M.R.O. 14—13,000—27-9-24

MADRAS RECORD OFFICE.

Government of Madras.

Revenue **DEPARTMENT.**

G.O. No. 1776 Press Mis.

3 4

Dated 1 — 5 — 1865.

Not to be folded or roughly handled

No. 3. Read the following letter from T. CLARKE, Esq., Member of the Board of Revenue, dated 1st November 1864, and despatched 13th May 1865, reporting on his inspection of the Tanjore Salt works:—

No. 4. ORDER THEREON, 1st August 1865, No. 1,776.

Separate Revenue, No. 1.
Salt.

1. Tanjore District is, for Salt manufacturing purposes, divided into nine Divisions, in which are included fifteen manufacturing stations distributed along a sea borde, which is approximately reckoned to be 150 miles in length.

2. The quantity of Salt sold annually has increased in the last 13 years from Indian Maunds 5,33,273 to Indian Maunds 6,57,343, or about 23¼ per cent., and the revenue has, in the same period, risen from Rupees 5,21,926 to Rupees 9,06,515, or nearly 74 per cent., the increase in the Government selling price having been 50 per cent. in the interval.

3. The quantity of Salt sold, ostensibly for consumption in the District, would give an average of 21¾ lbs. yearly per head of the population; but although there is reason to think that the consumption is really larger in Tanjore than in others of the Coast Districts, still there is no doubt that much of what is sold for consumption in the District passes beyond its limits, and Mr. Clarke has seen reason to believe that the District is not free from smuggling, or illicit manufacture of Salt by the lower and poorer classes.

4. Mr. Clarke condemns the roads of the District leading to the Salt stores as wofully bad, and apparently not without reason, as shewn by his illustration. The character of the soil is peculiarly unfavorable to road-making, the system of irrigation works in the Shrotriem villages, which intersects it, is altogether unregulated, and the expenditure on roads, as compared with other Districts, has been inadequate.

5. Mr. Clarke suggests that the "usual per-centage of the Land Revenue," and a similar per-centage out of the Salt revenue, may be set aside to affect and maintain the needed improvement.

6. The Government presume that Mr. Clarke alludes to the per-centage road cess which has been *added* to the revised assessment on the land, recently imposed in some of the Districts; for in no District has any per-centage of Land Revenue proper been assigned for road improvements, and it is in the highest degree improbable that any such assignment would be sanctioned by the Supreme Government. Provision is made out of the general revenues to the utmost ability of Government for the improvement and maintenance of Imperial works, including high roads, and Tanjore has probably received its full share of this expenditure when the charges on account of her irrigational works are taken into consideration.

7. Paragraphs 8 to 16 of Mr. Clarke's report will, however, be referred to the Department Public Works for consideration, in view to such improvement being effected as may be possible with the available means.

8. It seems probable that great part of the road-way to which Mr. Clarke refers is strictly Local Fund Road, and a measure to improve these Local Funds is now under consideration, which ought to have marked effect in Tanjore, and provide funds sufficient to produce very decided improvement on the cross roads.

9. The next point to which Mr. Clarke directs attention is the quality of the Salt manufactured in the District, which in the northern part of the District is very bad. In the south it is better, and no good reason exists for this difference.

10. The Collector should impress on his Deputy the absolute necessity of rejecting bad Salt unhesitatingly, and of compelling on his subordinates, attention to this rule. It is not to be endured that at Negapatam, the head quarters of the Deputy Collector in charge of the Department, and the Depôt for the Railway traffic

of the whole south of the Presidency, the manufacturers should be allowed by combination to force on Government and the public a very inferior article when good Salt can be made there, as has been proved by Mr. Clarke to demonstration. The parties engaged in the manufacture cannot be required to continue it against their inclination, but they can be required to make a good article for the price they receive, so long as they choose to engage in the manufacture, and if they refuse or neglect to do this, the sooner the manufacture ceases there, the better. Vedarniem will afford an ample source of supply to meet the demand, and so soon as the boat channel is completed, the difficulty in the way of carrying that Salt to the terminus of the Railway will cease to exist.

11. Mr. Clarke next remarks on the utter want of arrangement in the works themselves, a defect which greatly increases the difficulty and cost of guarding them, and facilitates fraud, and in order to effect the necessary improvements efficiently and economically he proposes gradually to reduce the fifteen existing stations to nine, at the places named in paragraph 34, and to close the rest.

Paragraphs 22 to 39.

Mr. Cadell concurred in this recommendation. (See Appendix to Report).

12. The Government approve of this proposal, on the understanding that the measure is to be gradually carried out. They agree with Mr. Clarke that the Negapatam stores being well supplied for all the traffic by rail, the rest of the stations must become merely depôts for local demand, and the number proposed to be retained will give on an average one store for every 17 miles of coast.

13. The Board will take the necessary steps for carrying out the reduction of the stations gradually, and for concurrently improving those that are to be retained, as proposed by Mr. Clarke and approved by Government.

14. The last point of general application to which Mr. Clarke directs attention, is "the desirableness of placing the structure and repair of all works belonging to "the Salt Stations, and the approaches leading to them," under the orders of the Collector, on considerations of economy and more speedy execution, with equal efficiency in all cases not requiring the professional skill of the special Department.

15. The principle of this proposal has already been approved by Government on more than one occasion, and they deem it only necessary to repeat here that it is open to Collectors to obtain the execution, by their own Department, of all new works of a simple character and repairs, connected with the Salt works of their Districts, and the approaches to them, for which funds are provided or available in the Budget, by intimating their desire to the Superintending Engineer of the Division.

16. Mr. Clarke then proceeds to review the circumstances of the several Divisions, as they occur in order from north to south.

17. *Nedavasal.*—This division is distant about 30 miles from the nearest Division in South Arcot, is about 9 miles north of Tranquebar, and 17 miles by road or 11 miles by the coast, north of Chundrapadi, the next Tanjore Division.

Paragraphs 45 to 70.

18. Three stations belonging to this Division were closed at the end of 1863. It now includes three stations, Vadapathy, and Tempathy—the intervening space between which is suitable for Salt pans, and was intended to be so laid out when the stations were reduced in 1863, though little has yet been done—and Kilayur.

19. The existing system of manufacture is fatal to the production of a good article, and the Salt is consequently of most inferior quality. The quantity, however, judging from paragraph 54, is not much below the capabilities of the existing pans. Mr. Clarke proposes to reform and extend the two first stations, and to close Kilayur so soon as the works at the other two stations are effective, and the necessary stock secured, and the works proposed at Tranquebar are in efficient operation.

20. The Government approve this proposal, which the Board will take steps to carry out.

21. The platforms at Vadapathy and Tempathy will be united and extended as proposed.

22. The Cutcherry will be removed to the Vadapathy platform, and will be constructed on the Madura plan, which is approved by Mr. Clarke as very suitable and inexpensive.

23. The Board will supply the Collector with weighing machines of the improved pattern lately approved, so soon as the necessary number are available.

24. The Collector will see that the disregard of standing rules brought to notice in paragraph 69 is properly punished, and that fit men are placed in charge of the Division. The Clerk referred to in paragraph 70 should be required to take his pension.

Paragraphs 71 to 109.

25. *Chendrapadi and Kovilput.*—The first of these two Divisions is situated about three miles south of Tranquebar, on the south bank of the Nandalur river, and on the very border of the French Settlement of Karical. Kovilput is 14 miles south of Chendrapadi, nine miles south of Karical, and four miles north of Negapatam. It is notorious for smuggling.

26. The system of manufacture and the quality of the produce at both stations are very bad, and Mr. Clarke most strongly advocates, on grounds of necessity and sound policy, that Kovilput should be closed altogether, and that the Chendrapadi station should be transferred to the north bank of the Nandalur, where is an admirable site for the works on which the Danish Government formerly carried on the manufacture. The arrangement will result in a net saving of Rupees 792 yearly in the cost of establishment.

27. Mr. Clarke enters at length into the reasons which have influenced him in making this recommendation, which Mr. Cadell approved, and the Government resolve to adopt it, and direct the Board of Revenue, to take the necessary steps for carrying it out. It is observed that the projected works on the north bank of the Nandalur have been already approved in G. O. dated 16th June 1865, No. 1,335, and estimates called for.

See Appendix to Report.

28. The Collector in his letter asking for an anticipation grant for preliminary operations, mentions that Kovilput had been already closed, and the formation of the new Salt pans commenced by the manufacturers.

29. The works will be laid out, and the necessary Cutcherry erected on the plan recommended by Mr. Clarke. The road thence to Tranquebar will be put into good order, and every facility provided to ensure easy carriage of the Salt required for Karical, from which the new works will be about six miles distant.

30. The establishment proposed by Mr. Clarke for the new works is approved, and will be introduced so soon as the works are sufficiently advanced.

31. The Board will take the necessary measures to ensure that the establishments are worked as was designed, and that the servants are not diverted from the duty they were intended to perform to something totally different, or allowed to assume functions which do not belong to them.

32. In forming the new establishment out of the two sets of servants now existing, the Collector will be careful to retain efficient and active men, and to get rid of such servants as are brought to notice in paragraphs 97 and 109 of Mr. Clarke's Report.

33. *Negapatam and Vedarniem.*—These two Divisions which are 32 miles apart, but in course of being united by a boat channel, form together the most important Depôt for supplying Salt to the interior south of Madras; and as the Negapatam and Trichinopoly Railway now open, is extended to its junction at Erode with the Madras line, the demand may be expected to increase to a very great extent, Erode being only 160 miles from Negapatam, while it is 243 miles distant from Madras.

Paragraphs 110 to 154.

34. The capabilities of Negapatam as a Salt producing station are very great, and Mr. Clarke proved that with care and intelligence a very good article can be made. The samples sent by him establish this fact beyond question.

35. At present the quantity produced is altogether inadequate to meet the demand, and the quality is very inferior.

36. In view to improvement in both these respects Mr. Clarke proposes to reform and extend the existing pans, and the Government desire that the Board will instruct the Collector to take the necessary steps for carrying out these proposals as fully and speedily as may be feasible.

37. Mr. Clarke also proposes that, in lieu of the extension of Platform No. 3, recommended by the Board in Proceedings, dated 16th May 1864, No. 2,982, and provisionally sanctioned by Government, a new platform be constructed on a most favorable site which was not available when the first proposition was made as it now is, and which holds out far greater advantages than the original scheme which also would be more expensive.

38. The Government approve and sanction the proposed work in substitution for that formerly recommended.

39. It is observed that sanction for commencing this work has already been given in G. O. dated 14th June 1865, No. 1,306, Revenue Department, and that the Public Works Department have been requested to arrange the provision of funds for its completion.

40. Mr. Clarke lays much stress on the necessity of providing an ample maintenance allowance for the boat channel from Vedarniem to Negapatam now in course of construction, and his remarks will be referred to the Department Public Works for consideration when the proper time arrives. He expresses his opinion that by means of this canal it will be possible to lay down the excellent Vedarniem Salt at Negapatam for the price which the Government are now paying for the very inferior article now produced at the latter pans.

41. The Government trust that the time is not far distant when this most desirable end will be attained. They rely on the Collector affording every assistance for the speedy execution of the work.

42. Mr. Clarke narrates the circumstances of the very successful experiment made in 1863 for manufacturing Salt at Vedarniem, where hitherto only spontaneous Salt had been gathered. The result was in every respect satisfactory, but in the following year the late Collector took the manufacture into his own hands as an economical arrangement, in which however the claims and vested interest of those who had been induced to undertake the manufacture in the first instance, under circumstances of considerable difficulty, appear to have met with less consideration than they were fairly entitled to.

43. Mr. Clarke recommends that the pans should be restored to these parties, and that they should be encouraged to resume the manufacture, and the Government desire that the present Collector will carry out this proposal. The price to be paid for the Salt will, as recommended by Mr. Clarke, be Rupees 10-10-0 per garce, being the lowest price paid in the District.

44. Mr. Cadell manufactured a small quantity by hired labor at a less cost in 1864, but independantly of the fact that this system is opposed to the universal practice of the Presidency from time immemorial, and involves an amount of risk and

responsibility which it is most undesirable for Government to assume, the result, as pointed out by Mr. Clarke, was obtained only by use of the means provided by the labor of the manufacturers on the ordinary system in the previous year, and made no allowance for the profits to which they were fairly entitled as the result of those labors. Allowing for the cost of the works, it would appear that even on Mr. Cadell's estimate the result of his experiment gives Rupees 9-12-7 as the cost of a garce of Salt without allowing anything for profit to the manufacturer, (See Appendix to Report.)

45. Mr. Clarke found that the prejudice against the use of the spontaneous Salt still exists in considerable force, notwithstanding that it is a very excellent and superior article. He does not think that it would be safe to depend on it as a source of supply to the market, but recommends that all that can be obtained should be collected.

46. The Government fully approve this proposal. They doubt not that, as a very superior article for distant carriage, it will in time attain as good a position as the Buntumilly spontaneous Salt holds in the north among the Brinjaries and Lumbadis, and the objection to its use is probably, in great measure, due to the novelty of the supply, and to the fact of its being a more highly concentrated essence of brine than the people are accustomed to use, and requiring more careful manipulation before use in cooking. The circumstances of its formation and the careful analyses made of its component ingredients preclude the idea of its really possessing any injurious qualities.

47. The source of supply is certainly not one that should be left unimproved, even if its abandonment would not involve great risk of illicit use of the article which is of spontaneous production.

48. The platforms at Vedarniem will be re-arranged as proposed by Mr. Clarke.

49. The revised establishment recommended by him for Negapatam and Vedarniem Divisions, is approved and sanctioned; it is observed that in combination with the general revision of the Salt Establishments in this District proposed by Mr. Clarke at paragraph 206, and approved by Government, the increase at Negapatam and Vedarniem can be made, and yet a considerable reduction effected in the cost of the whole with improved efficiency.

50. Mr. Pelly will be requested to make the necessary provision in his final revision of the District Revenue Establishment now in hand.

Paragraphs 155 to 169.

51. *Tambikanallavankottai and Tamarankottai.*—From Point Calimere not far from Vedarniem the coast trends abruptly to the westward, and the above two stations forming now one Division, lie about 30 miles west of Vedarniem, and about half a mile apart, and some two miles east of Adrampatam.

52. The Salt is a fairly good article, but the system of manufacture is very slovenly, and the arrangement of the pans most objectionable.

53. Mr. Clarke is satisfied that nothing but the inferiority of the Negapatam Salt, and the objectionable practice of closing the Adrampatam stores in order to force an artificial demand at these stations, has enabled the sales to be maintained, and he recommends that Tamarankottai should be closed at once, and that Tambikanullavankottai should have a fair trial on its own merits and unless it can maintain its position, it should also be closed.

54. The Government approve these recommendations, and direct that they be carried out. The Platform No. 2 at the last named station, will only be used when absolutely necessary, and a cheap description of Cutcherry on the Madura pattern will be erected on Platform No. 1, if after a reasonable trial it be determined to retain the station.

Paragraphs 170 to 181.

55. *Adrampatam.*—This station lies in the bight of the Bay, of which Point Calimere is the north-eastern extremity, and in the close vicinity of the last named stations.

56. The port is most favorably situated as regards protection from the north-east monsoon, and is much resorted to by Native coasters engaged in the Ceylon trade.

57. There is a considerable export trade in grain, and the carts take Salt as a return load. But the increased sales at Negapatam have checked those at Adrampatam, as was to be expected from the greater economy and facilities afforded by the Railway.

58. When a full supply of good Salt can always be obtained from Negapatam, the Adrampatam sales must in great measure die out. It is only the shortcomings at the former place that postpone this result.

59. Recently, however, an export trade to Travancore has sprung up, and if this is not checked by the changes necessary to make export sales remunerative to this Government, or by the development of the manufacture in Travancore itself, the stores at Adrampatam and at Cuttumavadi in the next Salt Division of Ayapatam, will need to be increased.

60. Magalancottai is the subordinate station of the Adrampatam Division, but sales there have hitherto been artificially excited by closing the stores at Adrampatam, and if this objectionable stimulus be withdrawn, Mr. Clarke anticipates that this sub-station may be abolished in a few years.

61. The Government desire that the Board will prohibit the District Officers from resorting to this reprehensible measure, which entails unnecessary expense on the Government, while it inconveniences the community. If after a fair trial on its own merits it should anywhere appear that the sales at any particular station cannot be maintained, the fact must be accepted as proof that the retention of such station is unnecessary and therefore objectionable, the manufacture should at once be discontinued, the establishment reduced to a minimum, and the station finally closed so soon as the stock on hand has been disposed of, to accelerate which result the terms of sale might be rendered somewhat more than ordinarily favorable to the purchaser by wholesale.

62. Mr. Clarke takes occasion, in connection with this Division, to discuss the principle on which pans should be assigned to the villagers when an extension of manufacture is necessary, and he appends to his Report a letter from the late Collector to the present Deputy Collector in charge of the Salt Department on this question.

63. The Government concur so far in Mr. Clarke's view that the available resources of existing pan-holders should be fully developed before the number of pan-holders is increased. If extension be found necessary beyond the land in which individual rights exist, and it be proposed to form pans in the waste lands hitherto enjoyed by the villagers in common, then the Government are of opinion that the distribution of the pans should follow the same rule as would guide the decision were the land required for cultivation.

64. The pans at Adrampatam should be laid open as recommended by Mr. Clarke, and a new Cutcherry erected on the Madura plan on the platform.

Paragraphs 183 to 193.

65. *Ayapatam.*—This Division includes parts of the old Division of Shembai, which was closed in 1863. Its most northerly station, Shembi Mahadevi, is 17 miles south of Magalancottai above-named. Cuttumavadi is one mile south of Shembi Mahadevi, and Ayapatam, which gives the name to the Division, is nine miles south of Cuttumavadi.

