the Vadakaranganallur and Kollankondan village boundary. On comparing the Survey of India map of the reserve with the village maps, Mr. Thornton finds a number of small differences. Stones are added or not shown. A line bends in when it should bend outwards and so on.

The Kudiraimoliteri reserve.—An entire village is included in the reserve which was excluded at the final notification and there are other errors more or less serious.

A number of admitted enclosures in Pápanásam reserve are not shown in the map at all. This last is an old charge. I was not able to see for myself any of the places where the small discrepancies referred to above existed; but I have no reason whatever to doubt that Mr. Thornton is quite accurate in his conclusions, and he was right to bring them to notice, though it might have been done in a somewhat different manner and certainly some of the proposals or demands made by him as to sending down surveyors to go over ground again which had been completed two years and more before were impossible ones. I may be wrong, but in my opinion the fault lay with the forest subordinates and not with the Survey of India. Formerly, it was the practice for them to traverse the outer boundary throughout in accordance with the line cleared by the Forest Department; now, in cases where the outer boundary

The District Forest-officer explains that the Conservator has made a mistake here. The India Survey did insert the enclosures in Pápanásam reserve in the tracing sent to him for check in 1891; but as he found all but one to be incorrectly surveyed, he asked them either to resurvey the enclosures or to omit them from the maps. The latter course was decided on by Colonel Campbell Walker, the then Conservator. These enclosures are now being inquired—*vide* paragraph 69 *supra*.
16th Dec. 1893. (Intld.) G. S. F.

This letter was another which unfortunately was despatched without my approval.
16th Dec. 1893. (Intld.) G. S. F.

follows a village boundary exactly, the Madras survey line is plotted on to the maps, and taking the Srívilliputtúr case referred to, now the boundary would be an exact reproduction in a smaller scale of the boundaries of the two villages named; but at the time the survey took place, the line must have been traversed as cleared, and whatever errors exist now must have been due to incorrect identification of the village boundary by the forest subordinates. I understand that a number of the field stones are found to be missing, and I do not think it could be contended that it was part of the Survey of India surveyor's business to ascertain this fact or to endeavour to hunt up those which were on the ground but not laid bare.

This matter has been discussed and settled in Board's Proceedings, No. 609 F., dated 22nd August 1893.
16th Dec. 1893. (Intld.) G. S. F.

73. Next as regards Kudiraimoliteri, *it appears to have been done in 1890–91 when there was no special demarcation whatever (I do not think there is any now), and it is said that a large number* of stones cannot be found at all and the survey followed the lines of the notification under section 4 which were considerably altered when the final notification appeared; so I am not prepared myself to attach any blame to the Survey of India who must have found the block very difficult to deal with in the absence of any special demarcation.

Kudiraimoliteri is now being correctly demarcated according to the notification map.
16th Dec. 1893. (Intld.) G. S. F.

As regards the omission of enclosures in Pápanásam reserve map, I do not know whose fault this is. They are not demarcated out even now, and as it is often difficult to tell what is private land when it is uncultivated, a surveyor must have found it very hard to get things right on his plane table.

Vide remark on paragraph 72.
16th Dec. 1893. (Intld.) G. S. F.

74. A multitude of small errors however evidently exist, and the maps would lose their value if they were not corrected; and they must therefore be taken in hand by a couple of good surveyors whose services must be obtained for this and other works in the district, for the programme for the Survey of India party appears to have been drawn up in a curious manner, for example, a small hill like Nallankurichi reserve, 217 acres, was done; while Kolandamamalai reserve of 1,540 areas near Sérmádévi was omitted, as also—

Kaliamankoil-potai.
Koviladiparai.
Salapapotai.
} Three reserves touching each other with an area of 500 acres,

and Mullimalai also close by with an area of 457 acres.

The reserves may be divided into blocks with local names as suggested by the Conservator; the change of name will have to be notified by Government.

16th Dec. 1893. (Intld.) G. S. F.

75. *The names of reserves.*—These need complete change and the present nomenclature is most confusing and difficult for subordinates. I got a list of the names from Mr. Thornton and as examples there are Pápanásam II-B and Kadayanallur III-C_2 which do not commend themselves at all to me. I talked this over with Mr. Thornton and suggested a system of grouping together under one or several intelligible local names which I have no doubt he can work out later on.

Vide remarks on the previous paragraph.

16th Dec. 1893. (Intld.) G. S. F.

76. *Division into blocks.*—This too is a most imperative work in the case of such enormous reserves as Pápanásam over 100 square miles and Srívilliputtúr over 70. The present system appears to be to refer to fire occurrences, grazing, or any event as taking place in such and such a beat. Block lines following natural features should be carefully selected and marked on the ground and shown on the reserve maps. Large blocks may be selected to start with.

This will be attended to.

16th Dec. 1893. (Intld.) G. S. F.

77. *Division of ranges.*—The above are all talukwar at present, but as the taluk boundaries are most irregular in parts, I do not know of any reason why they need be followed so exactly, and I recommend that straighter and more easily defined lines such as main roads be adopted.

78. *Topes.*—There are at present 24 topes under Mr. Thornton scattered all over the country. His work would be lessened if the bulk of these were transferred to the control of the Revenue officials in the taluks. I discussed the matter with him and recommend that the Huzur cutcherry compound, 20 acres in extent, alone be retained.

This has been done.

16th Dec. 1893. (Intld.) G. S. F.

The Tuticorin Government tope, 3·62 acres, is to be proposed as a reserve, as also a tope in Mélaguram village, 40 acres in extent, which adjoins a reserved forest and which is at present under the Revenue Department.

I can see no object in the District Forest-officer being left to look after the Government Nursery Garden in Tinnevelly which is only an unnecessary expense in the shape of a watcher on Rs. 5 a month besides incidental expenses for seeds, &c.

At present there are mangoes, nim, konnai, limes, casuarina, vaghay, teak, vengai, &c., plants raised in the garden and it is too far away from any of the reserves to be of any use to us. I recommend that it be sold or at all events removed from his control.