66. There is a road from Cuttumavadi to Pondicherry, viâ Poodoocottah, and Mr. Clarke recommends that this station alone be retained, one platform being closed, and a Cutcherry added to the other, and that Shembi Mahadevi and Ayapatam

be closed. The Government approve this proposal which will be gradually carried out.

Paragraphs 194 to 202.

67. *Arasanagherry.*—This Division consisting of a single station is about 12 miles south of Ayapatam, or 21 miles south of Cuttumavadi, and is the last Salt Division in the Tanjore District. The nearest Salt Division in the adjoining Madura District, is distant 10 miles south.

68. Mr. Clarke seems to think that this Division might be abolished, but the Government approve its retention at least for the present. If the sales continue to fall off rapidly after a fair trial subsequent to the closing of Ayapatam, the proposal can again be brought under consideration.

69. Meanwhile one platform will be abolished, the Cutcherry will be transferred to Platform No. 1 from the village of Minpesil where it is now situated, at a distance of 3 miles from the works, and the servants on the establishment will be required to take up their residences on the same side of the river with the works, and in their neighbourhood.

70. Having gone through the Divisions in detail, Mr. Clarke proceeds to review the Salt Establishment of the whole District, and he submits a revised scheme of which the Government have already expressed their approval, the result being an annual saving of Rupees 2,838 on the present charge.

71. The Government entirely concur in his remarks on the necessity of improving the entire staff, and they desire that steps be taken for getting rid of those servants who are no longer efficient, by requiring them to take the pensions to which their service entitles them. The practice of transferring to the Salt Department men who have shewn themselves elsewhere to be inefficient or untrustworthy, must be strictly prohibited.

72. With reference to paragraph 190, the Collector must take care that not more Police Guards are charged to the Department, than are absolutely needed and actually furnished.

73. Mr. Clarke gives the result of his examination of the Salt heaps which, on the whole, is not unfavorable. The defects observed in the system of measuring can only be fully remedied by the substitution of weighing in all transactions, and this will be carried out as rapidly as the manufacture of the machines will allow.

74. The Government desire to thank Mr. Clarke for his very searching and exhaustive report. It has certainly revealed a state of things which is very far from satisfactory, but it may be hoped that the revelation will lead to thorough reform, and that the valuable suggestions which his extended experience enables him to offer with confidence, will, when thoroughly carried out, effect all the improvement that can be desired.

75. A change has recently been made in the Officer immediately in charge of the Department, and the Government do not doubt that Mr. Ricketts will use his best endeavours to remedy whatever is faulty in its administration. They are confident that he will receive every support from the Collector, and the concentration of the works will greatly facilitate the attainment of the desired end.

(True Extract.)

(Signed) W. HUDLESTON,

Acting Secretary to Government.

To T. Clarke, Esq.,
" the Revenue Board,
" the Honorable C. Pelly,
" the Department Public Works,
" the Accountant General,
" the Collector of Tanjore,
} With Report.

Exd. S. T. Augustin.

IN CON., 14TH MARCH 1860, No. 1,170.

From W. M. CADELL, Esq., Collector of TANJORE,
dated Vallum, 12th March 1860, No. 62.

With reference to the Board's Circular, No. 2,684, dated the 8th July 1859, I have now the honor to report on the subject of the treatment of spontaneous salt in this district.

2. There is only one locality where spontaneous salt is found to any extent and which consists of an extensive swamp capable of producing almost an unlimited amount. It extends from Vadarniem near Point Calimere in the east to the river Korayar near Muttupetta in the west, a distance of about 22 miles. The average breadth of this swamp is from four to five miles. Over the whole of this area, but more especially in the small pits and inequalities of ground round the margin and around the small islands the salt is produced. It is impossible to collect the whole of this on account of its enormous quantity, the difficulty of access thereto and the distance it would have to be carried. The gathering and heaping of the salt is at present confined to a small arm of the swamp which stretches northward between Vadarniem and the sea. This I shall describe presently. The salt produced in other places is destroyed where it can be got at, but notwithstanding this it is calculated that nearly 150 garce of spontaneous salt is carried off yearly and surreptitiously to the prejudice of the Government monopoly. This is effected by men swimming and wading out with chatties to the Islands and mud banks, near the margin of the swamp on the sea side where the salt forms in large crystals. This they bring away in their chatties, but the operation is an exceedingly dangerous one on account of the great depth of the mud in some places, and it is supposed that many persons perish annually in the attempt. The only way to guard against this appropriation of the salt that appears feasible is, to establish a chain of tannahs between Vadarniem and Muttupetta. I am of opinion that five tannahs with two peons at each would be sufficient. The peons should be placed at such points as the Head of Police of the Tritrapundi Taluq in communication with the proposed Deputy Collector in charge of the salt may point out. The principal tannah should be established at Sheritalekadu where a Kotwal or head peon might be posted, whose duty it should be to visit the different tannahs once or twice every week to receive reports and ensure that the peons are at their stations and performing their duties.

3. The salt produced spontaneously in this swamp is, what is usually termed, white salt. It is perfectly white, the crystals being of uncommon size and unusually hard. It is not, however, held in such esteem by the people generally as the red salt which is manufactured at other allams in this district. The people in Tanjore are not peculiar in this respect, as I have always found that white salt is refused when red can be procured. It is, however, peculiarly adapted for exportation and ship sale, as from the size and hardness of the crystals it is less liable to wastage in transport. I would, therefore, recommend strongly that ship sales in this district should be confined entirely to Vadarniem, and that the collection and storing of salt there should consequently be increased.

4. The present mode of gathering salt is as follows:—During the high tides in April, the whole of the swamp is covered with salt water. This runs off at various outlets, two of which are at the eastern extremity. Of these, one stretches northward and forms a sandy Delta with the second which runs south-east. Across the northern of these two outlets, embankments are thrown forming large enclosures which are left open in certain parts to admit the high tide, as soon as the tide is at its height the openings are closed, and the water retained in the enclosure which thus becomes an enormous salt pan. As the water evaporates the salt is formed and is then scraped together and heaped upon vadies or platforms formed on each side of the outlet. Only a very small portion of the available space is now enclosed, and yet this is capable of producing upwards of 600 garce in average years. It is evident therefore that by throwing up fresh embankments the quantity of salt may be multiplied almost to any extent and as much produced as could possibly be required for exportation. By forming vadies on the Delta and clearing a short road to the sea, the shipping of the salt would be rendered easy, while for all ordinary land sales another platform might be

constructed on the opposite side of the outlet. This platform for land sales should, I propose, be constructed at a place called Parellam, on the west side of the road leading to Kodikarai. Enclosures might there be thrown up and 400 or 500 garce be annually gathered which would be amply sufficient in all ordinary years for the land sales.

5. Another reason which I might mention for largely extending the gathering of salt at Vadarniem is, that this would act as a reserve in case the season should prove unfavorable for the manufacture of salt in other parts of the District.

6. The Board of Revenue will be the most competent judges as to the extent to which the gathering for ship sales should be carried on, as they will know the probable amount required for exportation.

7. With regard to the mode in which labor is obtained and remunerated for collecting it, the plan adopted is a very simple one. Two or three maistry coolies are employed, who engage to supply the requisite number of hands for collecting, measuring and heaping the salt, and this they do by contract receiving a certain fixed rate per garce for each of these operations. The rate must, of course, vary in proportion to the demand for labor. During the past year, there was, I believe, considerable difficulty in procuring the requisite amount of labor, in consequence of the same rates being retained which were formerly in use, while the demand has been considerably increased. For future operations a better plan cannot, I conceive, be devised than the continuation of the present plan with a slight modification, viz., that as soon as the probable quantity of salt to be stored can be ascertained, a notification should be published as widely as possible in the neighbourhood shewing the number of garce to be collected, the maximum rate per garce which will be given for collecting, measuring and heaping it, and inviting tenders for the supply of labor at rates not exceeding the fixed maximum.

8. A Memorandum is subjoined which shews the charges on account of the various operations above enumerated and the average cost per garce for three years.

9. The present establishment at Vadarniem consists of a Maniem on 10½ Rupees per mensem, a Karnam on 5¼, four Peons at 3½, and a Taragan or Striker on 2¼. Should it be determined to increase the collection of salt at this place, an increase to the establishment will be indispensably necessary, and if the Board approve of the suggestions now made, I shall be prepared to submit a further small addition to the salt establishments as proposed in my letter of the 11th November 1859, No. 240.

10. I have to apologize for the delay which has taken place in the submission of this report, and also for its not being so complete as I could have wished. I have long been of opinion that the manufacture of salt in this District might be increased and extended to an almost unlimited extent; but before finally reporting on the subject, I was most anxious to visit the different pans on the coast and the localities where salt is produced with the greatest facility. This I have hitherto been unable to do, owing to the pressure of more important business, and it is but right I should say that I am indebted to Mr. Hooper for the information contained in the present paper.

ENC. 1.

ABSTRACT.—Statement showing the charges incurred for manufacturing and gathering spontaneous salt at Vadarniem and the average cost per garce for three years.

Exd. J. Tulloch.

From T. CLARKE, Esq., Member of the Board of Revenue,
To J. D. SIM, Esq., Secretary to Government, R. D.

SIR,

I now proceed to submit my report on my inspection of the salt works of the Tanjore district.

2. This district does not cover so large an area as many of the other Maritime districts of this presidency, but it possesses a very long sea-board, and is, for the most part, densely populated. The sea board is approximately reckoned at 150 miles, and the average breadth of the district is about 50 miles. Its population is stated to be 1,652,170, giving 442 persons to each square mile of the area.

3. The quantity of salt, shown by the accounts of Fusly 1272 to be sold for consumption, in the district, is 4 14,011 Indian Maunds, or 2,40,67,190 lbs., which makes the consumption of salt, in the district, to be 21¾ lbs. per head of the population. Large quantities of salt, purchased for consumption in the district, are carried, by rail, to depôts on the line of railway, and from thence, find their way into other districts.

4. Owing to the large number of wealthy persons inhabiting the district, to the very prosperous condition of the people generally, to the facilities, which the railway and other communications offer for the carriage of salt to all parts of it, together with the compact size of it, I believe, larger quantities of Government salt are consumed in Tanjore than in other districts of this presidency; but notwithstanding the large quantities of salt sold in this district, I am afraid it is not exempt from smuggling, or from illicit manufacture. I believe these offences are chiefly restricted to the lower and poorer classes.

5. The sales of salt in this district have, during the last thirteen years, risen from 5,33,273 Indian Maunds, to 6,57,343 Indian Maunds, or about 23¼ per cent.; while the revenue has increased from 5,21,926 Rupees to 9,06,515 Rupees, or nearly 71 per cent. These sales have not reached the magnitude they ought, and I trust shortly will reach.

6. Tanjore was, under the old regime, divided into five salt divisions and twenty-six stations. Seven of these stations were closed in September 1863, and four previously, and the divisions have since been augmented to nine, in order to ensure increased efficiency of supervision.

7. The present divisions, with the number of stations, pans and platforms attached to each, the distance of one division from another are given below. I have also appended a statement, showing the average quantity of salt ordered to be made, and that sold, during the last ten years, in each of the five divisions, as they stood before the last changes, as also the cost of salt to Government, at these divisions, as they stood, and now stand. I have shown the cost of the salt according to the old and revised establishments calculated on the salt received into store each year, and the quantity in hand, at the beginning of each Fasli, during the last ten years.

Statement A. showing the number of Divisions and Stations retained at present for the manufacture of salt in the Tanjore District.

Divisions.	Stations.	No. of pans.	No. of platforms.	Distance between one division and another.	Distance between one station and another.
1. Neidavasal ...	Vadapathy ...	448	2	17 miles to next division.	1 mile to next Station.
	Tempathy ...	260	1	.....	¾ „ „
	Kilayur... ...	192	1	.....	15¼ „ „
2. Chendrapady.	Chendrapady .	844	1	12 „ „	13 „ „
3. Covilput... ...	Covilput... ...	1,394	1	5 „ „	4 „ „
4. Negapatam ..	Negapatam ...	17,430	2	32 „ „	32 „ „
5. Vedarniem ...	Vedarniem ...	4,226 and 6 swamps.	7	35 „ „	35 „ „
6. Tambikanalla-vancottai	Tambikanalla-vancottai ...	2,646	3	3 „ „	1 „ „
	Tamarancottai	1,853	2	.....	2 „ „
7. Adrampatam.	Adrampatam .	2,027	3	12 „ „	2 „ „
	Magalancottai.	8,430	1	.....	10 „ „
8. Ayapatam. ...	Sembi Maha-devi...	687	1	21 „ „	1 „ „
	Cutiumavady.	1,857	2	.....	8½ „ „
	Ayapatam ...	761	2	.....	12 „ „
9. Arasanagery.	Arsanagery ...	1,033	3	.....	.....

Statement B showing the average cost of Salt per garce and per Maund to Government before sale in the Tanjore District, as the Divisions stood during the ten years from Fasli 1263 to Fasli 1272.

NEDAVASAL.

Faslis.	Quantity of Salt in hand at beginning of each Fasli.	Quantity ordered to be made.	Quantity received into store.	Sales.			Cudivaram on quantity received into store.	Cost of storing.	Total of Columns 8+9.	Charges in Column 10, divided on Column 4.	Wastage.		Cost of Measurers
				Home.	Inland.	Foreign.					Quantity.	Value.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	I. MDS.	I. MDS.	I. MDS.	I. MDS.	I. MDS	I. MDS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	I. MDS.	RS. A. P.	RS A. P.
1263	17,270	62,400	1,63,103	75,366	60	10,080	13,554 11 2	.. ..	13,554 11 2	0 1 4	1,124	93 10 8	... ...
1264	93,743	1,47,600	1,13,063	87,681	48	1,200	9,418 3 7	... ...	9,418 3 7	0 1 4	2,736	228 0 0	... ...
1265	1,15,140	78,000	1,35,400	88,462	78	...	11,632 15 10	... ...	11,632 15 10	0 1 5	13,878	1,228 12 6	... ...
1266	1,48,122	1,08,000	25,754	84,134	7,290	6,960	2,277 2 0	... ...	2,277 2 0	0 1 5	5,996	530 14 4	... ...
1267	69,494	1,50,000	1,19,881	84,972	1,421	6,000	10,607 1 2	... ...	10,607 1 2	0 1 5	4,558	394 11 6	... ...
1268	92,423	2,08,800	60,881	87,379	22,121	12,960	5,369 12 11	... ...	5,369 12 11	0 1 5	2,396	212 2 4	... ...
1269	22,928	2,68,800	1,58,409	69,162	9,014	8,280	11,876 15 4	... ...	11,876 15 4	0 1 5	1,018	90 2 2	... ...
1270	93,861	1,33,200	1,42,193	79,504	7,269	7,200	13,437 1 1	... ...	13,437 1 1	0 1 5	1,203	106 7 5	... ...
1271	1,40,878	1,17,600	84,250	73,721	2,733	6,000	7,444 4 5	... ...	7,444 4 5	0 1 5	1,949	172 9 1	... ...
1272	1,40,724	1,68,000	35,107	73,065	21,888	13,200	3,035 14 3	... ...	3,035 14 3	0 1 5	1,801	159 7 5	... ...
Total	9,34,581	14,42,400	10,38,041	8,03,446	71,922	71,880	88,654 1 9	... ...	88,654 1 9	... ...	37,660	3,216 13 5	... ...
Average	93,458	1,44,240	1,03,804	80,344	7,192	7,188	8,865 6 7	... ...	8,865 6 7	0 1 5	3,766	321 10 10	... ...

NEDAVASAL *(Concluded.)*

Faslis.	Hire for destroying spontaneous Salt and reward for detection of smuggling.	Fixed Establishment.	Temporary Establishment.	Police Guards.	Saderwarid.	Repairs to Salt works.	Sundries.	Total of Columns 13 to 21.	Charges in Column 22 divided on Columns 2+4.	Total of Columns 11+23, giving actual cost per Maund	Cost per Garce calculated on Column 24.
	15	16	17	18	19	20	21	22	23	24	25
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1263	... ...	2,661 0 0	... ...	... ...	42 0 0	564 5 0	... ...	3,360 15 8	0 0 4	0 1 8	12 8 0
1264	... ...	2,661 0 0	86 2 5	... ...	42 0 0	63 12 0	... ...	3,080 14 5	0 0 3	0 1 7	11 14 0
1265	... ...	2,661 0 0	110 0 0	... ...	42 0 0	97 5 6	... ...	4,139 2 0	0 0 3	0 1 8	12 8 0
1266	... ...	2,661 0 0	90 0 0	... ...	42 0 0	21 8 0	... ...	3,345 6 4	0 0 4	0 1 9	13 2 0
1267	... ...	2,661 0 0	85 7 8	... ...	42 0 0	... ...	... ...	3,183 3 2	0 0 3	0 1 8	12 8 0
1268	... ...	2,661 0 0	50 0 0	... ...	42 0 0	77 8 0	... ...	3,042 10 4	0 0 4	0 1 9	13 2 0
1269	... ...	2,661 0 0	86 0 0	... ...	42 0 0	327 6 8	1,516 1 9	4,722 10 7	0 0 5	0 1 10	13 12 0
1270	... ...	2,661 0 0	86 2 0	... ...	42 0 0	4,412 14 11	... ...	7,308 8 4	0 0 6	0 1 11	14 6 0
1271	... ...	2,661 0 0	90 0 0	... ...	42 0 0	... ...	14 11 6	2,980 4 7	0 0 3	0 1 8	12 8 0
1272	... ...	2,518 8 0	... ...	1,096 12 5	42 0 0	259 11 2	12 4 0	4,088 11 0	0 0 4	0 1 9	13 2 0
Total...	... ...	26,467 8 0	683 12 1	1,096 12 5	420 0 0	5,824 7 3	1,543 1 3	39,252 6 5	... ...	... ...	... ...
Average...	... ...	2,646 12 0	68 6 0	109 10 10	42 0 0	582 7 1	154 4 11	3,925 3 10	0 0 4	0 1 9	12 15 0

NEGAPATAM.

Faslis.	Quantity of salt in hand at beginning of each Fasli.	Quantity ordered to be made.	Quantity received into store.	Sales.			Cudivaram on quantity received into store.	Cost of storing.	Total of Columns 8+9.	Charges in Column 10, divided on Column 4.	Wastage.	
				Home.	Inland.	Foreign.					Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13
	I. MDS.	I. MDS.	I. MDS.	I. MDS.	I. MDS.	I. MDS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	I. MDS.	RS. A. P.
1263	43,457	1,28,400	1,86,581	98,050	306	720	12,982 9 0	131 12 8	13,114 5 8	0 1 2	3,424	249 10 8
1264	1,09,897	2,19,600	1,83,894	92,001	632	9,600	13,244 8 6	154 0 10	13,398 9 4	0 1 2	4,777	348 5 2
1265	1,84,622	1,64,400	2,35,271	1,13,508	390	13,200	19,372 6 1	70 5 2	19,442 11 3	0 1 4	16,258	1,354 13 4
1266	2,50,466	1,49,400	1,05,803	1,06,109	184	6,000	8,390 2 4	103 2 8	8,493 5 0	0 1 3	2,923	228 5 9
1267	2,23,132	78,000	1,32,303	1,02,033	230	7,080	6,541 3 8	414 12 3	6,955 5 11	0 0 10	5,026	261 12 4
1268	2,19,826	2,42,400	23,105	1,03,433	400	1,080	1,334 4 3	68 9 1	1,402 13 4	0 1 1	14,232	963 10 0
1269	13,757	3,39,600	1,56,182	1,28,172	1,686	5,640	7,195 4 10	472 9 11	7,667 14 9	0 1 1	1,247	77 15 0
1270	33,194	2,91,600	3,12,538	1,17,576	399	7,200	15,910 11 0	1,321 5 0	17,232 0 0	0 0 10	1,402	73 0 4
1271	1,98,035	3,06,000	1,94,272	1,08,890	6,840	6,000	15,166 5 11	159 0 3	15,325 6 2	0 1 3	1,119	87 6 9
1272	2,26,656	5,35,200	1,64,443	1,59,523	1,20,778	...	11,904 8 10	382 11 2	12,287 4 0	0 1 3	2,163	168 15 9
Total...	15,03,042	24,54,600	16,94,492	11,29,295	1,31,845	56,520	1,12,052 0 5	3,278 5 0	1,15,330 5 5	.....	52,571	3,813 15 1
Average...	1,50,304	2,45,460	1,69,449	1,12,929	13,184	5,652	11,205 3 3	327 13 3	11,533 0 6	0 1 1	5,257	381 3 1

NEGAPATAM.—*(Concluded)*

Faslis.	Cost of Measures.	Hire for destroying spontaneous salt, and reward for detection of smuggling.	Fixed Establishment.	Temporary Establishment.	Police Guards.	Saderwarid.	Repairs to Salt works.	Sundries.	Total of Columns 13 to 21.	Charges in Column 22 divided on Columns 2+4.	Total of Columns 11+23 giving actual cost per Maund.	Cost per garce calculated on Column 24.
	14	15	16	17	18	19	20	21	22	23	24	25
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1263	271 10 5	... ...	2,115 0 0	... ...	... ...	42 0 0	154 0 0	....	2,832 5 1	0 0 2	0 1 4	10 0 0
1264	257 1 10	... ...	2,115 0 0	87 10 5	... ...	42 0 0	795 14 0	....	3,645 15 5	0 0 2	0 1 4	10 0 0
1265	91 3 9	... ...	2,115 0 0	146 8 9	... ...	42 0 0	215 3 1	....	3,964 12 11	0 0 2	0 1 6	11 4 0
1266	116 7 2	... ...	2,115 0 0	170 0 0	... ...	42 0 0	294 13 2	23 0 0	2,989 10 1	0 0 2	0 1 5	10 10 0
1267	530 1 8	... ...	2,115 0 0	170 0 0	... ...	42 0 0	309 6 10	74 15 0	3,803 3 10	0 0 2	0 1 0	7 8 0
1268	62 4 1	... ...	2,115 0 0	86 11 9	... ...	42 0 0	162 0 8	....	3,431 10 6	0 0 3	0 1 4	10 0 0
1269	242 2 11	... ...	2,115 0 0	248 3 9	... ...	42 0 0	5,934 12 4	1,740 3 8	10,400 5 8	0 0 11	0 2 0	15 0 0
1270	983 3 1	... ...	2,115 0 0	294 13 7	... ...	42 0 0	3,930 1 4	65 4 11	7,503 7 3	0 0 4	0 1 2	8 12 0
1271	128 13 8	... ...	2,115 0 0	306 8 3	40 2 1	42 0 0	.. ..	13 2 1	2,733 0 10	0 0 1	0 1 4	10 0 0
1272	176 13 3	... ...	2,104 8 0	....	1,119 5 5	42 0 0	1,277 0 6	8 5 0	4,896 15 11	0 0 2	0 1 5	10 10 0
Total...	2,859 13 10	... ...	21,139 8 0	1,510 8 6	1,159 7 6	420 0 0	13,073 3 11	1,924 14 8	46,201 7 6	.....	.....	.....
Average...	285 15 9	... ...	2,113 15 2	151 0 10	115 15 1	42 0 0	1,307 5 2	192 7 10	4,620 2 4	0 0 3	0 1 4	10 6 0

ADRAMPATAM.

Faslis.	Quantity of Salt in hand at beginning of each Fasli.	Quantity ordered to be made.	Quantity received into store.	Sales. Home.	Sales. Inland.	Sales. Foreign.	Cudivaram on quantity received into Store.	Cost of storing.	Total of Columns 8+9.	Charges in Column 10 divided on Column 4.	Wastage. Quantity.	Wastage. Value.	Cost of Measurers.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	IN MDS.	IN. MDS.	IN. MDS.	IN. MDS.	IN. MDS.	IN.MDS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	IN.MDS.	RS. A. P.	RS. A. P.
1263	16,143	2,46,000	2,96,100	1,55,899	6,675	...	24,568 4 10	... ...	24,568 4 10	0 1 4	429	35 12 0	... ...
1264	1,49,240	3,36,000	2,20,973	1,75,582	16,430	...	18,395 8 0	... ...	18,395 8 0	0 1 4	3,463	288 9 4	... ...
1265	174,738	1,44,000	3,55,269	2,11,664	23,630	...	30,554 4 4	... ...	30,554 4 4	0 1 5	27,049	2,448 1 5	... ...
1266	2,67,064	2,77,200	1,29,743	1,89,566	49,056	...	11,458 9 4	... ...	11,458 9 4	0 1 5	4,945	437 13 5	... ...
1267	1,53,239	2,61,600	2,96,186	1,86,680	63,880	...	26,177 7 7	... ...	26,177 7 7	0 1 5	3,267	289 4 3	... ...
1268	1,95,597	3,28,800	1,85,579	1,85,185	79,428	...	16,336 7 6	... ...	16,336 7 6	0 1 5	3,576	316 10 0	... ...
1269	1,12,986	4,51,200	2,74,197	1,57,326	52,434	...	19,471 15 1	... ...	19,471 15 1	0 1 5	2,390	211 9 10	... ...
1270	1,75,034	2,32,800	3,21,745	1,79,526	79,923	...	31,831 10 9	... ...	31,381 10 9	0 1 5	1,670	147 13 10	... ...
1271	2,35,659	4,02,000	1,17,385	1,86,900	69,145	...	10,301 6 3	... ...	10,301 6 3	0 1 5	5,472	480 12 6	... ...
1272	91,569	3,48,000	2,13,590	1,20,576	9,666	...	18,731 14 6	... ...	18,731 14 6	0 1 5	422	37 5 0	... ...
Total..	15,71,269	30,27,300	24,10,767	17,48,904	4,50,267	...	2,07,860 7 8	... ...	2,07,860 7 8	... ...	53,211	4,693 12 5	... ...
Average...	1,57,126	3,02,760	2,41,076	1,74,890	45,026	...	20,783 0 9	... ...	20,783 0 9	0 1 5	5,321	469 6 0	... ...

ADRAMPATAM.—*(Concluded.)*

Faslis.	Hire for destroying spontaneous Salt, and reward for detection of smuggling.	Fixed Establishment.	Temporary Establishment	Police Guards.	Saderwarid.	Repairs to Salt works.	Sundries.	Total of Columns 13 to 21.	Charges in Column 22 divided on Columns 2+4.	Total of Columns 11+23 giving actual cost per Maund.	Cost per Garce calculated on Column 24.
	15	16	17	18	19	20	21	22	23	24	25
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1263	... ...	2,493 0 0	135 0 0	... ...	42 0 0	704 4 0	... ...	3,410 0 0	0 0 2	0 1 6	11 4 0
1264	... ...	2,493 0 0	87 9 5	... ...	42 0 0	261 15 0	... ...	3,173 1 9	0 0 2	0 1 6	11 4 0
1265	... ...	2,493 0 0	110 0 0	... ...	42 0 0	20 11 6	... ...	5,113 12 11	0 0 2	0 1 7	11 14 0
1266	... ...	2,493 0 0	125 0 0	... ...	42 0 0	... ...	... ...	3,097 13 5	0 0 2	0 1 7	11 14 0
1267	... ...	2,493 0 0	130 0 0	... ...	42 0 0	... ...	... ...	2,954 4 3	0 0 1	0 1 6	11 4 0
1268	... ...	2,493 0 0	69 7 9	... ...	42 0 0	... ...	... ...	2,921 1 9	0 0 1	0 1 6	11 4 0
1269	... ...	2,493 0 0	130 0 0	... ...	42 0 0	90 0 0	2,153 10 6	5,120 4 4	0 0 3	0 1 8	12 8 0
1270	9 3 3	2,313 14 7	130 0 0	... ...	42 0 0	94 15 0	... ...	2,737 14 8	0 0 1	0 1 6	11 4 0
1271	... ...	2,301 0 0	130 0 0	225 9 7	42 0 0	54 12 5	15 15 0	3,250 1 6	0 0 2	0 1 7	11 14 0
1272	8 12 0	2,254 10 10	... ...	1,885 3 5	42 0 0	489 0 0	9 10 6	4,726 10 7	0 0 3	0 1 8	12 8 0
Total...	17 5 3	24,320 9 5	1,047 1 2	2,110 13 0	420 0 0	1,715 9 11	2,179 4 0	36,505 1 2	0 0 0	... ...	... ...
Average...	1 12 8	2,432 0 11	104 11 3	211 1 3	42 0 0	171 8 11	217 14 9	3,650 8 1	0 0 2	0 1 7	11 11 0

SENDELAI.

Faslis.	Quantity of Salt in hand at beginning of each Fasli.	Quantity ordered to be made.	Quantity received into Store.	Sales.			Cudivaram on quantity received into Store.	Cost of storing.	Total of Columns 8+9.	Charges in Column 10 divided on Column 4.	Wastage.	
				Home.	Inland.	Foreign.					Quantity.	Value.
1	2	3	4	5	6	7	8	9	10	11	12	13
	I. MDS.	I. MDS.	I. MDS.	I. MDS.	I. MDS.	I. MDS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	I. MDS.	RS. A. P.
1263	195	96,000	1,56,451	18,159	53,196	...	13,024 7 7	... ...	13,024 7 7	0 1 4	345	28 12 0
1264	84,946	84,000	1,32,908	9,513	38,620	...	11,072 4 10	... ...	11,072 4 10	0 1 4	1,860	155 0 0
1265	1,67,860	51,600	88,881	19,872	65,476	...	7,641 13 6	... ...	7,641 13 6	0 1 5	14,748	1,305 13 0
1266	1,56,645	58,800	37,214	10,524	60,998	...	3,292 9 11	... ...	3,292 9 11	0 1 5	3,912	346 6 0
1267	1,18,424	96,000	66,278	11,996	82,035	...	5,844 9 5	... ...	5,844 9 5	0 1 5	6,196	548 9 8
1268	84,475	1,95,600	37,428	11,209	89,654	...	3,295 7 6	... ...	3,295 7 6	0 1 5	3,081	272 12 9
1269	17,958	1,99,200	96,352	9,232	35,619	...	8,518 7 0	... ...	8,518 7 0	0 1 5	629	55 11 1
1270	68,830	1,10,400	1,74,427	8,158	61,590	...	16,638 7 7	... ...	16,638 7 7	0 1 5	383	33 14 7
1271	1,73,126	30,000	75,045	7,649	38,966	...	6,607 12 0	... ...	6,607 12 0	0 1 5	1,574	139 5 10
1272	1,99,981	15,600	42,175	56,079	30,374	...	3,693 12 6	... ...	3,693 12 6	0 1 5	2,488	220 4 8
Total...	10,72,440	9,37,200	9,07,157	1,62,391	5,56,528	...	79,629 11 10	... ...	79,629 11 10	.....	35,216	2,806 9 7
Average...	1,07,244	93,720	90,715	16,239	55,652	...	7,962 15 7	... .	7,962 15 7	0 1 5	3,521	280 10 6

SENDELAI.—*(Concluded.)*

Faslis.	Cost of Measurers.	Hire for destroying spontaneous Salt, and reward for seizure of smuggling.	Fixed Establishment.	Temporary Establishment.	Police Guards.	Suderwarid.	Repairs to Salt works.	Sundries.	Total of Columns 13 to 21.	Charges in Column 22 divided on Columns 2+4.	Total of Columns 11+23, giving actual cost per Maund.	Cost per Garce calculated on Column 24.
	14	15	16	17	18	19	20	21	22	23	24	25
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1263	... ...	... ...	1,959 0 0	... ...	... ...	42 0 0	399 5 0	... ...	2,429 1 0	0 0 3	0 1 7	11 14 0
1264	... ...	... ...	1,959 0 0	... ...	... ...	42 0 0	141 9 0	... ...	2,297 9 0	0 0 2	0 1 6	11 4 0
1265	... ...	... ...	1,959 0 0	30 0 0	... ...	42 0 0	44 4 4	... ...	3,381 1 4	0 0 3	0 1 8	12 8 0
1266	... ...	... ...	1,959 0 0	90 0 0	... ...	42 0 0	... ...	... ...	2,377 6 0	0 0 2	0 1 7	11 14 0
1267	... ...	... ...	1,959 0 0	90 0 0	... ...	42 0 0	... ...	... ...	2,639 9 8	0 0 3	0 1 8	12 8 0
1268	... ...	... ...	1,959 0 0	55 0 0	... ...	42 0 0	125 15 11	... ...	2,454 12 8	0 0 4	0 1 9	13 2 0
1269	... ...	... ...	1,959 0 0	90 0 0	... ...	42 0 0	39 14 0	... ...	2,186 9 1	0 0 4	0 1 9	13 2 0
1270	... ...	... ...	1,959 0 0	90 0 0	... ...	42 0 0	13 12 0	... ...	2,138 10 7	0 0 2	0 1 7	11 14 0
1271	... ...	... ...	1,959 0 0	88 5 4	... ...	42 0 0	151 3 6	6 3 0	2,386 1 8	0 0 2	0 1 7	11 14 0
1272	... ...	... ...	1,959 0 0	... ...	... ...	42 0 0	... ...	21 14 0	2,243 2 8	0 0 2	0 1 7	11 14 0
Total...	... ...	... ...	19,590 0 0	533 5 4	... ...	420 0 0	915 15 9	28 1 0	24,533 15 8	.....	.. ...	... ...
Average...	... ...	... ...	1,959 0 0	53 5 4	... ...	42 0 0	91 9 6	2 12 0	2,453 6 4	0 0 3	0 1 8	12 3 0

ARSANAGHERRY.

Faslis.	Quantity of Salt on hand at beginning of each Fasli.	Quantity ordered to be made.	Quantity received into store.	Sales. Home.	Sales. Inland.	Sales. Foreign.	Cudiyaram on quantity received into Store.	Cost of storing.	Total of Columns 8+9.	Charges in Column 10, divided on Column 4.	Wastage. Quantity.	Wastage. Value.	Cost of Measurers.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	IN. MDS.	IN. MDS.	IN. MDS.	IN. MDS.	IN. MDS.	IN. MDS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	IN. MDS	RS. A. P.	RS A. P.
1263	129	84,000	1,07,012	3,552	55,876	...	8,915 4 0	... ...	8,915 4 0	0 1 4	395	32 13 4	.. ..
1264	47,318	1,46,400	94,489	3,879	46,482	...	7,870 8 0	... .	7,870 8 0	0 1 4	1,040	86 10 8	... ...
1265	90,406	42,000	1,19,768	4,802	63,258	...	10,266 14 7	... .	10,266 14 7	0 1 5	9,350	827 13 10	.. ..
1266	1,32,763	90,000	53,247	4,920	75,550	...	4,714 9 3	... .	4,714 9 3	0 1 5	2,299	203 8 11	... ...
1267	1,03,241	67,200	93,888	4,368	58,506	...	8,311 5 5	... .	8,311 5 5	0 1 5	2,927	259 2 7	... ...
1268	1,31,327	68,400	22,858	4,729	41,468	...	2,020 6 6	... ...	2,020 6 6	0 1 5	2,110	186 13 2	... ...
1269	1,05,878	1,94,400	74,432	6,213	1,03,722	...	6,569 0 8	... ...	6,569 0 8	0 1 5	2,293	214 15 6	... ...
1270	68,082	1,20,000	71,474	4,753	79,715	...	6,856 12 7	... ...	6,856 12 7	0 1 5	710	62 13 10	... ...
1271	54 377	1,36,800	1,01,506	5,238	61,084	...	8,949 7 0	... ...	8,949 7 0	0 1 5	715	63 4 11	... ...
1272	88,845	72,000	50,415	4,768	21,265	...	4,443 0 8	... ...	4,443 0 8	0 1 5	197	17 7 1	... ...
Total...	8,22,366	10,21,200	7,89,089	47,222	6,06,926	...	68,917 4 8	... .	68,917 4 8	0 0 0	22,035	1,956 7 10	... ...
Average...	82,236	1,02,120	78,908	4,722	60,692	...	6,891 11 8	... .	6,891 11 8	0 1 5	2,203	195 10 4	... ...