The garden contains a valuable selection of trees. No extra expense need be incurred as the watcher for the Huzur cutcherry compound, the retention of which the Conservator recommends, will attend to the garden. The lease of the fruit in the cutcherry compound covers the expense of a watchman. The matter will however be further considered.

16th Dec. 1893. (Intld.) G. S. F.

A great deal of the correspondence is really unnecessary, being due to the incomplete and inaccurate reports submitted by the rangers. This can be remedied by more strict discipline and considerable improvement is being effected.

16th Dec. 1893. (Intld.) G. S. F.

79. *Forest Offences.*—There is a large increase in the number of cases now reported and it involves the District Forest-officer in a heavy correspondence.

In 1891–92 the number of cases brought before the Magistrate was ... 156
Cases compounded 43

199

In 1892–93 for 15 months, cases, brought before Magistrate were. 432
Cases compounded 158

590

Relatively the proportion of compounded cases to the total dealt with is smaller than the Presidency average for 1891–92 as shown in paragraph 9 of Government Order, dated 20th December 1892, No. 1277-R.

I have taken great pains to reform this branch of forest duty and place the control and check more directly in the District Forest-officer's own hands than it used to be.

16th Dec. 1893. (Intld.) G. S. F.

I do not follow the principle on which so large a number of cases is compounded.

I did not trace any unusual delay in bringing cases before the Magistrates.

The register for recording the forest offences is a convenient and useful one, and if written up properly, which I fear is not always the case, gives all necessary information in a very easy form.

I have never heard of such a rule.

16th Dec. 1893. (Intld.) G. S. F.

80. *Forest rest-houses.*—All the above are under existing rules open to and liable to be used by officials of other departments free of charge and even by private persons on payment with your permission. A copy of the printed rules should be put up in each bungalow and likewise a book in which the names, &c., of visitors should be recorded.

None of the bungalows are provided with any furniture and this I think is a mistake. A rest-house loses half its utility if an officer is compelled to take a lot of furniture to it with him. I recommend that all the rest-houses be provided with a small amount of furniture, such as a bath-tub, basin, and stand, cot, chairs and tables, and 80 to 100 rupees would be ample in each case.

I see no objection if the Government will sanction funds.

16th Dec. 1893. (Intld.) G. S. F.

81. *Measures taken to check sand drifts.*—I regret I was not able to see what has been done. I learnt, however, that dates and palmyras have been put out, the palakodi creepers largely introduced, and the system of passing the *Acacia planifrons*

A full report on this subject was sent as an appendix to the administration report for 1892–93.

16th Dec. 1893. (Intld.) G. S. F.

I am quite alive to this.
16th Dec. 1893. (Intld.) G. S. F.

Vide remark on paragraph 36 *supra*. For the present only a few large areas in each taluk will be proposed.
16th Dec. 1893. (Intld.) G. S. F.

Vide my letter to the Board No. 939, dated 16th November 1893.
16th Dec. 1893. (Intld.) G. S. F.

The real check on false certificates from the karnams is the risk of discovery with the pains and penalties, criminal and departmental, that may follow. After all a few false certificates are of little consequence.
16th Dec. 1893. (Intld.) G .S. F.

pods through goats has been tried but not very successfully. The goats probably require penning for long periods in the reserve before much good can be hoped for.

Mr. Thornton has tried sand bunds with partial success only and now he is intending to try hurdles which seem likely to succeed. In this manner the sand will bank up against the hurdles which will then be lifted and placed on the top till a considerable height is reached and a regular bund formed which will be planted up as it increases in size.

82. *Tank-beds.*—In statement A I have given a list of tank-beds in the several taluks obtained from Mr. Thornton, the correctness of which he is not sure of however. I know of no reason why tank-beds as such should not be proposed for reservation, and there are places where it is absolutely necessary to reserve them; but there is probably no class of land the ryots themselves object to being reserved more strongly, and there is a very strong feeling against the presence of any tree growth on it.

I understand you are in favour of some of them being reserved, and I can only recommend, as in the case of other proposed reserves, that the selection be restricted to the most suitable and largest single and groups of tanks and that it be made by the District Forest-officer himself.

83. *Grazing and grass farming.*—The grazing arrangements in your district are very advanced and appear to work very satisfactorily. As I understand them, the karnam furnishes each applicant with a certificate that he cultivates so many acres of land and for every 5 acres he is allowed to graze 2 bullocks and one milch-cow at half fees and for surplus cattle has to pay full rates, and the range officer concerned gives the grazing permit and collects fees accordingly.

The Sub-Assistant Conservator informed me that as a check on the karnam the pattas are occasionally scrutinized. Grazing compartments are selected and notified in the Gazette, and no restriction whatever is put upon the ryots generally, and the coupes are quite as much open to those living at a distance as to those living in towns and villages near the hills. As a fact, the grazing is used only by those whose villages border on the forests, and it is not the custom for them to pen

their cattle. The grazing is evidently well in hand, and it cannot be said that the forests are over-grazed. If this were so, larger areas could easily be opened. Mr. Thornton furnished me with a grazing statement which shows that the revenue under this head is increasing.

The grazing fees for 1891–92 were Rs. 2,158 and for 1892–93 for 15 months Rs. 3,729–14–0.

Under a condition inserted in the permit, grazing in a particular compartment is stopped if any fire wilfully caused takes place.

The range officers are provided with tracing of the several reserves in which grazing is allowed and enter on them the areas in their correct positions with different symbols for different years.

The fact that the ryots in the plains do not, except in seasons of scarcity, take advantage of the opportunity to graze on the hills is no doubt partly explained by their at present having large available areas of waste land at their disposal.

The new selections will materially reduce this area and doubtless cause a good deal of discontent. It is not apparently the imposition of a fee that is likely to irritate so much as curtailment of area, for I understand that they pay as much as Re. 1 and even Rs. 1–8–0 for the privilege of grazing in some zemindari lands in the district.