ARSANAGHERRY.—(*Concluded*)

Faslis.	Hire for destroying spontaneous Salt, and reward for detection of smuggling.	Fixed establishment.	Temporary establishment.	Police Guards.	Saderwarid.	Repairs to Salt works.	Sundries.	Total of Columns 13 to 21.	Charges in Column 22, divided on Columns 2+4.	Total of Columns 11+23, giving actual cost per Maund.	Cost per Garce, calculated on Column 24.
	15	16	17	18	19	20	21	22	23	24	25
	RS. A. P.	RS. A. P.	RS. A. P	RS. A. P.	RS. A. P.	RS. A P	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
1263	... ...	1,593 0 0	132 10 9	... ...	37 8 0	400 11 0	... ...	2,196 11 1	0 0 4	0 1 8	12 8 0
1264	... ...	1,593 0 0	85 13 10	... ...	37 8 0	267 3 3	... .	2,070 2 11	0 0 3	0 1 7	11 14 0
1265	... ...	1,593 0 0	62 0 0	... .	37 8 0	43 14 1	... ...	2,564 3 11	0 0 2	0 1 7	11 14 0
1266	... ...	1,593 0 0	90 0 0	... ...	37 8 0	... ...	... ...	1,924 0 11	0 0 2	0 1 7	11 14 0
1267	... ...	1,593 0 0	90 0 0	... ...	37 8 0	... ...	... ...	1,980 10 7	0 0 2	0 1 7	11 14 0
1268	... ...	1,593 0 0	36 4 8	... ...	37 8 0	110 7 2	... ...	1,964 1 4	0 0 2	0 1 7	11 14 0
1269	... .	1,593 0 0	89 13 10	... ...	37 8 0	4 13 10	... ...	1,940 3 2	0 0 2	0 1 7	11 14 0
1270	... ...	1,593 0 0	90 0 0	... ...	37 8 0	50 0 6	7 0 0	1,840 5 10	0 0 3	0 1 8	12 8 0
1271	1 9 0	1,593 0 0	91 10 0	40 2 1	37 8 0	13 2 6	40 3 8	1,880 8 2	0 0 2	0 1 7	11 14 0
1272	... ...	1,534 8 0	... .	964 3 10	37 8 0	... ...	16 13 4	2,521 2 8	0 0 3	0 1 8	12 8 0
Total..	1 9 0	15,871 8 0	768 5 1	1,004 5 11	375 0 0	890 3 10	64 15 10	20,882 2 7	.. ..	... ...	... ...
Average...	0 2 6	1,587 2 4	76 13 3	100 6 11	37 8 0	89 0 4	6 7 11	2,088 3 5	0 0 2	0 1 7	12 1 0

STATEMENT C. showing the cost of Salt, per Garce, and per Maund, to Government, before sale, in the Tanjore District, in Fasli 1273, or as the Divisions now stand

Divisions.	Quantity of Salt in hand at beginning of each Fasli.	Quantity ordered to be made.	Quantity received into store.	Sales.			Cudivaram on quantity received into store.	Cost of storing.	Total of Columns 8+9.	Charges in Column 10 divided on Column 4.	Wastage.		Cost of Measurers.	Hire for destroying spontaneous Salt and reward for detection of smuggling.
				Home	Inland.	Foreign.					Quantity.	Value.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	IN. MDS.	IN. MDS.	IN. MDS.	IN.MDS.	IN. MDS.	IN.MDS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	IN.MDS.	RS. A. P.	RS. A. P.	RS. A. P.
Nedavasal ...	63,476	1,62,000	78,741	77,541	38,039	...	7,173 5 4	... ...	7,173 5 4	0 1 6	2,495	233 14 6	... ...	... ...
Chendrapady.	2,400	24,000	12,084	1,284	...	7,200	1,086 7 9	... ...	1,086 7 9	0 1 6	...	... ...	... ...	... .
Covilput ...	3,009	21,600	2,724	43	...	4,800	263 6 4	.. ..	263 6 4	0 1 7	72	7 2 0	... ...	... ...
Negapatam ...	18,931	3,00,000	2,19,688	65,127	90,269	...	13,939 6 0	.. ..	13,939 6 0	0 1 0	902	56 6 0	... ...	... ...
Vedarniem ...	60,532	2,52,000	1,25,309	26,528	...	...	8,016 15 10	86 2 9	8,103 2 7	0 1 0	2,439	152 7 0	70 9 11	... ...
Tambikanalla-vancottai ...	1,18,805	1,92,000	26,879	94,703	23,526	...	2,347 7 6	... ...	2,347 7 6	0 1 5	1,055	93 6 7	... ...	3 6 0
Adrampatam .	55,690	2,28,000	36,387	82,026	7,215	...	3,111 14 10	... .	3,111 14 10	0 1 5	116	10 4 4	... ...	... .
Ayapatam ...	1,82,014	...	28,656	30,575	39,358	...	2,485 3 0	... .	2,485 3 0	0 1 5	2,734	210 3 2	... ...	... ...
Arsanagherry.	84,229	...	28,373	2,581	5,360	...	2,512 0 3	... ...	2,512 0 3	0 1 5	158	13 15 10	... ...	... .

Statement C. showing the cost of Salt per Garce and per Maund, &c.—(*Concluded.*)

Divisions.	Fixed Establishment.	Temporary Establishment.	Police Guards.	Saderwarid.	Repairs to Salt works.	Sundries.	Total of Columns 13 to 21.	Charges in Column 22, divided on Columns 2+4.	Total of Columns 11+23 giving actual cost per Maund.	Cost per Garce, calculated on Column 24.	Cost of Deputy Collector and Establishment.	Addition to cost per Garce by Column 26.
	16	17	18	19	20	21	22	23	24	25	26	27
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Nedavasal ...	1,782 9 3	... ...	28,99 6 4	51 0 0	... ...	36 11 6	5,003 9 7	0 0 7	0 2 1	15 10 0	1,187 12 9	0 15 0
Chendrapady.	760 8 0	... ...	972 9 6	21 0 0	... ...	4 8 0	1,758 9 6	0 1 11	0 3 5	25 10 0	395 14 11	3 2 0
Covilput ...	693 0 0	... ...	486 0 0	21 0 0	12 0 9	... ...	1,219 2 9	0 3 5	0 5 0	37 8 0	395 14 11	8 2 0
Negapatam ...	2,168 0 0	... ...	1,657 7 0	63 0 0	375 3 0	... ...	4,320 0 0	0 0 4	0 1 4	10 0 0	395 14 11	0 3 4
Vedarniem ...	1,087 8 0	... ...	2,341 12 8	30 0 0	2,003 12 0	7 5 0	5,693 7 2	0 0 6	0 1 6	11 4 0	395 14 11	0 4 3
Tambikanalla-vancottai ...	1,290 0 0	... ...	1,872 0 0	24 0 0	650 0 0	7 1 9	3,939 13 4	0 0 5	0 1 10	13 12 0	791 13 10	0 10 0
Adrampatam .	1,743 0 0	... ...	2,844 12 8	51 0 0	1,000 0 0	12 3 3	5,661 4 3	0 1 0	0 2 5	18 2 0	791 13 10	0 15 0
Ayapatam ...	1,756 12 1	... ...	2,190 8 0	51 0 0	62 0 0	22 14 1	4,293 5 4	0 0 4	0 1 9	13 2 0	1,187 12 9	0 10 0
Arsanagherry.	1,221 0 0	... ...	774 0 0	42 12 0	55 0 0	7 8 0	2,114 3 10	0 0 4	0 1 9	13 2 0	395 14 11	0 5 0

NOTE.—The figures in Column 26 have been arrived at by dividing the whole Annual cost of the Deputy Collector and his Establishment on the fifteen Stations of the Districts, and allotting to each Division a sum according to the number of Stations contained in that Division.

STATEMENT D showing the details of the cost of manufacture of salt in the Tanjore District during the three years, from Fasli 1270 to Fasli 1272 inclusive,

Divisions.	Quantity of Salt in hand at the beginning of the Fasli.	Quantity ordered to be made.	Quantity received into Store.	Cudivaram on quantity received into Store.	Cost of storing.	Total of Columns 5+6.	Charges in Column 7, divided on Column 4.	WASTAGE.		Cost of Measurers.	Hire for destroying spontaneous Salt and reward for detection of smuggling.	Fixed establishment.
								Quantity.	Value.			
1	2	3	4	5	6	7	8	9	10	11	12	13
	IN. MDS.	IN. MDS.	IN. MDS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	IN.MDS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Nedavasal	3,75,463	4,18,800	2,61,550	23,917 3 9	... ...	23,917 3 9	0 1 5	4,954	438 10 2	... ...	.. ..	7,840 8 0
Negapatam	4,57,884	11,32,800	6,71,353	42,981 9 9	1,863 0 5	44,844 10 2	0 1 1	4,684	317 2 4	1,288 0 0	... ...	6,334 8 0
Adrampatam.....	5,02,262	9,82,800	6,52,720	60,867 15 0	... ...	60,867 15 0	0 1 6	7,522	705 3 0	... ...	17 15 3	6,869 9 5
Sendelai.....	4,41,936	1,56,000	2,91,647	26,940 0 1	... ...	26,940 0 1	0 1 6	4,446	416 13 0	... ...	... ...	5,877 0 0
Arsanagherry.....	2,11,804	3,28,800	2,23,395	20,249 4 3	... ...	20,249 4 3	0 1 6	1,622	152 1 0	... ...	1 9 0	4,720 8 0

STATEMENT D showing the details of the cost, &c.—*(Concluded.)*

Divisions.	Temporary establishment.	Police Guards.	Saderwarid.	Repairs to Salt works.	Sundries.	Total of Columns 10 to 18.	Charges in Column 19, divided on Columns 2+4.	Total of Columns 8+20, or average cost per maund.	Average cost per Garce, calculated on Column 21.	Total of average annual quantity of Salt in hand at beginning of Fasli, and average annual manufacture of District.	Average annual cost of Deputy Collector and establishment.	Increase to Column 21, by dividing Column 24 on column 23.
	14	15	16	17	18	19	20	21	22	23	24	25
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A P.	RS. A. P.	RS. A. P.	RS. A. P	RS. A. P.	RS. A. P.	IN. MDS.	RS. A. P.	RS. A. P.
Nedavasal ...	176 2 0	1,096 12 5	126 0 0	4,672 10 1	26 15 6	14,377 8 2	0 0 4	0 1 9	13 2 0			
Negapatam ...	601 5 10	1,159 7 6	126 0 0	5,207 1 10	86 12 0	15,120 5 6	0 0 3	0 1 4	10 0 0			
Adrampatam .	260 0 0	2,110 13 0	126 0 0	638 11 5	25 9 6	10,753 13 7	0 0 2	0 1 8	12 8 0	13,63,170	5,938 15 10	0 0 ¾
Sendelai... ...	178 5 4	... ...	126 0 0	164 15 6	28 1 0	6,791 2 10	0 0 2	0 1 8	12 8 0			
Arsanaghery...	181 10 0	1,004 5 11	112 8 0	63 2 6	64 1 0	,6,299 13 5	0 0 3	0 1 9	13 2 0			

8. The first point that calls for remark, in reviewing the salt administration of this District is the absence of good roads to connect the salt stores with one another, or with the surrounding villages.

9. A traveller observes well planted lines of trees, and, in some parts of the district, finds these lines raised and bridged ; but these mud roads, as I have heard the latter most significantly termed by a professional man, are in some parts almost worse than no roads at all. The natural soil and the natural hinderances are, almost, a less evil than the artificial ones. Where we do not find mud roads we meet with sand roads, and these two sorts of roads are the usual ones found in the delta, and in the vicinity of the coast.

10. It appears to me that a district, which contributes so large a proportion, as about one-tenth of the revenues of the presidency, or about 62 lacs out of 610 lacs, deserves a larger expenditure on its roads and communications than this district receives. In Salt and Customs alone, Tanjore contributes a revenue of about 13½ lacs. This amount might be increased, for there can be no room to doubt that the trade of the district is injured by the state of its roads.

11. I need not dwell on, though, I cannot but refer to the contrast between the roads in this district and those in Ganjam ; and when we look at the expenditure under this head in the two districts, we shall not be surprised at the difference observable in their condition.

12. In Ganjam, it is not difficult to drive along the coast, from one end of the district to the other, in a horse conveyance, at a fair rate of speed, and the coast line is connected with the interior parts of the District, by good and well formed roads. In Tanjore, it is difficult for a bullock bandy to travel over many parts of the district, and there are very few parts indeed, on which a horse conveyance could be used, with safety or comfort. In eight years the expenditure in Ganjam, (which is only 1,053 square miles,) on roads and bridges, was Rupees 8,40,633; in Tanjore, (which is 3,736 square miles,) exclusive of the railroad, it was in the same period Rupees 6,28,470, as may be seen in the margin.

	Ganjam.			Tanjore.
	New works.	Repairs.		Maintenance.
	Rs. A. P	Rs. A P		Rs. A. P.
Prior to 1856-57	2,20,305 9 11	3,763 3 9		2,09,242 0 0
In 1856-57	94,460 13 0	14,775 3 11		55,118 0 0
1857-58	85,125 0 0	18,992 0 0		80,377 13 8
1858-59	25,881 0 0	24,971 0 0		43,971 6 4
1859-60	45,550 8 0	27,774 1 6		83,708 14 2
1860-61	25,734 3 7	28,860 9 3		58,563 4 3
1861-62	68,782 9 4	35,443 3 1		41,371 0 6
1862-63	1,17,400 15 6	52,813 3 0		56,116 6 5
Total..	6,33,240 11 4	2,07,392 8 6		6,28,470 13 9
Total of Ganjam...		8,40,633 3 10		

13. I am aware that, in Tanjore, which is a delta, the nature of the soil renders road making a difficult and expensive matter ; but if the usual per centage of its land revenue were set aside for local improvements, and a similar per centage out of the salt revenue, good material could be brought down, by the rivers and channels, from Trichinopoly and other inland places, and landed on the banks, and be carted from thence to the several lines of roads, and thus in a few years we might see some approach to good roads.

14. The southern and western parts of the coast road, on which I have been travelling, are in a worse condition than many others in the district, cut up in all directions, especially in the south by the drainage of the country and by rain ; without bridges and with heavy mud and sand, it is difficult to proceed along it. In the southern part this road is breached throughout, and is converted into water courses in parts. In one part it is a mere swamp, and only a year ago, an elephant travelling on the road, was totally engulphed. He sank down in the quagmire, and could not be extricated. He remained embedded in the bog, and there died. His remains still lie in the same place, and his bones act as a beacon to warn travellers to avoid the elephant hole and the high road.

15. The general cry of the merchants and salt manufacturers is, that the roads are in so bad a state that bandies cannot travel upon them, and their salt remains unsold. I can fully bear them out in their statement regarding the roads I travelled over. I rode the greater part of my passage through this district, and am therefore in a position to speak to the condition of the coast road. It is a misnomer to call it a road in some parts. The only wonder to me is that any bandies attempt to move along the line, or many of its feeders. In the dry weather it must be one heavy sand bed ; now, it is in parts almost impassable. The road is intersected at about every quarter of a mile by unbridged streams, or the drainage of breached tanks.

16. The tanks of the Shrotriem villages, in the neighbourhood, being without calingulahs, are continually liable to be breached, and the waters let loose, rush towards the sea and cut up the roads. I found a range Officer, at Minpesil, examining the roads and tanks. He was ordered to spend 300 Rupees in repairing a road which had no existence, all of it having been washed away; but I leave it to Mr. Seton to tell his own story of the condition, in which, he found the communications, in this part of Tanjore, for which lines, I believe, a maintenance allowance of only 30 Rupees a mile is allowed, a sum wholly inadequate for the maintenance of the roads when in good order. In their present condition the expenditure of this sum on them would be simple waste.

17. The next thing that struck me as requiring improvement was the character of the salt sold in this district. That offered for sale, in the northern stores, is a reproach to the Government, which brings it into the market. It is nothing but a dirty looking powder, and contains very little Chloride of Sodium. It is no wonder merchants and consumers have been loth to buy this stuff. Down, in the southern pans, the manufactured salt is a fair article.

18. The reason for the difference between the manufacture in the north and south, is that in the south the water is drawn directly from the sea and is not stinted. It is kept for some days in reservoirs, till a good brine is obtained, and is then poured with a liberal hand into the salt beds. In the north, the water is drawn from wells, in which the salt is very much diluted with fresh water, and very little quantities of it are used. From half, to one inch, of this water is let into the beds, almost directly from the well, and the salt is scraped up on the following day.

19. Means should be taken, if possible, to introduce sea-water into the northern works, and the manufacturers should be required to use it plentifully, condensing it, if possible, before introducing it into the beds.

20. Late experiments made, in this district, have most clearly established the fact that a really good salt can be made, at the northern pans, and the Collector and Deputy Collector should insist that none but a good salt be admitted into store.

21. Firmness and decision will need to be exhibited, both towards the subordinate officials and manufacturers, as combinations will be attempted, especially at Negapatam, to compel the authorities to receive an inferior article. With Vedarniem so near at hand, and the canal completed, the Collector should be able to set such combinations at defiance, as I will endeavor to show hereafter.

22. The next point to be remarked on is the very slovenly way in which the works are laid out. There is no method at all observed, as in the other salt districts, in laying out the pans. In them the pans are ordinarily found to lie in one plot; all the beds being together, with nothing intervening between them to obstruct complete supervision. In this district the pans are scattered about over the plain just as fancy may dictate, and often large mounds of sand or mud separate one set of pans entirely from another. A large space of ground is in consequence occupied ; the difficulty and expense of guarding it is increased, and the means of peculation and fraud is also increased. In some places the pans are skirted by thick brushwood jungles.

23. The beds should be laid out in a series of courses in close succession, and should all be on one level. No mounds should be allowed between the several courses. If possible, the plan followed at Bimlipatam should be adopted.

24. All drying grounds should be removed, from among the pans, and the salt when scraped up should be taken to the platforms and kept there till it is dry ; a week or so, in ordinary weather, would be found sufficient time for the salt to dry in. The storage should go on simulta-

neously with the manufacture, and should not be deferred till the close of the season, as is now the practice. By closing the scraping of the salt by one o'clock, the salt gathered each day may be removed before sun-set to the platform.

25. The store-yards should be as few as practicable, and should, if possible, be placed in the centre of the pans. They should always be well fenced, and, if possible, should have a deep moat round them filled with water. No carts should be allowed to encamp within three hundred yards of the store-yards, and good topes and tanks or wells should, if possible, be planted and sunk in the encamping ground for the use of the purchasers.

26. In order that these improvements may be both efficiently and economically carried out, I would strongly urge the reduction in the number of divisions and stations. They are far too many for the requirements of the people of Tanjore and the neighbouring districts.

27. The Tanjore sea-board is but one hundred and fifty miles, and we find upon it no less than fifteen places of manufacture and sale, being one for every ten miles, and at several of the stations there are two or three platforms. The sales are very trifling, at some of these stations, and they are still diminishing as the rail is more extensively brought into use for the transport of salt. The salt stations, however, are not equi-distant from each other. Some are above thirty miles apart, while some are only one or two miles from each other. It appears to me that if eight, or at the most nine stations were retained, we should have as many as are really wanted.

28. Considering the changes that have lately been made in this district, the small and insufficient quantity of salt in store, and the very great, and radical improvements, which are needed in laying out the pans, and in improving the character of the salt, I would not propose closing all the stores above referred to at once, but would gradually close them at as early a date as the Collector deems safe, and the course of the trade indicates the practicability of such a measure.

29. Lately salt appears to have been made in this district on no principle. The quantities to be manufactured have been fixed without any regard to the wants of the market, or the capacity of the pans, and in order to get rid of the excess of salt at some places, the neighbouring stores have been closed.

30. The power to close one station and to keep another open, has been delegated to the Peishcars of the division, who have acted in the matter very much according to their own interests, and a power has been given them which has, I fear, been often seriously abused. If salt is not saleable at a station, that station should be closed. The absence of demand shows the place is not wanted.

31. It is neither just to the purchasers, nor to the Government, to give a fictitious character to a store by forcing parties to resort to it in order to keep up the sales. Salt traders are thus often required to travel miles to get their salt, and this, over heavy sand tracts, while they might procure it more conveniently, at some port, to which they had carried their goods for export or sale, and where plenty of good salt is in store: and Government have been called on, at a large expense for establishments and guards, to keep up places, which are no real convenience to the people generally, in order to find employment for some favored manufacturers, or to prevent the reduction of a useless establishment. In making these remarks, I do not intend to reflect on the present Collector of the district, but on a vicious system, which had grown up, in some of the southern Districts, and in none more than in Tanjore, where a large number of petty depôts have been kept up along the sea-board. Efforts have, of late, been made to reduce the number of stations, and I am sure the present Collector will do all, in his power, to retain only such a number as is absolutely necessary for the wants of this district.

32. The salt stations should be at fair distances of from twenty to thirty miles apart, and should contain, in store, sufficient quantities of good salt to meet the requirements of the neighbourhood, both local and foreign, or as it is technically termed, the home and inland trade.

33. Ten miles is not far to require a merchant to go for salt; and with stations about twenty miles apart, this would be the usual distance traders would have to travel. Along the coast the population is very spare and scattered, and their convenience is not advanced by a multitude of little Government salt shops, huddled together within the space of a few miles, and which are hardly accessible from the absence of roads, or from the interruption of unbridged streams. Subsidiary stations should not be kept up, if salt, in sufficient quantities, can be made at the principal stations.

34. Acting on these views, I would recommend that stations be retained at the several places noted below:—

1, Vadapathy and 2, Tempathy at Nedavasal; 3, Tranquebar; 4, Negapatam; 5, Vedarniem; 6, Adrampatam; 7, Tambikanallavancottai; 8, Cuttoomavady: and perhaps 9, Arasanagherry; and that the stations of 1, Kilayur; 2, Chendrapady; 3, Covilput; 4, Tamarancottai; 5, Magalancottai; 6, Shembi Mahadevi; and 7, Ayapatam be closed.

35. It is clear that the great source of salt supply, not only of this district, but of the larger part of the southern districts, must hereafter be Negapatam, and that Vedarniem must be kept up as a feeder to this principal depôt. Negapatam cannot at present, nor for some time to come, meet the demand made on it for salt. At present the largest quantity of salt, which has ever been made in the existing pans of Negapatam, is 2,19,688 Indian Maunds; it is said that if all the pans were well worked 4,00,000 Indian Maunds might be made. In the last Fasli 1273 (1863-64) the quantity of salt sold at Negapatam up to the date of my visit, was 1,55,396 Indian Maunds, and in the previous year, the highest on record, it was 2,80,301 Indian Maunds exclusive of 26,160 Indian Maunds exported by sea in that year. The sales might have been largely increased had there been a further supply of salt, in store. It is clear, therefore, that without some other provision than what at present exists at, Negapatam, we shall not be able adequately to meet the increasing demands of the salt merchants employing the rail.

36. Vedarniem meets the deficiency. We can obtain from that place, if we keep up our manufacture, any quantity of salt of a very superior kind. In a few years, under good and efficient superintendence, the manufacture at Negapatam may be very largely increased, and this station may be made to contribute the larger proportion of the required supply; but if we do not desire to starve the railway, we should lose no time in re-opening and extending the manufacture so wisely and effectively established at Vedarniem, by Mr. Morris and Mr. D'Monte. The manufacturers, who formed the pans in 1863, and who, have since been deprived of them, should be encouraged to re-commence their manufacture, and make as much salt as they possibly can, which should be sent up by canal as soon as made, to Negapatam.

37. Unless some such course as this be adopted, there will be no salt to be had at Negapatam at the close of the Fasli, even, if the stock in hand, meet the requirements of the market up to so late a date.

38. When the Negapatam stores are duly supplied, the other stations in the district will only be wanted to meet a limited local demand. Hitherto they have contributed, with other districts, to supply the wants of the inland districts, at the south of this presidency; but if Negapatam with Vedarniem be always well furnished, with a supply of good salt, their aid in supplying these inland markets will no longer be required.

39. Negapatam salt can be put down at Trichinopoly, by rail, at 20 Rupees a Garce, while the cost of the carriage of the same quantity by the common cart of the country, from Adrampatam or any of the other stations at the South to Trichinopoly, Combaconum, or any distant inland village or town, ranges from 40 to 80 Rupees a Garce.

40. Another point, I wish to bring specially under the consideration of Government, is the desirableness of placing the structure and repair of all works belonging to the salt stations, and the approaches leading to them, under the orders of the Collector. These officers possess the

means of executing far more cheaply, effectually, and rapidly than the Department of Public Works, the repairs, &c., needed; and in some districts, as in Tanjore, where both the Collector and Deputy Collector in charge of the Salt are specially qualified for such work, I believe the Government interests would be very greatly advanced by the transfer. The work to be done is usually of a simple character, the digging out of channels, the adding to, or raising salt platforms, the repair of roads and approaches, and the erection of simple buildings for Cutcherries, and perhaps in some places the construction and repair of sluices. In any particular case requiring the exercise of professional skill, the aid of the Department of Public Works might be called in, and the Officers of this Department might, if it is thought necessary, check and control the expenditure by examining the works and the bills. I believe at present much money is wasted in the destruction of property, which might have been saved had the Collector been authorized to carry out immediate repairs, and he would often, with the aid of the manufacturers, do the work both better and cheaper than can be done by the professional officer.

41. I might instance the Vedarniem canal, a large part of which was undertaken and executed by the Collector, with a rapidity which could not be expected from the range officers, who, I believe, have found some difficulty in completing the portion of the work to be executed under their orders.

42. I have heard many complaints of the inability of the Public Works Department to meet as rapidly as was required, the demands of the Salt Department. I do not intend to imply that any blame attaches to the Officers of the Public Works Department, who, fully occupied in works of greater importance, are unable to visit or execute, or to depute any subordinate officer to visit and execute the petty works required to be done at the salt stations. But these petty works, when neglected, soon grow into works of importance, and demand heavy outlay.

43. If the Government think proper to approve of this suggestion, I would recommend that the works now estimated for in Tanjore be entrusted to the Collector's Department.

44. I now proceed to report on each of the existing divisions, in the order in which they are found in Statement A. above.

45. The first is the Nedavasal division.

46. Nedavasal is situated about thirty miles south of the Killay division in South Arcot, and is, by the road, seventeen miles, and by the sea shore, eleven miles, north of Chendrapady. Nedavasal is nine miles north of Tranquebar, and thirteen miles south-east of Sheally, and thirteen miles east of Mayaveram. There are roads to each of these places, but they are out of order, and all need immediate and extensive repair.

47. From Caverypatam, at which all the roads converge, approaches have been made to the several stations and platforms comprising the division. The crowns of the arches which span some of the streams crossing the approaches to the platforms, are either quite or extensively worn through, and the roadways need levelling.

48. There are now three stations attached to the Nedavasal division; Vadapathy, Tempathy and Kelayur. The distance of these places one from the other, the number of pans and platforms attached to each, the quantity of salt ordered, manufactured, sold, and the usual details of the sales during ten years, are given in the statements attached to paragraph 7 of this report.

49. The salt made at Nedavasal is very bad. It cannot be otherwise, for the water out of which it is manufactured, is drawn out of wells, which are emptied at each drawing, and after being retained in channels for a few hours, is let into the salt beds to a depth of about quarter or half of an inch, and the next day the salt is scraped up.

50. The Deputy Collector should endeavour to improve the manufacture by insisting on the use of nothing but a good brine. Each salt bed, as soon as it is formed, should have let into it two inches of good brine, which quantity should be kept up in the pans for twenty days, fresh brine being introduced into the pans daily to replace the quantity lost each previous day by evaporation. If the instructions laid down by Major DeHavilland in the Salt Manual, were carefully attended to and carried out, the manufacture would be greatly improved.

51. The quantity of salt now ordered to be made at Nedavasal is never attained, and the sales consequently are seriously affected by the want of salt.

52. Up to the 31st December 1863, there were seven stations attached to this division. The average quantity of salt produced during the last ten years was 1,03,804 Indian Maunds a year, and the sales averaged 95,277 Indian Maunds a year.

53. The stations of Kelakarai, Tanampatam, and Kudicadu were closed owing to their distance from the head-quarters of the Division, their inaccessibility to efficient supervision, the bad salt made at them, and the evil practices carried on at these places.

54. The quantity of salt which can be manufactured at the stations retained is, 1,20,000 Indian Maunds, while the quantity made at them, since the abolition of the other stations, has only been 1,19,446 Indian Maunds a year. The sales of Fasli 1272 amounted to 1,08,153 Indian Maunds.

55. When the three northern stations specified above were closed, it was proposed to bring into use the piece of ground intervening between the Vadapathy and Tempathy stations, and which was estimated to be 60,000 square yards. Very little has been done towards carrying out this project, owing to the delay in putting up embankments by the Public Works Department. A few new pans have been opened, and they have been worked so indifferently that the quantity of Salt gathered from them has only amounted to 20 Garce, or 2,400 Indian Maunds.

56. I would not advocate the re-opening of any of the closed places of manufacture. The reasons and the circumstances under which they have been given up, preclude my doing so; but I hope means will be found to open up as much ground in the vicinity of the present stations as is fit for producing salt, and that the existing pans will be well and earnestly worked.

57. The manufacture both here and throughout the district, is carried on in a most slovenly and unsatisfactory manner. The salt beds are laid out according to no rule or method, nor are they in any order, but are found dotted about according to the fancy or convenience of parties working them. Often they are placed in the midst of an inaccessible morass without any road or means of approach; often they are hidden behind mounds of sand or rubbish. Some pans are large, some small. Some have an evaporating bed attached to them, some only a channel. The beds are not of a uniform size or form, and are worked, I fear, in much the same way, just as it suits the convenience of the manufacturers, who neither understand how to make a good salt, nor will take the pains to learn to do so, nor is the dittum observed.

58. The first step that should be taken at this and the other reserved stations, is to reform all the beds in the front of, and in the vicinity of the platforms. All the available ground around the platform should be brought into use. The ground should be laid out in squares. Each square should measure a Cawny, and should contain three evaporating beds, which should cover two-thirds of the space, and the remaining one-third should be divided into beds of a smaller size. Good paths should intersect the works, and the whole should be surrounded by a deep broad ditch, which should serve both as a means of defence, and as a channel for conveying salt water to the beds, and should be topped by a good hedge if possible.

59. The water should first be conveyed into evaporating bed No. 1, which should be double the size of Nos. 2 and 3. Three feet of water at least should be kept in No. 1, two feet in No. 2, and one foot in No. 3. The water should stand for at least forty-two days in No. 1, while the ground is being prepared and the salt beds are being made; it should then be let into No. 2, and be retained there for fifteen days, and then let into No. 3 for the same time, and from there should be conveyed into the salt beds to the depth of two inches, and this depth of water kept for fifteen days, when it will be found that a good salt has been formed.

60. No drying grounds should be allowed among the pans; the drying ground and store-yard should be in one and the same enclosure, and the salt after being kept a few days to dry in the enclosure, should be formed into heaps and not kept unstored for months as it now is.

61. The store-yard should also be surrounded with ditches and hedges, and should be accessible only by a gate. By adopting this plan not only will a better salt be made, but the protection of the Government interests will be secured both more efficiently, and by a smaller number of guards than at present.

62. It must be u terly impossible, effectively, to guard the present works from depredations, with ten times the number of guards now employed. The guards are now required to watch the several drying yards, which are wholly unprotected by any natural defences, as well as the pans above described, and also the store-yards and the Cutcherry.

63. By having the pans, in front of, and in view from any part c', the store-yards, and surrounded by deep and broad ditches and strong hedges, the pans could only be reached by the inlets guarded by Constables, and it would be impossible to remove salt except with the knowledge and connivance of the guards. At present it is impossible for the most alert guards to prevent depredations on the stores and pans.

64. There are at present four platforms in this division; one at Kelayur, one at Tempathy and two at Vadapatty. These two last are close to each other. They might with advantage be united and made one, and the salt, instead of being placed to dry on mounds situated among the pans, might all be carried at once to the platform and placed there. The platform at Tempathy might also be extended in order to allow of the present drying grounds being giv up.

65. The strength of the guard is much weakened, by being scattered over different drying yards, and I see no practical advantage gained by having these separate drying yar' .

66. As soon as the quantity of salt, needed at this station, can be made at adapathy and Tempathy, and the necessary stock secured, and the proposed new works at Tranquebar are in good working order, the pans and platform at Kelayur might be given up.

67. The Nedavasal Cutcherry is situated at about quarter of a mile from the platforms and works. It might, with advantage, be removed to the Vadapathy platform. The p esent building is an old one, and is very dark, and unfit for the purpose for which it is used.

68. I do not see why the plan of building the Salt Cutcherry at Madura, should not be extended to other places. It is both convenient and inexpensive, and I would tr. ly recommend its more general adoption. The pans in Madura are all surrounded by a bank and hedge. The platform is enclosed with a palisade. At the entrance is a mat ve gateway with good, strong doors. On the outer side of the gateway are good broad covered ials. The whole building only costs with gates 150 Rupees.

69. Salt is sold, in the Tanjore District, by measurement and not by weight, the Collector not having been furnished with machines for weighing. I examined a heap of salt at Kelayur by measurement, and found it to be half Garce or 212 Mercals, or 5 per cent. in excess of the 10 Garce. The heap had only been stored four days before. The Assistant Superintendent admitted he had taken good measure, because the salt was damp and would decrease in bulk as it dried; and the returns of wastage would therefore be very large. The salt indeed is very inferior, and has no substance, and must be easily affected by the dampness of the atmosphere. But this does not justify the glaring departure from the repeated and strict injunctions of the superior authority, and the officer's conduct should, I think, be noticed by the Deputy Collector in a proper way. Unless the rule that salt is to be received in the same way that it is sold, is observed, it had better be cancelled. It can only bring Government and its officers into contempt to permit an inferior officer to set up his own judgment, and so glaringly and openly to disobey the orders given him. I subsequently examined two other heaps at Nedavasal, and found them to contain less than the prescribed quantity as may be seen below :—

Station.	Number of platform.	Date of storage.	Quantity found on examination.	Increase.	Decrease.
			G. M. M.	MER. M.	MER. M.
Kelayur	No. 1.	29th June 1864.	10 212 0	212 0	....
Tempathy	„ 1.	22nd do. do.	9 350 0	....	74 0
Do.	„ 1.	23rd July do.	9 386 18	....	37 2

70. The Superintendent of this Division, and the Assistant Superintendent are well spoken of, but they both show gross ignorance of their duties. The Assistant Superintendent at Kelayur does not appear to bear agood character. The Clerk of the Division is a very old man, and it is found necessary, in consequence, to supplement the establishment by Curnums, one of the Measurers being so employed, and another officer being detached from the Collector's office. None but efficient men and men of good character should be employed, and they should be made to do the work allotted to them.