The selections will not be wholesale. Besides the reserves will be opened in rotation. In many plain villages considerable areas are retained waste by the villagers on patta, the grazing on which they lease out to neighbouring villagers at As. 12, Re. 1, or at even higher rates per head—much in excess of the Government fees. In the zemindaris, similar fees are charged and paid; so that in the end our reserves should prove more economical for the ryot.

16th Dec. 1893. (Intld.) G. S. F.

The departmental experiments in grass-farming and hay-making failed for want of a demand and because the best kind of grass was not available. They are now being conducted in Milavittan reserve near Tuticorin where neither of these difficulties occurs. The grass of one tank (Korampalam) is leased out to a contractor who finds no difficulty in disposing of it in Tuticorin.

16th Dec. 1893. (Intld.) G. S. F.

Some unsuccessful attempts at stacking grass for hay have been made in the district.

I have some remarks to make regarding the removal of thatching and edible grass from the reserves which I shall add below under minor produce.

84. *The timber transit rules* are worked regularly and Mr. Thornton informs me that timber is only conveyed along recognized roads covered by permits.

85. *Firewood supply.*—The old system of cutting on permit has long been entirely abolished, and whatever firewood is removed from the Government forests comes from the several coupes in the shape of head-loads for which 6 pies and 3 pies are charged.

This is true. As a matter of fact the prices now charged by the contractors are below seigniorage rates. There is no present danger in this district. I am not sure that the insertion of a seigniorage rate which is higher than the market rate might not be used to raise the latter rate.

The whole question is, however, being reported on separately.

16th Dec. 1893. (Intld.) G. S. F.

Cart-loads are very rarely removed. Travancore and the zemindaris furnish a very large supply of firewood to the district, no coupes or other sources of supply are opened for groups of villages in the plains and indeed the circumstances of the district with all the forests on one side of it render this impossible. No restriction is put upon contractors as regards rates and they are at liberty to make what charge they please for firewood removed from their contract coupes.

Mr. Thornton considers that the keen competition renders it unnecessary to impose any restriction, but I do not agree with this and would recommend that a clause be entered in each agreement binding the contractor concerned not to charge more than a certain amount which must be regulated by local circumstances, distance from market, nature of road, &c., both for cart-loads and head-loads. It might prove a very necessary condition and at all events is harmless in so far as the contractor's bid is concerned.

I learnt that a dead wood contractor was allowed to remove 1,000 cart-loads of firewood in Pápanásam reserved forest, paying at the rate of Rs. 1–10–0 for every cart-load removed.

He actually removed about 500 when his year's vaida expired.

Another man is now offering Rs. 1–4–0 for a similar contract.

I do not consider it at all a judicious arrangement and there is plenty of room for fraud.

The District Forest-officer explains that the dead wood had to be checked at Mundanthorai by the Forester who saw that no green wood was taken. There is a large quantity of dead wood which would never pay to take out departmentally. If the Conservator is finally of opinion that the arrangement is injudicious it will be altered.

16th Dec. 1893. (Intld.) G. S. F.

86. *Demarcation of reserved forests.*—Special Forest demarcation is undoubtedly very backward and though apparently a good deal has been done since Mr. Cherry's last visit, an immense amount of work still has to be completed.

A programme has been framed for completing the demarcation in 3 or 4 years.

(Intld.) G. S. F.

The stone pillar in use in your district answers the purpose very well and has the advantage of being very cheap. When whitewashed, these pillars can be seen at very great distances.

The outer boundaries of all the ghât forests were cleared for survey and settlement and they will be cleared triennially hereafter. Funds do not admit of their being cleared every year.

As in many cases the boundary borders on the cultivated areas, while in many others additions are now to be made, it would seem waste of money to clear it annually. As long as the public can see the masonry pillars 6 feet high, they cannot mistake the boundary. The pillars will be consecutively numbered after final settlement of the boundaries.

16th Dec. 1893. (Intld.) G. S. F.

This suggestion will be considered.

16th Dec. 1893. (Intld.) G. S. F.

This will be attended to.

16th Dec. 1893. (Intld.) G. S. F.

The outer boundaries of reserves do not appear to be cleared at all. Many of the stone pillars I saw are too low and those recently set up are not firmly fixed. To many of the reserves, new blocks are being added, and the outer boundary must then be cleared and demarcated comprising all in one place and the line of pillars must be numbered consecutively on some system as from left to right or starting from west end of northern boundary, &c.; and the numbering finally decided upon must be entered on the reserve maps.

At present in some maps the numbering is villagewar which is very confusing; and there may be half-a-dozen pillars bearing one and the same number.

87. *Permit Gumastahs.*—These individuals are stationed at coupes, and in addition to issuing permits at fixed rates, for which labour they are paid by commission, the responsibility for the correct cutting in the coupes and the trimming of the stools is put upon them. I do not think this should be, but apparently Mr. Thornton experiences no difficulty.

In substitution of the present system of paying commission after the revenue has been collected and the consequent necessity for maintaining various accounts, I suggest that the permits be sold to the gumastahs at given rates outright like postage stamps, and the gumastah be left to recover the money by the sales. For example, if 10 per cent. commission be payable, Rs. 25 of permits may be sold for Rs. 22-8-0, the money being paid by gumastahs in advance. This system works well in Madura and Mr. Thornton can learn the details from the Madura District Forest-officer.

88. *Minor produce contracts.*—The minor produce is leased rangewar, that is talukwar. The bonds bear no stamps and the preparation of them is still left in the hands of range officers. The originals should be kept at head-quarters in the treasury instead of being in the hands of range officers to whom copies should be given.

Contractors are permitted to levy seigniorage on a variety of things including thatching grass and edible grass but no rates are fixed, which is very necessary—as a fact 6 pies is charged for thatching and 3 pies for edible grass. These rates are in my opinion too high considering the produce and that its removal is bene-

For grass and manure leaves, &c., every ryot should be able to purchase a permit for the quantity he requires at the market price. The contractor should then be the agent of such ryots as choose to employ him, the contractor's remuneration being a matter between the ryots and himself. If a ryot finds it more advantageous to go to the forest himself he may do so. I will introduce this system.

(Intld.) G. S. F.

16th Dec. 1893.

It was understood that the introduction of the revised establishment was indefinitely postponed for financial reasons; hence no provision was made in the budget for 1894–95.

(Intld.) G. S. F.

16th Dec. 1893.

Repeated instructions have been issued both by Mr. Cherry, and by myself on this subject.

(Intld.) G. S. F.

16th Dec. 1893.

ficial—but as matters stand, a contractor might cause great inconvenience by insisting on recovering much higher fees. Contractors are also at liberity to collect fees on manure leaves, but I think this should not be allowed and that it would be best to retain the collection of fees and grant of permits for this produce in the hands of the range officers.

89. *Revenue and expenditure.*—The figures for 1892–93 are—

		Rs.
Revenue ...	...	
Expenditure, A	...	... 84,234
Do. B	...	... 57,597
	...	... 25,244

A includes Rs. 11,642 expended in Singampatti suit.

For 1893–94 the budget figures are—

		Rs.
Revenue ...	...	
Expenditure, A	...	... 86,000
Do. B	...	... 39,300
	...	... 30,712

B includes the cost of proposed increased establishment which is not likely to be entertained at present and the revised budget maintains the same figure for this year. On the other hand the budget for 1894–95 leaves out this possible cost and brings B down to Rs. 22,519, although the revised establishment will no doubt then be in existence. Your figures under B for this year are likely to be considerably in excess of requirement, and there may be a saving of Rs. 5 or 6,000 available *for transfer to A.*

90. *Forest Journal.*—Your District Forest-officer writes extremely long diaries, recording a number of notes and a lot of information in them for future use which should find a place in a Forest Journal which is not maintained by him. The diary is not the proper place for such observations, being difficult of reference, and if there were a change of District Forest-officer, it would be lost altogether, for while it is comparatively easy for Mr. Thornton to remember where to turn for his notes on any particular subject, it would not be possible for his successor to do so.

91. *Action taken on last inspection notes.*—I have already dealt with Mr. Cherry's remarks regarding the office and the registers.

The question of the special treatment of tank beds has merged in the general proposals for further reservation. The other question of the reservation of specially assigned grazing areas has been settled (Government Order, No. 764 R., dated 29th August 1893).

(Intld.) G. S. F.
16th Dec. 1893.

In Kuttálam reserve most of the enclosures have been demarcated. As to Papanassum, *vide* paragraph 72 *supra*.

(Intld.) G. S. F.
16th Dec. 1893.

Vide remarks opposite paragraph 83.

(Intld.) G. S. F.
16th Dec. 1893.

Paragraph 41 ?

(Intld.) G. S. F.
16th Dec. 1893.

I do not see the necessity of imposing any import duty on Travancore timber to meet the trifling cost of tannahs. The benefit is ours.

(Intld.) G. S. F.
16th Dec. 1893.

The *Board* agreed in my view—*vide* Board's Proceedings, Mis. No. 424 F., dated 20th April 1893.

(Intld.) G. S. F.
16th Dec. 1893.

Vide paragraph *supra*.

(Intld.) G. S. F.
16th Dec. 1893.

The first sale this year was not confirmed. A second sale will be held.

(Intld.) G. S. F.
16th Dec. 1893.

Paragraph 26.—The matter is said to be still in correspondence with you.

Paragraph 31.—Nothing has been done in the way of demarcating admitted enclosures.

Paragraph 32.—Some progress has been made in special demarcation.

Paragraph 37.—The grass is allowed to be removed on permit issued by the contractors.

Paragraph 40.—One resident watchman has since been employed.

Paragraph 42.—Mangalore tiles obtained from a surplus supply of the Mills Company have been put up.

Paragraph 44.—The stabling has been built.

Paragraph 46.—The bridle-path and rest-house suggested are proposed for next year.

Paragraph 49.—Mr. Eber Hardie's trace is now being followed.

Paragraph 52.—A report on the subject of the import, &c., has, I understand, been submitted to the Board.

Paragraph 59.—The "*Kunis*" appear to have left the Government forests and migrated elsewhere.

The proposed reservoir scheme has been reported against by the Public Works Department.

Paragraph 60.—The opportunity of acquiring Kattalaimalai estate has been lost.

Paragraph 65.—Nothing appears to have been done; nothing higher than Rs. 45 was obtainable for the 1,000 palmyra trees in auction.

92. *The Forest staff.*—Sub-Assistant Conservator Mr. Gurunatha Pillai is an active and intelligent officer. He is extremely slack in his office work.

I agree.

(Intld.) G. S. F.

16th Dec. 1893.

I agree also in this. These habits have thrown his work and his office into great confusion. Of late, however, I am glad to say, there has been decided improvement.

(Intld.) G. S. F.

16th Dec. 1893.

Foresters, Messrs. Jackson, White, Jones and Matcher, all of whom I saw, are very promising young officers. The last two are under the orders of the Sub-Assistant Conservator. They all appear to take much interest in their work. Mr. Thornton has a heavy task to keep things going.

He is an excellent officer of great energy and zeal, and has acquired very complete information about forest matters in his charge. There is a great want of method in his work however, and a constant disregard of rules and detail which must make work very irksome both to you and him. If he drops the tendency to argue, and is careful in sending up things to see that the orders and the rules on the subject are being fully complied with, his work will, in the end, be greatly facilitated. His zeal has led him into starting things without sanction, and you have met this desire on his part with the necessary decision, and I have no doubt that in future he will be content to move more consistently along the sanction groove only.

93. In conclusion, I beg that you will send on this inspection note at an early date to the Board of Revenue with your remarks.

Statement A.

Statement showing the reserves of Tinnevelly district, existing and proposed (including tanks).