71. Next to Nedavasal is the Chendrapady division.

72. Chendrapady is situated about three miles south of Tranquebar, and about three-quarters of a mile from the main road from Tranquebar to Karical.

Faslis.	Salt received into store.
	In. Mds.
1263	19,918
1264	22,461
1265	6,286
1266	18,532
1267	14,891
1268	1,477
1269	15,970
1270	14,902
1271	4 807
1272	5,565
Total	1,24,809
Average	12,480

73. This division consists of only one platform and 844 pans. These pans are capable of producing 200 Garce or 24,000 Indian Maunds. The largest quantity of salt ever received from these pans was in Fasli 1264, when 22,461 Indian Maunds were made and stored. The average of ten years' receipts is 12,480 Indian Maunds a year, as may be seen in the margin. This year 24,000 Indian Maunds of salt were ordered to be manufactured, but only 13,695 Indian Maunds were reported to have been collected at the date of my leaving the district.

74. The highest sales took place in Fasli 1268, when 21,330 Indian Maunds were sold. The average sales of ten years are 13,071 Indian Maunds a year.

75. This station, which is situated in the very border of the French Territory, is chiefly kept up to supply the French Government, at Karical, with salt. Their demand is usually 12,000 Indian Maunds a year, of which one-half is supplied from this station, and the other half from Kovilput. Any excess of salt in store at Chendrapady, beyond the quantity required by the French Government, is sold by retail to purchasers living in the neighbourhood.

76. The population of Tranquebar and its environs is computed at 14,154 souls. They and the people in the neighbourhood consume usually from 8,000 to 10,000 Indian Maunds of Government salt a year.

77. The subjoined table shows the quantity of salt in store at Chendrapady at the beginning of each Fasli, the quantity ordered to be manufactured and stored, the quantity sold to the French Government, at Rupees 13-10-0 per Garce, and that sold for home and inland consumption during the last ten years :—

Faslis.	Quantity of salt ordered to be manufactured.	Quantity received into store.	Quantity in hand at the beginning of each Fasli.	Sales.		
				Home.	Inland.	To the French Government.
	I. Mds.	I. Mds.	I. Mds.	I. Mds.	I. Mds.	I. Mds.
1263...	8,400	25,357	3,695	5,718	.....	10,080
1264...	25,200	29,624	9,338	18,550	.....	1,200
1265...	24,000	23,358	9,288	14,114	.....	.....
1266...	16,800	16,880	8,177	2,989	.....	6,960
1267...	14,400	25,048	6,471	8,547	.....	6,000
1268...	19,200	22,673	10,111	8,346	24	12,960
1269...	21,600	34,907	1,102	.....	.....	3,460
1270...	14,400	14,933	7,320	156	....	7,200
1271...	14,400	22,447	7,515	.....	.....	6,000
1272...	20,400	21,355	16,361	5,133	77	13,200
Total... ...	1,78,800	2,36,582	79,378	63,553	101	67,060
Average... ..	17,880	$23,658\frac{1}{5}$	$7,937\frac{4}{5}$	$6,355\frac{3}{10}$	$10\frac{1}{10}$	6,706

78. No salt has ever been exported from this place. The salt made at Chendrapady is very inferior, and this is not surprising considering the *modus operandi*. It is made very much in the same way as the salt at Nedavasal. There are six exceedingly high mounds or drying yards. The salt is retained on these drying yards usually for about a month, when it is transferred to the platform and heaped and covered with a casing of clay for preservation. The drying yards are at some distance from one another, and are not very capacious.

79. The pans at Chendrapady are in better order, and less straggling than those at Nedavasal. They are in two sets, and might, without much expense, be surrounded with a bank and hedge. The drying yards might be dispensed with, and the salt carried to the platform, where it could be kept till the time of storing. If the platform be found not quite large enough for a drying ground, a small addition might be made to it.

80. By surrounding the pans with good hedges and banks, and placing all the salt to dry on the platform, the permanent guard might be reduced to half its present number.

81. I would not, however, suggest any thing being done to the works at this station, unless it is resolved not to carry out the proposal made below, of transferring the works to the north of the river Nandalar, a measure I most strongly advocate as one of necessity and sound policy.

82. The Deputy Collector should endeavour to improve the staple of the salt manufactured at this place, and insist that all inferior salt be rejected by the Superintendent who should be held responsible for receiving any that does not reach the standard fixed by him.

83. By insisting that none but condensed brine be used in the manufacture of salt, and that this brine be kept for from fifteen to twenty days at the depth of two inches, as pointed out above, in the beds, and fresh brine introduced every day to supply what has evaporated the day before, a good salt may be gathered at the end of the fifteenth day, both more remunerative to the manufacturer, and in much larger quantities than he now collects.

84. It is impossible that any thing deserving the name of salt can be collected by pursuing the present course.

85. During my investigation of Mr. D'Mello's case, though the season was an adverse one, I had some experiments made with a view of improving the staple of the salt both here and at Negapatam. I beg to submit specimens of the salt found in the district, and of that which was subsequently made. The experiments were not quite successful, as the heavy falls of rain and precipitation of fresh water into the channel and adjoining grounds from unusually heavy floods affected the brine, and prevented a good salt being made.

86. The platform was surrounded by a hedge of aloes, which when grown up will form a good defence. The platform was kept in good order.

87. The approach to the platform from the high road is in bad order. It needs to be repaired and should not be longer neglected, if this place of manufacture is to be retained. The approach passes through the French territory, and is always repaired by them. The inconvenience of this arrangement is palpable, and forms a strong additional reason for removing these works to the north of the Nandalar.

88. It is proposed to carry on the road from the platform to the village, and to construct a wooden bridge over a channel in order to connect the village with the works. At present it is difficult in the wet season, in high tides and when the rivers are in flood, for the people to reach the platform. It is desirable that this proposal should be early carried out if the place is to be kept up.

89. But it has been proposed to open new pans on the northern side of the river where there is a large space of vacant ground, admirably adapted for the purpose. The ground measures several acres, and any number of pans capable of producing more salt than would be wanted, might be opened in this space with a platform capable of holding 2,000 Garce. It was on this ground that the Danish Government formerly manufactured salt. If the manufacturers will consent to make good salt, I would strongly advocate the occupation of the ground, and the opening of new pans on the north of the Nandalar, closing the present place of manufacture on the south of that river.

90. The salt made at the new pans would always be sold. The residents of Tranquebar and its immediate neighbourhood would become purchasers at these pans, instead of going to Nedavasal nine miles off, and that station would be relieved of the heavy drain now made on it from the south, and be able to meet its legitimate requirements. The traders who frequent the port of Tranquebar, and who come from the villages to the west and south of Tranquebar, would carry back salt instead of going home with empty carts, and we could easily furnish them with as much good salt as they would require, and might close the station of Covilput as soon as the new pans should be brought into good working order. I would strongly recommend, if new pans are opened, that the plan used in forming the pans at Bimlipatam be adopted, and that care be taken that the pans be laid out uniformly and in good order, and that they be supplied with water from the sea for the manufacture.

91. Covilput, which is about fourteen miles to the south of Chandrapudy, is notorious for smuggling and other malpractices, and the manufacturers being many of them residents of Karical, are not at all amenable to the authority of our servants, and take refuge and are protected in that settlement when discovered transgressing the law.

92. By laying out the new pans according to the plan adopted at Bimlipatam, and uniting the works by a good road to the town of Tranquebar, they might be made very accessible to the merchants, and could be well protected from intrusion by thieves and others.

93. The pans and works should be surrounded by a good moat which could easily be filled with water drawn from the Nandalar. This moat would, except in the freshes, answer the double purpose of supplying the pans with water, and forming a barrier to the people entering the works.

94. The present establishment at Chendrapady would suffice until the new works at Tranquebar are completed and are in good working order, when the establishment proposed in the statement affixed to paragraph 206 will be required. This proposal involves only a small addition to the present establishment at Chendrapady, while that now kept up at Covilput would be abolished, effecting a saving of Rupees 66 a month, or 792 Rupees a year.

95. An estimate has been submitted for the erection of a Salt Cutcherry at Chendrapady, the present mud building being found very inconvenient. If my proposal above be sanctioned, the building should be erected as at Madura, at the entrance of the new platform at Tranquebar.

96. The Superintendent at Chendrapady is new to the work, having hitherto been employed in the Police and Sub-Magistracy and in the Danish Military Service. He has also done Maramut work. He has received the highest testimonials from Colonel Lawford, R. E. He is said to be an intelligent, active, and respectable man. He should receive instruction in his present duties both, in regard to the method of making salt, and in seeing that the manufacturers attend to their duties.

97. The Assistant Superintendent has long been employed in the department. His work does not reflect much credit on him. The salt is very inferior, and he says he needs an assistant to help him to keep the accounts. A Kurnum from the Collector's office is accordingly deputed to assist him in keeping the account of the collection and storing of 23,638 Indian Maunds a year.

98. If the salt servants were efficient this help would not be needed. It is not required in other districts. When the new works are opened, if the sales increase very largely, a Clerk and a Shroff with three additional Vettyans may be needed; but for the present transactions the establishment allowed is ample.

99. The Vettyans at Chendrapady and throughout the district wear belts. They are caste people, and wish to appear on a footing with peons.

100. I think if Government intend the experiment suggested by the Honorable Mr. Pelly, of substituting Vettyans for Peons should have a fair trial, that the abnegation and entire ignoring of his plan and purpose should be put an immediate stop to.

101. Down in the Southern Districts Brahmins and Sudras are employed as Vettyans. I think myself, good active peons are a better class of men, and are more needed than Vettyans, unless the number of these latter men be so largely increased as to allow of their measuring or weighing out the salt received into store and sold without the aid of the manufacturers. The number of Measurers and Vettyans now allowed at each station is so small that they can only superintend the measuring as peons, while the measuring is done by the manufacturers, or by parties hired for the occasion.

102. I find a strong tendency of substituting Peons for Vettyans in this district. I also beg to draw the attention of the Government to the list in the margin.* If the establishment is weaker in one part, and stronger in another than is needed, I think it would be better to obtain sanction for making the necessary alteration, than that a lax principle should grow up in regard to the certificates which officers of the district are monthly required to attach to the salary abstracts, that persons receiving the pay of the Office are employed in doing the duty of that office. A Karnam does not do the duty of the Measurer, nor does a Clerk do the duty of a Vettyan.

		Negapatam.
* 1.	Measure.	Subbramanya Ayen, Curnum of Negapatam. To duty as Curnum. Ayapatam.
2.	Do.	Viranna Pillay, Curnum of Magalancottai. To duty in Shembi Mahadevi. Arsanagherry.
3	Do.	Sitapati Aiyen, Sumprathy, Adiampatam Division.

103. At about fourteen miles to the south of the Chendrapady station is the station of Covilput, which is nine miles south of Karical, and four miles north of Negapatam. It is a very small station, and consists of one platform with 1,394 pans.

104. The manufacture here is very trifling; in the last five Faslis it has averaged thirty-one Garce, or 3,515 Indian Maunds of salt a year, while the sales during the same time have only averaged 24 Garce, or 2,915 Indian Maunds a year. The sales might have been larger had there been more salt in store; but a portion of the salt made at this place is reserved for the French Government, and the manufacture is always very small. Out of an order for 21,600 Indian Maunds this year, only 2,724 Indian Maunds were made in the season.

105. The Superintendent complained that he was unable to induce the manufacturers to work their pans properly. They are chiefly inhabitants of the French Territory, and very contumacious and refractory, and are given much to smuggling and other fraudulent practices, and when pursued, run into the French villages where they are protected.

106. The two following tables give a comparison of the quantites of salt manufactured and sold at the two stations of Chendrapady and Covilput, the cost of the establishment, and the net returns realized by Government each year from these stations during the last ten years. The next two Statements show the average cost of salt per Garce to Government before the alteration in the strength of the establishment, and in the price paid for salt, and the present cost of the late increase both in the price paid for salt, and in the strength of the establishment:—

STATEMENT showing the net profit to Government during the last ten years by the Sale of salt at the station of Chendrapady.

Faslis.	Quantity of Salt in hand at beginning of each Fasli.	Quantity ordered to be made.	SALES. HOME. Quantity.	SALES. HOME. Value.	SALES. FOREIGN. Quantity.	SALES. FOREIGN. Value.	SALES. TOTAL. Quantity.	SALES. TOTAL. Value.	Cultivaram on quantity received into Store.	Fixed establishment.	Temporary establishment.	Repairs to salt works.	Total cost.	Profit to Government.	Loss to Government.	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
	IN. MDS.	IN. MDS.	IN. MDS.	IN. MDS.	IN. MDS.	RS.	IN. MDS	RS.	IN. MDS.	RS.	RS. A. P.	RS.	RS.	RS.	RS. A. P.	RS. A. P.	RS. A. P.	
1263 ...	3,695	8,400	5,718	21,661	5,718	5,718	10,080	1,170	15,798	6,885	1,800 0 0	345	...	...	2,145 0 0	4,743 0 0	... .	
1264 ...	9,358	25,200	18,550	20,286	18,550	18,550	1,200	130	19,750	18,680	1,689 14 0	345	...	...	2,034 14 0	16,645 2 0	... .	
1265 ...	9,288	24,000	14,114	14,070	14,114	14,114	...	...	14,114	14,114	1,188 12 5	345	...	...	1,533 12 5	12,580 3 7	... ...	
1266 ...	8,177	16,800	2,989	8,703	2,989	2,989	6,960	790	9,949	3,779	769 0 3	345	...	...	1,114 0 3	2,664 15 9	... ...	
1267 ...	6,471	14,400	8,547	18,576	8,547	8,547	6,000	681	14,547	9,228	1,640 14 4	345	...	...	1,985 14 4	7,242 1 8	... ...	
1268 ...	10,111	19,200	8,346	12,561	8,346	8,316	12,960	1,472	21,306	9,818	1,105 15 11	315	...	...	1,450 15 11	8,367 0 1	... .	
1269 ...	1,102	21,600	18,204	33,804	18,204	18,204	8,280	949	26,484	19,153	874 9 1	345	...	...	1,219 9 1	17,933 6 11	... ...	
1270 ...	7,320	14,400	156	7,613	156	176	7,200	847	7,356	1,023	731 6 4	345	...	...	1,076 6 4	... .	53 6 4	
1271 ...	7,515	14,400	...	14,933	...	...	6,000	682	6,000	682	1,319 7 10	315	...	...	1,664 7 10	... ...	982 7 10	
1272 ...	16,361	20,400	5,133	4,991	5,133	7,699	13,200	1,500	18,333	9,199	425 10 7	345	...	115	885 10 7	8,313 5 5	... ...	
Total...	79,378	1,78,800	81,757	1,57,201	81,757	84,313	71,880	8,221	1,53,637	92,564	11,545 10 9	3,450	...	115	15,110 10 9	78,489 3 5	1,035 14 2	Net profit Rupees 77,453-5-3
Average.	7,937	17,880	8,175	15,720	8,175	8,434	7,188	822	15,363	9,256	1,154 9 0	345	...	11	1,511 1 0	7,848 14 9	103 9 5	

STATEMENT showing the net profit to Government during the last ten years by the sale of Salt at the Station of Covilput.

Faslis.	Quantity of Salt in hand at the beginning of each Fasli.	Quantity ordered to be made.	Quantity received into Store.	SALES. HOME. Quantity.	HOME. Value.	FOREIGN. Quantity.	FOREIGN. Value.	TOTAL. Quantity.	TOTAL. Value.	Cudivaram on quantity received into Store.	Fixed Establishment.	Temporary Establishment.	Repairs to Salt works.	Total cost.	Profit to Government	Loss to Government.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
	IN.MDS.	IN. MDS.	IN. MDS.	IN.MDS	RS.	IN. MDS.	RS.	IN.MDS.	RS.	RS. A. P.	RS.	RS.	RS.	RS. A. P.	RS. A. P.	RS. A. P.	
1263 ...	1,743	8,400	1,332	603	603	720	78	1,323	681	111 0 0	168	...	...	279 0 0	570 0 0	... ...	
1264 ...	1,602	6,000	13,817	313	313	9,600	1,040	9,913	1,353	1,147 8 0	168	...	9	1,324 8 0	28 8 0	... ...	
1265 ...	5,213	14,400	9,372	315	315	13,200	1,492	13,515	1,807	817 10 7	168	...	100	1,085 10 7	721 5 5	... .	
1266 ...	927	12,000	703	371	371	1,200	136	1,571	507	60 8 4	168	...	...	228 8 4	276 7 8	... ...	
1267 ...	...	18,000	4,751	8	8	4,680	531	4,688	539	419 15 10	168	...	...	587 15 10	... .	48 15 10	
1268 ..	28	24,000	...	24	21	...	...	24	24	... ...	168	...	...	168 0 0	... .	144 0 0	
1269 ...	...	24,000	962	116	116	840	105	956	221	85 2 1	168	...	12	265 2 1	... ...	44 2 1	
1270 ...	...	12,000	7,412	211	238	7,200	817	7,411	1,055	698 14 2	168	...	...	866 14 2	188 1 10	... ...	
1271 ...	...	12,000	6,195	86	121	6,000	681	6,086	802	510 14 1	168	...	...	708 14 1	93 1 11	... .	
1272 ...	108	6,000	3,009	102	153	...	...	102	153	266 6 9	168	...	8	442 6 9	... ...	289 6 9	
Total...	9,651	1,36,800	47,553	2,149	2,262	43,440	4,880	45,589	7,142	4,147 15 10	1,680	...	129	5,956 15 10	1,877 8 10	526 8 8	Net profit, Rupees 1,351 0-2
Average.	965	13,680	4,755	214	226	4,344	488	4,558	714	414 12 9	168	...	12	595 11 2	187 12 1	52 10 5	135 1 8

AVERAGE cost of Salt to Government at Chendrapady and Covilput according to the old standard of Establishment and former rates of Cudivaram during the ten years from Fasli 1263 to Fasli 1272.