Taluk.	Existing reserved forests.		Proposed reserves.										Tanks.		Total.	
	Number of reserved forests.	Area in acres.	Number of proposed reserves.	Estimated area in acres.	Number inspected.	Number selected.	Number demarcated preliminarily.	Number mapped.	Number of maps checked and returned to Survey office.	Number of final maps returned by the Survey office for further revision.	Number of final maps correct and complete.	Number for which notification under section 4 submitted.	Number.	Area in acres.	Number.	Area in acres.
Srívilliputtúr ..	7	45,785·71	(6) 16	5,971	11	5	*Nil.*	6	*Nil.*	*Nil.*	*Nil.*	*Nil.*	..	4,817·46	56	56,574·17
Sankaranayinárkóyil.	3	27,114·55	(2) 11	4,472	4	9	*Nil.*	8	*Nil.*	*Nil.*	*Nil.*	*Nil.*	20	3,833·01	34	35,419·56
Tenkási	6	23,916·80	(6) 8	4,791	8	7	1	7	1	*Nil.*	*Nil.*	*Nil.*	5	558·34	19	29,266·14
Ambásamudram ..	6	92,760·73	(3) 13	5,884	12	7	1	6	*Nil.*	*Nil.*	*Nil.*	*Nil.*	21	873·18	40	99,517·91
Nángunéri	2	51,401·06	(1) 24	16,768	7	6	*Nil.*	6	*Nil.*	*Nil.*	*Nil.*	*Nil.*	50	5,526·88	76	73,695·94
Tinnevelly	2	1,103·95	(2) 23	12,560	10	10	4	10	3	1	..	*Nil.*	16	2,200·65	41	15,864·6
Tenkarai	6	19,665·69	(6) 22	25,213	20	19	17	17	17	7	4	*Nil.*	13	1,704·78	41	46,583·47
Ottappidáram ..	2	1,002·71	(1) 14	8,555	5	9	*Nil.*	9	*Nil.*	*Nil.*	*Nil.*	*Nil.*	17	2,259·84	33	11,817·55
Sáttúr	..	..	13	2,578	6	11	*Nil.*	10	*Nil.*	*Nil.*	*Nil.*	*Nil.*	31	4,733·81	44	7,311·81
Total ..	34	262,751	(27 *) 144	86,792	83	83	23	79	21	8	4	*Nil.*	206	26,507·95	384	376,051·15

* Lands adjoining existing reserves.

Number selected means those of which boundaries have been revised by District Forest-officer. Number mapped means those of which plans with revised boundaries have been sent to Madras.

Number demarcated preliminarily means those blocks in which missing stones have been replaced.

The final totals are those which would exist if all the tanks and all the blocks selected up to 30th September 1893 were finally constituted reserves.

Statement B.

Buildings.

Works provided for in the budget for 1893–94.				Works for which detailed estimates were submitted and sanctioned during 1893–94.						Works to be carried out in 1893–94.						
By the Collector.		Approved by the Board or Government.		By the Collector.			By the Board.			Now in progress.				Remaining to be done.		
Name.	Amount.	Name.	Amount.	Name.	Number and date of sanction.	Amount.	Name.	Number and date of sanction.	Amount.	Name.	By whom sanctioned, number and date.	Amount.	Actual expenditure up to 30th September 1893.	Name.	By whom sanctioned, number and date.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Rs.		Rs.			Rs.			Rs.			Rs.				Rs.
1. Chittar bungalow (postponed).	1,000	..	..	..	*Nil.*	..	..	Anapadi rest-house.	Sent to Board and sanction is awaited.	1,000	*Nil.*	..	..	..	Anapadi rest-house.	Board's sanction awaited.	1,000
2. Kallimalai, *i.e.*, Anapadi rest-house.	1,000															
3. Ranger's office at Kadayanallur (partly done in 1892–93 but not paid for).	1,250															
4. Sivasylam bungalow already done, partly in 1892–93.	750															
5. Ambásamudram bungalow.	2,500															
6. Kusanankuliar bungalow.	750															
7. Rest-house at Koparai.	250															
8. Melavittan bungalow.	2,500															
9. Forest guard's rest-house at Mudukalankulam.	25															
10. Forest guard's rest-house at Virusampatti.	25															
11. Vallanad bungalow, partly done in 1892–93 but not paid for.	350															
12. Kudiraimoli Teri bungalow, partly done in 1892–93 but not paid for.	350															
Total ..	10,750	..	4,744													
Maintenance for all buildings.	1,266	..	1,266													
Total ..	12,016	..	6,010	..	*Nil.*	..	..	..	..	1,000	*Nil.*	..	..	..	..	..	1,000

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P. Ramayya

Statement B.

Buildings.

Works provided for in the budget for 1893–94.				Works for which detailed estimates were submitted and sanctioned during 1893–94.						Works to be carried out in 1893–94.						
By the Collector.		Approved by the Board or Government.		By the Collector.			By the Board.			Now in progress.				Remaining to be done.		
Name.	Amount.	Name.	Amount.	Name.	Number and date of sanction.	Amount.	Name.	Number and date of sanction.	Amount.	Name.	By whom sanctioned, number and date.	Amount.	Actual expenditure up to 30th September 1893.	Name.	By whom sanctioned, number and date.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Rs.		Rs.			Rs.			Rs.			Rs.				Rs.
1. Chittar bungalow (postponed).	1,000	..	..	..	*Nil.*	..	..	Anapadi rest-house.	Sent to Board and sanction is awaited.	1,000	*Nil.*	..	..	..	Anapadi rest-house.	Board's sanction awaited.	1,000
2. Kallimalai, *i.e.*, Anapadi rest-house.	1,000															
3. Ranger's office at Kadayanallur (partly done in 1892–93 but not paid for).	1,250															
4. Sivasylam bungalow already done, partly in 1892–93.	750															
5. Ambásamudram bungalow.	2,500															
6. Kusanankuliar bungalow.	750															
7. Rest-house at Koparai.	250															
8. Melavittan bungalow.	2,500															
9. Forest guard's rest-house at Mudukalankulam.	25															
10. Forest guard's rest-house at Virusampatti.	25															
11. Vallanad bungalow, partly done in 1892–93 but not paid for.	350															
12. Kudiraimoli Teri bungalow, partly done in 1892–93 but not paid for.	350															
Total ..	10,750	..	4,744													
Maintenance for all buildings.	1,266	..	1,266													
Total ..	12,016	..	6,010	..	*Nil.*	..	..	..	..	1,000	*Nil.*	..	..	..	..	..	1,000