Stations.	Average quantity of Salt in hand at beginning of each Fasli.	Average quantity of Salt ordered to be made.	Average quantity received into Store each year.	SALES. Quantity.	SALES. Value.	Average Cudivaram on quantity received into Store each year.	Average cost of storing.	Total of Columns 7+8.	Charges in Column 9, divided on Column 4.	Cost per Garce calculated on Column 10.	WASTAGE. Quantity.	WASTAGE. Value.	Average annual cost of fixed establishment.
1	2	3	4	5	6	7	8	9	10	11	12	13	14
	IN. MDS.	IN. MDS.	IN. MDS.	IN.MDS.	RS.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	IN.MDS.	RS. A. P.	RS. A. P.
Chendrapady ...	7,938	17,880	15,720	15,366	9,252	1,154 9 1	... ...	1,154 9 1	0 1 5	10 10 0	294	26 0 6	345 0 0
Covilput	965	13,680	4,755	4,558	714	414 12 9	... ...	414 12 9	0 1 5	10 10 0	60	5 5 0	168 0 0
Cost of Salt to Government according to the revised Establishment, (of Fasli 1273,) and new rates of Cudivaram.													
Chendrapady ...	2,400	24,000	12,084	8,484	2,743½	1,086 7 9	... ...	1,086 7 9	0 1 6	11 4 0	...	... ...	1,176 0 0
Covilput	3,009	21,600	2,724	4,843	609½	263 6 4	... .	263 6 4	0 1 7	11 14 0	72	7 2 0	1,176 0 0

AVERAGE cost of Salt to Government at Chendrapady and Covilput, &c.—*(Concluded.)*

Stations.	Average annual cost of Police Guards.		Average annual cost of repairs to Salt Works.		Average annual cost of Sa-derwarid.		Average annual cost of Departy Collector and Establishment.		Total of Columns 13 to 18.		Charges in Column 19 divided on Columns 2+4.		Total of Columns 10+20, giving average cost per Maund.		Average cost per Garce, calculated on Column 21.		Price charged to the French.		Average net returns to Government each year.		
	15		16		17		18		19			20		21		22		23		24		25
	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.		Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	Rs.	A. P.	
Chendrapady ..	...	...	11	0 0	...	...	56	8 11	438	9 5	0	0	4	0	1 9	13	2 0	13	10 0	7,653	13 6	
Covilput ..	...	...	12	14 4	...	...	56	8 11	212	12 3	0	0	8	0	2 11	5	10 0	13	10 0	56	7 0	
Cost of Salt to Government according to the revised Establishment, (of Fasli 1273,) and new rates of Cudivaram.																						1 Loss to Government. Do.
Chendrapady ...	972	0 0	17	5 5	48	0 0	595	14 11	2,609	4 4	0	2	10	0	4 4	32	8 0	13	10 0	932	4 1	
Covilput ...	486	0 0	9	12 4	48	0 0	395	14 11	2,122	13 3	0	5	11	0	7 6	56	4 0	13	10 0	1,776	11 7	

107. Both of these stations, so near each other, are not necessary, and the question is which shall be closed, and which retained and enlarged.

108. The comparative amount of the population of Nagore and Tranquebar is given in the margin; both places are equi-distant from Karical. But while the Tranquebar people would have to go nine miles to Nedavasal over a sandy, heavy road, for their salt, if Chendrapady be closed, and no new place opened at Tranquebar, the Nagore people will only have to travel four miles over a good metalled road if Covilput be closed. Considering further the conduct of the manufacturers of the two places, the ease with which the Covilput people can obtain a high price for their labour on the Railway, and the facilities there exist for smuggling at Covilput, I am induced most strongly to recommend that Covilput be closed, and the Chendrapady station be transferred to the north of the river Nundalar as advocated above. If the French insist on Covilput being retained, they should be made to understand that their request can only be acceded to on their consenting to pay the price which salt at this station costs us, which is Rupees 48-2-0 per Garce, exclusive of the share of the salary of the Deputy Collector and establishment, which is Rupees 8-2-0 more per Garce.

Nagore	15,523 souls.
Tranquebar	14,154 „

109. The Superintendent at Covilput does not bear a very high character for integrity or zeal. It is a pity men of this stamp are drafted into the Salt Department. The practice is a remnant of an effete and barbarous system, which should have found no place in a di laying claim to any degree of advancement. It is, in fact, declaring that the more corrupt and dishonest a man is, the severer should be the measure of temptation to which he should be exposed. It is the very reverse of the wise Tamil saw which says, if a man is found perfectly honest, try him in the Salt Department.

110. The next station is Negapatam, which is four miles south of Covilput, and thirty-two miles north of Vedarniem. Negapatam was long the capital of the Tanjore district. It is a very populous town, but is ill arranged and crowded, and the roads and streets though now undergoing efficient repair, are not such as should be met within a town of such magnitude in a district which in wealth, intelligence, and commercial activity and revenue, stands so high in the list of districts in this presidency.

111. The importance of Negapatam as a salt-producing town cannot be over-estimated. It stands, in the same relation to the southern and western districts of this presidency, that Nowpada and Omeravalli do, and which Cocanada and Bimlipatam ought also to do to the Central Provinces; that the Kistna and Nellore districts do to Hyderabad, and that Madras must do to the Ceded Districts, Bangalore, Coorg and one or two of the districts surrounding the presidency.

112. Hitherto the supply of the required kind of salt, at Negapatam, has never been equal to the demand.

113. At present the Madras depot supplies salt to the district of Coimbatore and to all districts to the north-east of it. Coimbatore is 301 miles from Madras; Erode, 243 miles, and Perindorai 252 miles, while Salem is 206 miles. Negapatam will be 160 miles from Erode when the extension of the Great Southern of India Railway is completed; 218 miles from Coimbatore, and only 322 miles from Beypore.

114. It is probable that when the extension is completed Salem, Coimbatore, and perhaps Calicut, as well as Trichinopoly, Tanjore, and the northern and western parts of Madura will be supplied with salt from Negapatam.

115. The capabilities for making salt at Negapatam are very great. I enclose a plan, for which I am indebted to Mr. Roberts, who at a great sacrifice of time and labour, undertook to prepare it for me, of a large swamp close to the town, from which the present supply is obtained, and which is now partly occupied with pans and where, I believe, five times the present quantity of salt might be made. There are also, in the vicinity of the above-mentioned swamp, further large swamps available for making salt.

116 The difficulty which has lately arisen to prevent salt being made at Negapatam, is the want of cheap labour. Labour, I believe, can be procured at Negapatam to any amount, if a fair sum be offered for it; but with so many markets for it near at hand where the labourer is able to command a not exorbitant price for his work, it is vain to suppose we can obtain our salt at the prices at which we have been accustomed to get it, especially, since our improved administration has contributed largely, I believe, to curtail and reduce the illicit profits of the manufacturer and his coolies, and we require a better and more expensive article to be furnished.

117. Since I came to this district, I pointed out a few simple principles and rules, without which it was impossible a good salt could be made, and as I perceived that what I said was received with distrust by the native officials, I suggested that an experiment should be made to satisfy them that a good salt could be obtained by following them I am much indebted to Mr. Ricketts for the pains he has taken to carry out my wishes. The specimens of salt referred to above show the result of the experiments.

118. There are at present at Negapatam ninety-seven Mirassidars who employ 432 labourers There are 12,756 pans in occupation and 4,674 waste. Each pan is estimated to produce on an average 20 Indian Maunds a year. The largest quantity of salt produced at Negapatam excluding the stations of Covilput and Vedarniem, during the ten years up to Fasli 1272 is 1,81,207 Indian Maunds manufactured in Fasli 1264; the smallest 11,977 Indian Maunds in Fasli 1267; the average during that period is 85,989 Indian Maunds. In Fasli 1273, the quantity of salt received into store amounted to 2,19,688 Indian Maunds. The sales have increased from 64,440 Indian Maunds in Fasli 1260 to 2,23,869 Indian Maunds in Fasli 1272. During this period they have averaged 1,00,623 Indian Maunds a year. In Fasli 1273 they amounted to 1,55,396 Indian Maunds, but both in 1272 and 1273 the supply has not met the demand of the rail, and the Traffic Manager has complained more than once of a want of good saleable salt.

119. There are at Negapatam two platforms which will be seen represented in the plan. No. 1 is so much out of the way that it is hardly used. No. 3 is but small. The Railway officials have allowed the Collector temporarily to occupy a piece of ground near the station and river as a platform, and on this ground the salt that has been brought up from Vedarniem has been stored. I examined a heap on this temporary platform and one on platform No. 3; the results are given below :—

Number of Platform.	Number of Heap.	Date of Storage.	Results of examination.	Difference.
			G. In. Mds.	Mercals.
Temporary Platform	No. 48	6th July 1864.	9 395 0	— 29
No. 3.	No. 11	21st June 1860.	10 7 0	+ 7

120. I went round the works in a boat and examined some of the pans, and the process adopted for making salt. It very much resembles the process observed at the other northern stations. I endeavoured to show the Superintendent and his able Deputy that no good salt could be obtained by such a process. I was immediately told by the Superintendent that it was owing to the nature of the soil that a better salt could not be made, and that Negapatam salt had always been of that character. I endeavoured to show by a process of arithmetic that with the quanity and quality of water used nothing else could be produced than what was shown me, but that if concentrated brine, containing from sixteen to twenty times the quantity of salt that was to be found in the water used at Negapatam, were substituted for the water drawn from the wells, and from eight to ten inches of this brine used, we should have a very fine salt. The Superintendent treated my remarks with the contempt which one would expect from an old man grown grey in prejudice; and even his Assistant, an able and enlightened man, seemed inclined to discredit them; but under the able superintendence of the Deputy Collector he tried to follow my advice as far as he could at that late period of the season when the floods had come down; his efforts were crowned with the success shown above.

121. It is possible that the Deputy Collector may meet with great difficulty in dealing with the Mirassidars and owners of the salt lands in Negapatam, and that his best devised plans, for making the necessary supply of salt at this place, may be thwarted.

122. This difficulty may be overcome in two ways; first, by manufacturing and bringing up salt from Vedarniem in sufficient quantities to supply the market; secondly, by taking up the land we need for salt beds under the Public Works Act, and then disposing of it to labourers willing to work it in the way laid down by us.

123. There is a third way; but I fear the expense of this proposal, were there no other serious objections to it, is a barrier to entertaining it. I mean by maintaining a salt depôt at Tanjore, and uniting this place with the stations of Tambikanallavancottai and Adrampatam by a tramway.

124. Notwithstanding the advantage the Negapatam salt possesses in carriage, over the salt made in the southern pans, as shown in paragraph 39, no less than 1,851 Indian Maunds from Adrampatam, 7,935 Indian Maunds from Cuttumavady, and 8,102 Indian Maunds from Ayapatam are carried to, and sold at Trichinopoly. It is said that the Negapatam salt is so very inferior, so small grained, black and tasteless, that it is necessary for the purchaser to mix it with a superior salt to obtain a sale for it.

125. This is not creditable to our Government officers, though I am aware they are very much hampered by the Mirassidars at Negapatam, who, it is said, set all their orders and wishes for improving the salt at defiance.

126. In order to secure a better salt, and to obtain the quantity that is ordered, it is absolutely necessary that the whole plan of the salt works at Negapatam should be reformed.

127. Mr. Cadell has, in his letter of the 18th April last,* No. 128, pointed out the great difficulty experienced, during the manufacturing season, in bringing salt from the Negapatam salt beds to the platform No. 3, the most important of the places of storage at Negapatam, as it is the one from which the railway is usually supplied, and to obviate the difficulty he has proposed to extend platform No. 3 to the Railway station at an estimated cost of Rupees 6,650, as detailed below :—

* Board's Proceedings, 16th May 1864, No. 2,982.

	Rs.
To construct a bank from the Railway to the river Kudumurty	200
Cost of a wooden bridge over the river	1,500
Raising a bank through the centre of the pans, B. C.	3,000
Constructing a tunnel over a channel which intersects the pans	350
Extending platform No. 3 to the Railway...	1,600
	6,650

These works have been sanctioned, but their execution has been suspended till I have reported on the proposal. It is clear that this extension of platform No. 3 cannot at all meet the requirements of the works at Negapatam; but Mr. Cadell's proposal were made before the Government Order directing the permanent location of the Courts at Tranquebar reached him.

128. The platform No. 3 is but a small one, and can at most only hold 62 heaps, or 620 Garce, or 74,400 Indian Maunds. The present monthly sales of salt, at Negapatam, amount, on an average, to 20,421 Indian Maunds, which require a stock of 2,45,052 Indian Maunds, or 204 heaps to meet the annual consumption; and to enable us to have in hand the proper supply, we want a platform, which can hold at least from 5 to 6 lacs of Indian Maunds of salt. The sales at Negapatam are increasing very greatly, and if a good salt is furnished, and in sufficient quantities, even with the present field of consumption the sales must increase still more largely; but when the extension of the railway to Erode is completed, it will be difficult to compute to what amount

the demand may grow; it will not probably be under 15 lacs of Indian Maunds; and unless we can provide room for keeping a large stock of salt in hand, much inconvenience will be felt by consumers in the south, if there be no dearth of salt.

129. There is a large piece of ground near the river bank, and the railway, which had been reserved for public buildings; this ground no longer required for the purpose for which it was originally intended, is admirably adapted for a salt store. It is near the river by which salt can at all times be easily brought by boats from the pans and from Vedarniem to the store. It is near the railway, with which it could easily be united by a short siding. It is conveniently situated for the people generally, and admits of being easily surrounded by a good wall or hedge, and it is large enough to meet all our wants at least for some years to come. Besides a salt Cutcherry 350 heaps of ten Garce, or 300 heaps of 20 Garce might be stored there with ease.

130. By adopting this proposal we should not only be saved the expenditure referred to in paragraph 127, but for a mere trifle, we should secure a larger and more convenient platform, than we could expect to do by the former plan.

131. The first thing, however, that is necessary to be done is, to lay out the pans, at Negapatam, so that their number might be very largely multiplied, without fresh ground being taken up. If the whole of the swamps marked A., B. and C. were occupied by well laid out pans, I think we could, without the slightest difficulty, get from six to eight times as much salt as we do now, if not more.

132. The ground should be laid out as pointed out above, in squares of a cawny each. Two-thirds of the squares should be devoted to the water beds, and one-third to the pans, paths, and channels. The Deputy Collector should insist on this being done when salt is not being manufactured, so that the beds should be ready to work early the following year. Means should be devised, if possible, to supply the works with salt water from the sea.

133. All the drying grounds should be removed from the swamp, and the salt when scraped should be conveyed by boats to the new platform. The beds should be reached by small subsidiary channels.

134. As soon as the swamps A., B. and C. are occupied, D., E, F. and G. might be taken up and swamps still further off might eventually be occupied; but it appears to me that the ground marked from A. to G. would furnish as much salt as we should need for a long time to come

135. If the Government approve of these proposals, which are concurred in I believe, by the local officers, I would request that early sanction may be given for levelling, draining, hedging, and walling in the ground plot alluded to above, as a platform. I would also request that instructions may be issued to the local officers for laying out afresh, according to the plan adopted at Bimlipatam, the swamps A., B. and C., and for extending, if necessary, the works by including the swamps D., E., F. and G.

136. As the quantity of salt, received into store at Negapatam, has not, for some years past, met the demand, no efforts should be spared, by the local officers, to double if not treble the amount of the highest year's sale. It may not be possible, at once, to secure so large an increase, at Negapatam, but if it be found impossible to make the required quantity of salt, on the spot, it could be made at Vedarniem, and sent up by the canal, which ought to be opened early in the year.

137. Vedarniem is 32 miles from Negapatam. There are several natural streams between these two places which when all united allow of easy water communication. But it will be necessary to keep this communication in good working order; parts of the canal will be liable to be silted up, and, I believe, it will be absolutely necessary that a maintenance allowance of 250 Rupees a mile, for the whole length of the canal, should be placed at the disposal of the Collecto, to be spent annually on the work.

138. If this amount cannot be allowed, it would be better that the work be not commenced than that our name should become a bye word, in the District for projecting and commencing expensive works, and then leaving them to ruin.

139. There is on the other side of Negapatam, from Tanquebar northward, the south-east canal, a work which cost above a lac of Rupees, but the grater portion of which is now all silted up, and has become, of no use. I hope if the Vedarniem Canal be completed, that a sufficient maintenance allowance will be granted for keeping it in order.

140. I believe, that by means of this canal a garce of salt might by competition and contract be brought down and delivered at Negapatam, for less than 5 Rupees or from 2 to 2½ annas a Garce a mile or from 6 pice to 7½ pice a ton a mile, and that we might have salt made at Vedarniem of a superior quality and delivered on our platform at Negapatam for 15 Rupees a Garce, the price we have been paying for the vile stuff called Negapatam salt. In this sum of 5 Rupees I do not include the interest on the outlay in forming the canal, or the maintenance allowance for keeping it in working order, because I view the canal as a public way.