Statement B—*cont.*

Incomplete capital works of last year completed and paid for from 1st April 1893.					Proposed new works not provided for in the budget for 1893–94.						
Name.	By whom sanctioned, number and date.	Total amount sanctioned for the work.	Balance of the sanctioned amount to be spent during 1893–94.	Actual expenditure from 1st April 1893 up to 30th September 1893.	Name.	By whom sanctioned, number and date.	Amount.	Total amount sanctioned in the budget.	Total amount required.	Actuals from 1st April 1892 to 30th September 1893.	Additional amount required by transfer from other districts.
18	19	20	21	22	23	24	25	26	27	28	29
		Rs.	Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs.	Rs.	Rs. A. P.	Rs. A. P.
Athithonda tannah ..	District Forest-officer's No. 5, dated 1st September 1892.	200	175 6 8	169 6 3	1. Compound wall at Kadayanallur.	Collector's letter, dated 23rd Aug. 1893.	50 0 0	..	..	..	..
Panakudi do. ..	District Forest-officer's No. 8, dated 1st September 1892.	200	200 0 0	153 13 6	2. Compound wall at Sivasylam.	Collector's letter, dated 12th Sept. 1893.	50 0 0	..	..	..	..
Athithonda bungalow.	Board's Proceedings, dated 23rd April 1892, Forest No. 340, Mis.	1,500	1,275 0 0	1,097 4 4	3. Puliyuthu Forest Guard's rest-house. ..	Do. ..	50 0 0	..	..	..	..
Sivasylum rest-house.	Conservator's No. 209, dated 4th October 1892.	875	37 1 6	37 1 6	4. Vadakarai Rest-house ..	Do. ..	50 0 0	..	..	..	..
Kudiraimoliteri rest-house.	Conservator's No. 210, dated 4th October 1892.	1,000	1,000 0 0	1,000 0 0	5. Settimadam do. ..	Do. ..	50 0 0	..	..	..	..
Vallavanad rest-house.	Conservator's No. 211, dated 4th October 1892.	875	875 0 0	875 0 0	6. Puliyankudi do. ..	Do. ..	50 0 0	..	..	..	..
Kadayanallur office building.	Conservator's No. 195, dated 21st September 1892.	800	800 0 0	784 5 4	7. Talayani do. ..	Collector's letter, dated 22nd June 1893.	50 0 0	..	..	..	..
Forest Guard's rest-house at Vallanad.	District Forest-officer's No. 7, dated 1st September 1892.	200	200 0 0	200 0 0	8. Peria Vellaikal rest-house.	Collector's letter, dated 12th Sept. 1893.	50 0 0	..	..	..	..
Forest Guard's rest-house at Nazareth.	District Forest-officer's No. 6, dated 1st September 1892.	200	200 0 0	200 0 0	9. Ambásamudram bungalow and out-house.	Sent to Board and sanction awaited.	3,000 0 0	..	..	..	..
Asamboo out-house ..	District Forest-officer's No. 16, dated 1st September 1892.	200	53 7 6	53 7 6	10. Kansapuram bungalow.	Do. ..	800 0 0	..	..	..	..
Mundanthorai kitchen	Conservator's No. 5, dated 20th May 1891.	500	13 4 0	13 4 0	11. Kopparai do. ..	Do. ..	800 0 0	..	..	..	..
					12. Melavittam do. ..	Do. ..	904 9 0	..	..	..	..
					13. Re-roofing Kalivilaipil bungalow.	Estimate under preparation.	1,000 0 0	..	..	..	..
Total ..	....	..	4,829 7 0	4,583 10 5	Total ..	....	6,904 9 0	6,010	14,000	4,990 4 1	7,990 0 0

Column 17 + 21 + 25 = 29 + 4 (after deducting the amount for maintenance, *i.e.*, 1266).

Statement C.

Roads.

Works provided for in the budget for 1893–94.				Works for which detailed estimates were submitted and sanctioned during 1893–94.						Works to be carried out in 1893–94.						
By the Collector.		Approved by Board or Government.		By the Collector.			By the Board.			Now in progress.				Remaining to be carried out.		
Name.	Amount.	Name.	Amount.	Name.	Number and date of sanction.	Amount.	Name.	Number and date of sanction.	Amount.	Name.	Number and date of sanction.	Amount.	Actual expenditure up to 30th September 1893.	Name.	By whom sanctioned number and date.	Amount.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Rs.		Rs.			Rs.			Rs.			Rs.				Rs.
1. Virusadikedai road (postponed to 1894–95 as estimates could not be prepared in time, ground found to be very difficult).	1,050	..	..	*Nil.*	..	..	*Nil.*			*Nil.*				*Nil.*		
2. Alagarcoil road ..	300	..	..													
3. Kullimalai to pulian-gudi (postponed).	1,750	..	..													
4. Sivasylum bridle-path (postponed).	800	..	..													
5. Koraiar bridle-path (estimate could not be prepared in time; postponed).	700	..	..													
6. Tulukanparai road (postponed as the work is not urgent).	750	..	..													
7. Melavittam road (awaiting final settlement of the reserve boundary; postponed).	50	..	..													
Total ..	5,400	..	5,400													
Maintenance of all roads.	4,298	..	4,300													
Total ..	9,698	..	9,700	..	..	..	..	..	..	..	..	..	..	..	..	..

STATEMENT C—*cont.*

Incomplete capital works of last year completed and paid for from 1st April 1893.					Proposed new works not provided for in the budget.			Total amount sanctioned in the budget.	Total amount required.	Actuals up to 30th September 1893.	Additional amount required by transfer from other districts.
Name.	By whom sanctioned, number and date.	Total amount sanctioned for the work.	Balance of sanctioned amount to be spent in 1893–94.	Actual expenditure up to 30th September 1893.	Name.	By whom sanctioned, number and date.	Amount.				
18	19	20	21	22	23	24	25	26	27	28	29
Rajapoliam Road ..	Board's Proceedings, dated 21st November 1892, Forest No. 1255, Mis.	Rs. 2,200	Rs. A. P. 807 5 9	Rs. A. P. 807 5 9	1. Conversion of Nadugani bridle-path into cart-road (urgently required to reduce the cost of timber transport.)	Collector's letter, dated 26th June 1893.	Rs. A. P. 500 0 0	Rs. ..	Rs. ..	Rs. A. P. ..	Rs. A. P. ..
Kottenteri to Kollimalai.	Conservator's, No. 257, dated 19th December 1892.	1,250	483 10 10	305 8 0	2. Cart-road from Athikondu to Puliuthu, *i.e.*, Alagarcoil road.	Collector's letter, dated 22nd Aug. 1893.	500 0 0	..	..	..	..
hembaga Devi Road.	Conservator's, No. 184, dated 10th September 1892.	1,100	320 12 6	135 1 0	3. Cart-road from Shengalmari up to Kaluthaikadavu (urgently required to reduce cost of firewood transport.)	Collector's letter, dated 23rd Aug. 1893.	300 0 0	..	..	..	..
					4. Cart-road in Nelliyuthu Vadakarai hills (urgently required to reduce cost of firewood transport.)	....	494 12 0	..	..	..	..
					5. Kadiem road (urgently required to reduce cost of firewood transport.)	Collector's letter, dated 6th Aug. 1893.	500 0 0	..	..	..	..
					6. Cart-road from Kariar to Karuthalipodai (this is in progress now.)	Collector's letter, dated 13th July 1893.	500 0 0	..	..	..	..
					7. Road from Sundakoipass to Aruguly.	Collector's letter, dated 22nd June 1893.	300 0 0	..	..	..	..
					8. Road from Kilaniyuthu to Papuparai.	Collector's, letter, dated 22nd June 1893.	270 0 0	..	..	..	..
					9. Road from Karupukal to Agamparambu.	Collector's letter, dated 22nd June 1893.	270 0 0	..	..	..	..
					10. Road through Sundakoipass ..	Collector's letter, dated 22nd June 1893.	200 0 0	..	..	..	..
					11. Conversion of bridle-path from Sivanaparai to Muthalarupan into cart-road.	Collector's letter, dated 22nd June 1893.	500 0 0	..	..	..	..
					12. Road through Saluparapathai reserve.	Collector's letter, dated 12th Sept. 1893.	50 0 0	..	..	..	..
					13. Road through Koviladiparai reserve.	Collector's letter dated 12th Sept. 1893.	50 0 0	..	..	..	..
					14. New cart-road from Pápanásam to Mundanthorai second portion (Board's sanction is awaited). (*N.B.*—7 to 11 are postponed to 1894–95.)	....	893 6 11	..	..	..	..
Total ..	....	..	1,611 13 1	1,247 14 9	Total ..	....	5,328 2 11	9,700	9,700	3,377 4 6	Nil.

Columns 17 + 21 + 25 (after deducting Rs. 1,540 for items 7 to 11 postponed) = 29 + 4 (after deducting the amount for maintenance, *i.e.*, 4,300.)

Endorsement by G. S. FORBES, Esq., Collector of the Tinnevelly District, dated 18th December 1893.
Forwarded.

1894
Forest Department.
Subject No. 2
G.O. Serial No. 2529

REVENUE BOARD OFFICE MADRAS.

Proceedings of the Board of Revenue

(Land Revenue)

Dated 27th February 1894.

Forest No. 275. Mis ~~Routine.~~

READ endorsement of the conservator of Forests, Northern circle, dated 26th January 1894. No 134, forwarding Tinnevelly collector's endorsement on his District Forest Officer's (Mr Thornton) explanation for the entertainment of temporary establishment in excess of sanctioned scale in 1892-93, called for in B.O. F. 1455 mis, dated 18 November 1893.

Resolution.

Recorded with the remark that in the circumstances now explained no recovery need be made from Mr Thornton.

(True Extract)

(signed) L. M. Wynch.
Secretary.

To the collector of Tinnevelly
thro' the Conservator, S.C.,

(True copy) L. M. Wynch
Secretary

1894.

Board of Revenue

(Land Revenue),

MADRAS.

To

True copy

Proceedings, dated 27th February 1894,
Forest No. 275. Misc.

Subject

The 6 enclosures to this
S.P. ~~Board~~ returned
to Board with G.O. 1781
dt 5-94

4
3
2529

REVENUE BOARD OFFICE
MADRAS.

Proceedings of the Board of Revenue

(Land Revenue),

Dated 2nd April 1894,

No. 435 Miscellaneous.

READ the following endorsement of J. W. Cherry Esquire, Conservator of Forests, Southern circle dated 5th March 1894 No 359 on that of G. S. Forbes Esquire, Collector of Tinnevelly dated 28th February 1894.

Forwarded

2. I do not offer any remarks on the memorial as I am neither aware of the special reasons of Mr Thornton's supersession nor if those which he assumes are related to those that actuated the Board in their recommendation to Government. If any remarks are required, I beg that I may be so informed.

Forwarded.

So far as I am concerned, I consider

Mr

Mr Thornton to be a good officer, but somewhat overzealous and disposed to neglect his office for the sake of his field work—faults which I consider have been due mainly to the fact that owing to paucity of officers, he was placed in charge of a large and important Division before he had had sufficient training and experience.

Resolution.

Submitted for the orders of Government.

Owing to the recent reorganisation of the Controlling staff of the Forest Department promotion came quickly to the juniors of the Department and it became necessary to decide whether officers of from three to five years standing could be promoted above the grade of Assistant Conservator.

In Proceedings dated 24th November 1893, No 1482 Forests, the Board recommended the promotion of Messrs: Jackson, McIntosh, and Bryant, but considered that Mr Thornton was not fit for it as he had on several occasions been guilty of gross irregularities and disobedience to rules in spite of serious warnings. The Government accepted the Board's recommendation×

G G 4691
15. 12. 94.

with the remark that the supersession of Messrs: McCarthy and Thornton was not to be considered permanent.

2. Mr Thornton now appeals against the decision and remarks that as there are only four vacancies of which three have been filled up, and the fourth will go to his senior Mr McCarthy, his promotion will be postponed for several years.

3. As a matter of fact there were five vacancies and the Board has recently refrained from recommending Mr Foulkes for promotion as the two remaining vacancies must be reserved for Messrs McCarthy and Thornton who may at any time show themselves fit to receive the deferred promotion.

4 As regards the grounds on which Mr Thornton was held to be unfit, reference was made to various papers in the Board's Proceedings above quoted and the Board would further invite the attention of Government to the marginally noted paragraphs of Mr Gass's inspection report recently disposed of by the Board×

5. The Board readily admits Mr Thornton's zeal

17, 19, 20, 35–36, 37
40, 47, 52, 79, 90, 92

× B P 16. 3 94 F 371 Mis.

× B P 221 31.3.94. in the press
3 spare copy of Report forwarded herewith

Zeal and energy and there is much reason to hope that he may yet be a very user-ful Government servant, but at present his zeal sadly wants tempering with dis-cretion, and the Board cannot recom-mend for promotion to a grade above that of Assistant Conservator an officer who rushes into operations without regard either to the orders of his superiors or the means at his command for carrying them out and who neither observes method in his own office, nor insists on it in the offices of his subordinates."

(True copies and Extract).

Richmond
Secretary

To The Secretary to Government, Revenue Department with memorial in (1) original, and a copy of Mr Gass Report on the inspection of the Tinnevelly Sd & Fy Bs (3) No 275 Mis 27.2.94. and with the Administration Reports for (4) 1891-92 + (5) 1892-93 and 2 (6)+(7) appendices, and (8) enclosures in No 275 Mis to be returned 27.2.94

(1), (2), (3) returned.
(4), (5), (6), (7), & (8) returned).

4/5/94

G.O. 4691/15.12.93. Contd.

Mr. Thornton will be told that he is mistaken as to there being only 4 vacancies - & that there were 5 of wh. 3 are filled up - the other two being for which Govt. see no reason to modify their previous order in his case, but that it will advance him, as soon as it appears that he has earned his promotion.

to
26 Apr.

Yes, Mr Thornton is an officer of great zeal & energy & is likely to be fit for promotion before long, but he has in many instances failed, as in many cases of late he has persisted in reports rejected by him. He is mistaken in thinking that nothing but gross negligence or incompetence will justify his supersession of his juniors. Simple unfitness for promotion is an sufficient reason.

29/4

1/5/94

C No. 2529

Mr. C. DuPré Thornton, Assistant Conservator of Forests, I District Forest Officer, Tinnevelly, appeals against the order* conveyed to him in para 2 of B.P. Forest no 21 Misc. Confdl. 9/9.1.94 refusing his promotion to 4th Grade Deputy Conservatorship as his work had not given satisfaction. Mr. Thornton points out that he has been found fault with on 4 occasions, three of them being for commencing works without sanction, & one for entertaining unsanctioned establishment. It would appear however that in the last case Mr. Thornton detected the existence of the unsanctioned establishment, before he was found fault with for entertaining it contrary to orders.

(Please see Collector's endorsement under B.P. Forest. 275 Misc. 27.2.94.)

Attention is respectfully invited to the Board's Proceedings in the Currents, as well as to the Conservator's endorsement. The

latter officer considers Mr T's shortcomings due to overzeal, & a disposition to neglect his office work for the sake of field-work. He has apparently done excellent outdoor work, but the heavy work of his charge has given him but little time to learn the office work required of him. Attention is also invited to para 92 of Mr Fass's inspection note of 15. 11. 93.

The Board in forwarding the petition declines to recommend him for promotion yet as they consider his zeal not sufficiently tempered with discretion.

Sd 24/4.

The facts upon which Mr Thornton's supersession - temporarily - was ordered in G.O. 4691 / 15.12.93 are not altered by his present statement of his case. Taken as a whole Mr Carr's inspection report, to wh. the Bd. refers at para 4, goes to show that the Bd & the Govt have right in the decision arrived at - Sd 5/4

Memorial from Mr C.O.P. Thornton, Asst Cons: of Forests regarding his non-promotion.

H.E. the Governor.
Hon. Mr Grose
Hon. Mr Bliss.

Confidential
REVENUE DEPARTMENT.

PROCEEDINGS OF THE MADRAS GOVERNMENT.

Read C.No. 2529/94.

Petition without date from Mr C.O.P. Thornton, Assistant Conservator of Forests 1st grade

Order. No 1781 dy 4-5-94

The Government sees no reason to modify its previous order. Mr Thornton will be promoted as soon as he is reported qualified.

2. Mr Thornton is in error in supposing that there is now only one vacancy in the 4th grade at the completion of Deputy Conservators, for only three were filled up of the 13 ~~4~~ 5 vacancies have been filled up.

Sd 3/5.

Sd 4/5

To the Comm^r of R.R.
with 5 Encls dy

Draft order in
the Thornton
memorial for
approval

First copy sent to Press.

Returned for Signature.

Despatched.

NUMBER OF COPIES REQUIRED.. { Order complete. / Letter only. / Order complete with Letter.

READ AGAIN G.O., N. 189 , DATED

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CURRENT No.

ENCLOSURES TO C. No.

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LETTER OF GOVERNMENT.

STATEMENT WITH DITTO

PAPERS NOT FILED UP, BEING MEANT FOR DESPATCH IN ORIGINAL.

N.B.—

A = Print in full.
B = Not to be printed.
P = Print abstract only.
Q = Print heading only.

Draft order in the Thornton memorial for approval

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189 ,

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