141. Till the opening of the works in 1863, nothing, but what is called spontaneous salt, had been collected at Vedarniem. This spontaneous salt is obtained in the manner detailed below. During the high floods at the end of May, the southerly winds drive the sea water over low swampy ground at the south-west near Point Calimere, and at Mootoopetta, channels have been formed the water from which floods the spit of land, at the south of the district, and finds its way into the sea again on the east side. Such quantity of this water, as is required, is conveyed into five large beds, formed by high banks of three or four feet, in height. The water is let into the beds to a depth, of 1½ foot, and when it has all evaporated, a fine salt is picked up. The usual quantity gathered from these five beds is 1,20,000 Indian Maunds, the largest quantity ever collected is 1,60,834, which was in Fasli 1269. This year only three morcels were obtained. Just as the salt was ready to be gathered heavy rains set in and destroyed the whole.

142. Considering the very precarious nature of spontaneous salt, and the late date of the floods, which supply the water out of which the salt is formed, it appeared to the late Acting Collector, Mr. G. L. Morris, and to Mr. D'Monte, that it would be an experiment worth trying to make salt at Vedarniem. This was done, by sinking a series of wells or shallow ponds from which water was conveyed into pans constructed on an abandoned spontaneous salt bed. By means of the wells and a cut from the sea it was believed that the beds could be worked as early as January.

143. Manufacturers were collected with some pains, but not till late in the season, and 4,226 pans were laid out. These pans have been formed, in a better manner, than any salt works I have seen in the Tanjore District, though the plan of them admits of improvement. The works need pathways and defences. Still, much skill is shown in their structure and in the laying out of the wells which all skirt the beds, and are in a line of a uniform size. By removing the small pieces of earth intervening between the several wells a fine canal could be formed, connecting these salt beds with the Vedarniem canal. I look on this experiment for making salt at Vedarniem as a great success, and the authors of it deserving of very great commendation. The works must have cost those who formed them a very large sum of money, for which the price paid for the salt manufactured in 1863 could not have re-paid them. I am confirmed in this opinion by the information I obtained from both official and non-official sources; and even the Pundarum,* the great authority in the district regarding salt concurred in this opinion.

* See paragraphs, 41 and 42 of my letter of 11th October 1864, giving cover to the packet containing proceedings on the charges preferred against Mr. D'Monte.

144. In the first year 1863 95,682 Indian Maunds, or 797½ Garce of salt were manufactured, and Rupees 8,471-13-6, at the rate of Rupees 10-10-0 per Garce were paid to the manufacturers.

145. The manufacturers were informed, when opening these pans, that they could claim no right in the ground from their manufacture, and that the Government would make them no compensation if they closed the works; but I was informed they felt assured that as long as the

pans were worked, they would be secure in the possession of them, and the principles of our land tenure and our dealings with natives employed by us in the salt manufacture throughout the country, would justify them in coming to the conclusion, that as long as the beds were worked, they would be allowed the preference of occupation.

146. This year the Collector endeavoured to manufacture salt, by hired labour, at the expense of Government. The salt so manufactured was made in the beds formed in the preceding year, and Mr. Ricketts informed me, by tools borrowed from the late manufacturers. Sixty-three and one-eighth Garce of salt have thus been made at a cost of Rupees 491-0-8, or Rupees 7-12-1 per Garce, exclusive of the cost of instruments and the interest of capital sunk in making beds, and of profits. While we have succeeded in diminishing to ourselves the cost of salt made at Vedarniem, we have, I fear, raised in the minds of the late manufacturers a feeling of distrust and dissatisfaction.

147. Considering the nature and success of the first experiment of making salt at Vedarniem, and the large quantities of salt which will be required at Negapatam to meet the demand of the railway, the large outlay and loss to which the parties who formed the salt beds in 1863 were subjected, I think we should be acting not only wisely but justly in restoring these pans to them, and permitting them to make as much salt as they possibly can the next season. This salt should be paid for at Rupees 10-10-0 per Garce, the lowest price we pay for manufactured salt in the district.

148. All the spontaneous salt also that can be obtained should be collected.

149. No doubt the spontaneous salt is a cheaper article than manufactured salt; but it is so precarious in its nature that we can never depend on a regular and sufficient supply of it. The spontaneous salt costs, for the repair of embankments, &c., on an average Rupees 316-14-0 a year, and 4¾ Rupees a Garce for gathering, or taking the average annual expense and the average annual receipts for ten years, about 6¼ Rupees a Garce.

150. This salt is a very excellent and superior article, but I found throughout the whole of the Southern Districts of South Arcot, Tanjore, Madura, Tinnevelly, and Trichinopoly, that there is a very strong prejudice against it, which I do not believe is at all worn away; and though the salt may sell when other salt cannot be got, I am assured, on the authority of both official and non-official natives of the highest respectability, as well as by dealers in the article, that the native community would rather pay a larger price for an inferior article than take it. It is not suited to their culinary purposes so well as the manufactured salt, and they have a strong feeling that it makes them ill.

151. With these prejudices, I hardly think it is wise to depend on the spontaneous salt to supply our market. I believe it is better to make a salt more suited to their liking. The manufactured salt of Vedarniem was very much liked, and found a ready sale.

152. If the spontaneous salt supply is to be kept up, a cut should be made from the salt beds into the sea to the eastward, in order that the operation of salt forming may commence earlier than it does at present. By waiting for the high tides of May, the best part of the salt producing season is lost. It will be necessary also to repair the sluices, and to have shutters let into them.

153. There are, at present, five platforms, at Vedarniem, capable of containing 1,480 Garce, or 1,77,600 Indian Maunds of salt. The accompanying rough sketch will show their position and that of the beds, &c. The platforms are, many of them, in very inconvenient and out-of-the-way places. They should be placed near the canal, and the salt should be placed there without being stored till it can be carried away by boat to Negapatam.

154. Considering the importance to which Negapatam is likely shortly to rise as a salt station, and the great demand that must arise there for salt, and also the importance of Vedarniem as a feeder to Negapatam, I do not think that the establishment provided for these places is sufficient. I have drawn up a table showing the existing establishment, and that which I would propose for these divisions.

Statement showing the financial result of the changes proposed in the Establishment for the Salt works of Negapatam and Vedarniem.

Present scale.	Salary. Per month.	Salary. Per annum.	Proposed scale	Salary. Per month.	Salary. Per annum.
	Rs, A. P.	Rs. A. P		Rs. A. P.	Rs. A. P
Negapatam.			**Negapatam.**		
Division Establishment.			**Division Establishment**		
1 Superintendent 85 0 0			1 Superintendent 120 0 0		
1 Clerk 20 0 0			1 Clerk 20 0 0		
1 Do. 15 0 0			2 do. at 15 each. 30 0 0		
1 Shroff 15 0 0			1 Shroff 15 0 0		
2 Measurers ... 12 0 0			8 Measurers at 6 Rs. each 48 0 0		
4 Peons 24 0 0			7 Peons at 6 Rs. each 42 0 0		
1 Vettyan 5 0 0			2 Vettyans... ... 10 0 0		
176 0 0			285 0 0		
Station Establishment. Papacovil, &c.			**1st Station.**		
1 Assistant Superintendent ... 30 0 0			1 Assistant Superintendent ... 25 0 0		
8 Vettyans ... 40 0 0			3 Vettyans... ... 15 0 0		
70 0 0	246 0 0	2,952 0 0	40 0 0		
			2nd Station.		
			1 Aszistant Superintendent 20 0 0		
			3 Vettyans... ... 15 0 0		
			35 0 0		
			3rd Station.		
			1 Assistant Superintendent ... 10 0 0		
			2 Vettyans... ... 10 0 0		
			20 0 0	380 0 0	4,560 0 0
Vedarniem.			**Verdaniem.**		
Division Establishment.			**Division Establishment.**		
1 Superintendent 60 0 0			1 Superintendent. 85 0 0		
1 Clerk 20 0 0			1 Clerk 20 0 0		
1 Shroff 10 0 0			1 do. 15 0 0		
2 Measurers ... 12 0 0			1 Shroff 10 0 0		
2 Peons 12 0 0			4 Measurers ... 24 0 0		
1 Vettyan 5 0 0			4 Peons 24 0 0		
119 0 0			4 Vettyans 20 0 0		
Station Establishment.			198 0 0		
1 Assistant Superintendent ... 20 0 0			**Spontaneous Salt.**		
2 Vettyans 10 0 0			1 Assistant Superintendent ... 25 0 0		
30 0 0	149 0 0	1,788 0 0	8 Vettyans... ... 40 0 0		
			65 0 0		
			Manufactured Salt.		
			1 Assistant Superintendent ... 20 0 0		
			2 Vettyans... ... 10 0 0		
			30 0 0	293 0 0	3,516 0 0
Preventive Establishment for Negapatam and Vedarniem.			**Preventive Establishment for Negapatam and Vedarniem.**		
2 Head Constables... ... ... 40 0 0			2 Head Constables... ... ... 40 0 0		
3 Deputy do. 31 8 0			2 Deputy do. 21 0 0		
32 Constables ... 208 0 0			27 Constables at 6¼ Rupees each 175 8 0		
	279 8 0	3,354 0 0		236 8 0	2,838 0 0
Total... ...	674 8 0	8,094 0 0	Total	909 8 0	10,914 0 0
			Additional expenditure	235 0 0	2,820 0 0

155. At about thirty miles to the west of Vedarniem lie the stations of Tambikanallavankottai and Tamarankottai. These formerly were outlying stations of the division of Adrampatam. They now form a separate division. The old division of Adrampatam consisted of the four stations of Adrampatam, Magalankottai, Tambikanallavankottai, and Tamarankottai.

156. The pans and platforms of the stations of Tambikanallavankottai and Tamarankottai lie close to each other, those of Tambikanallavankottai lying to the east and those of Tamarankottai to the west. They are about half a mile apart. The salt made at both these places is fair, but the manufacture is conducted in a most slovenly manner. The beds are laid out in no kind of order. Many are hidden among mounds of earth and sand, and are flanked by a thick jungle, affording great facilities for fraud and peculiaon.

157. There are three platforms at Tambikanallavankottai, and two at Tamarankottai. The platforms at the former place are capable of holding severally 550, 290, and 350 Garce each. The home sales at Tambikanallavankottai have hitherto averaged 55,982 Indian Maunds, and the inland sales have averaged 14,478 Indian Maunds, making in all an average of 70,460 Indian Maunds. Last year, Fasli 1273, they amounted to 80,010 Indian Maunds, being 62,620 Indian Maunds for home consumption, and 17,390 Indian Maunds for inland consumption. The highest sales were in Fasli 1270, when the home sales amounted to 76,196 Indian Maunds, and the inland sales to 33,991 Indian Maunds, making a total sale of 1,10,187 Indian Maunds. These sales are not, however, a fair index of the state of the market; they are forced by other depôts being closed.

Garce.	I. Mds.
550...	= 66,000
290...	= 34,800
350...	= 42,000
	1,42,800

158. If Negapatam and Vedaraniem produce a sufficiency of a really good salt, the sales in this part of the district must greatly decrease Of the salt sold in this place, 21,700 Indian Maunds were taken for Trichinopoly and its neighbourhood, and 91,700 Indian Maunds for Tanjore and its vicinity.

159. The salt at Negapatam has been so bad that the merchants trading in it have been obliged to mix large quantities of the salt of this and the neighbouring stations with it to find purchasers for it. I could not account for the fact that while the rail charge for the carriage of a Garce of salt from Negapatam to Trichinopoly was only 20 Rupees, and the charge for bandy hire on account of a garce of salt from Adrampatam or Tambikanallavankottai was about three times that amount, so much salt was conveyed from these latter places, and on inquiry I was informed of the fact above stated. This is very probable, for the salt of Negapatam is a very inferior article. I hope and expect much from the intelligence and zeal of Mr. Ricketts in remedying this defect, and from his determination to permit none but a really, good salt being received into the Government store, now that he has learnt how easily a good salt can be made at Negapatam.

160. He will, I doubt not, experience much passive resistance from the Mirassidars, and will receive little aid from some of his subordinates in carrying out his wishes. The whole weight of the Collector's influence should be applied to aid him in his efforts, and this I am confident Mr. Cadell will gladly accord.

161. I believe that as soon as a good salt can be obtained, in abundance, at Negapatam, the sales along the line of the rail, and for ten or twenty miles to the south of it, as well as all the country lying to the north, and Trichinopoly and parts of Madura will be supplied from Negapatam. If this idea prove correct, the sales, at all the southern pans, must fall off even more largely than they have of late, and it will be necessary to reduce them; but this would not be a safe course at present, when there is annually so great a dearth of salt at Negapatam, and in the district generally, as there has been for the last five or six years.

162. At present Tambikanallavankottai and Tamarankottai cannot be reached during the rainy season, owing to a large river which separates them from the western and northern parts of the district of Tanjore. It is therefore not unusual to close the sales at Adrampatam during the dry months; and thus force the sales of Tambikanallavankottai. I question the policy or wisdom of this measure. If salt is found, not saleable at one place and greatly in demand at another, the former should be closed, and the latter enlarged.

163. The quantity of salt, ordered to be made in a year, has never been fixed, on any correct principle; and the consequence is, that we find some of the platforms loaded with old salt while others have no salt at all.

164. From the practice, followed in the district, and which though disapproved of, by the present Collector, was maintained by Mr. D'Monte, of closing one store in order to ged rid of old salt accumulated in another neighbouring store, it is impossible to ascertain within any degree of precision, the requirements of, and necessity for the several stores, or to obtain any satisfactory explanation of the sudden rise and fall, in the sales, at any of the several stores.

165. The sales at Tambikanallavankottai during the last ten years are given in the margin. The variations are very marked. The sales are fictitiously kept up by closing the stores at Adrampatam, and compelling purchasers to resort to this place. The roads are bad and the stores are not easily accessible, and as far as I could learn, it would appear that, if salt were made in sufficient quantities at Adrampatam, merchants would not travel the further distance to Tambikanallavankottai, over bad roads, to obtain their supply of this article. There is nothing at Tambikanallavankottai to attract honest purchasers. I think the place should have a fair trial on its own merits, and if found to be necessary should be retained; but if the sales when not forced, fall off, very largely, it should be closed.

SALES.

Faslis.	In. Maunds. Home.	In. Maunds Inland.	In Maunds. Total.
1263... ...	55,087	1 998	57,085
1264	59,540	6 621	66,161
1265	64,998	7 461	72,459
1266	69,600	17,715	87,315
1267... ...	48,114	18,252	66,366
1268... ...	72,993	26,756	99,749
1269	31,722	12,182	43,904
1270... ...	76,196	33,991	1,10,187
1271... ...	57,372	17 687	75,059
1272... ...	24,201	2,123	26,324
Total ...	5,59,823	1,44,786	7,04,609
Average ..	55,982	14 478	70,460

166. There are, as I have said before, three platforms at Tambikanallavankottai, the first capable of holding fifty-five heaps, or 66,000 Indian Maunds, and two others of holding each twenty-nine and thirty-five heaps, or 34,800 and 42,000 Indian Maunds respectively. The sales average about 70,460 Indian Maunds a year. The first and third platforms would, therefore, be enough for eighteen months' consumption. No. 2 should not, therefore, be used except when necessity requires, and by this means the guards might be reduced.

167. There is no Cutcherry at Tambikanallavankottai. If the place is to be retained, a Cutcherry should be added to the first platform, and if built by the Collector on the plan of the Salt Cutcherries in the Madura District, or of the Police office built by Mr. Cadell at Vellum, it might be erected at a moderate cost.

168. Tamarankottai, the outlying station of Tambikanallavankottai, adjoins the principal station. The platforms of the one station lie close to those of the other. The sales of Tamarankottai for the last ten years are given in the margin. They are less than those of Tambikanallavankottai by about half. It does not appear to me that both these places of manufacture and sale are required. I would strongly recommend that Tamarankottai be closed. All the salt that is needed in this vicinity might with great ease be made at Tambikanallavankottai. There are two platforms at Tamarankottai, one capable of holding 75,600 Indian Maunds, the other 42,000 Indian Maunds. As the average sales at this place are only about 36,000 Indian Maunds a year, I think if the place is retained that one platform will be sufficient.

Faslis.	Sales. I Maunds.
1263... ...	24,701
1264... ...	49,553
1265	22 394
1266... ..	65,612
1267... ...	29 317
1268... ...	41,536
1269... ...	31,147
1270... ...	57,372
1271... ...	36,639
1272... ...	7,910
Total...	3,66,181
Average...	36,618

169. The pans in this place are skirted by thick low brushwood jungle, and the several sets of pans are surrounded by high mounds of mud and sand. The difficulty and expense of guarding these pans and platforms is very largely increased by their increased numbers, and the extended area over which they are scattered. A much smaller number of pans, than 1,853, well worked, would produce the quantity of salt really needed to meet the market demand of this place, at which, the sales, if they are not forced, would not, I should think, average more than 20,000 Indian Maunds a year. By employing all the platforms, at Tambikanallavankottai, the required storage room for all the salt needed at this division might be secured, and the station of Tamarankottai might, with advantage, be given up.

170. At about two miles to the west of Tambikanallavankottai lies the salt village of Adram patam. There is no village of that name found in the Government village accounts, but the port- and salt works are so named.

171. The port of Adrampatam lies in a very safe and protected bay, and is much resorted to by traders to Ceylon. The chief articles of export are rice and paddy. The value of the exports is about 3½ lacs, and the duty levied at the port on the exported grain, is about 17,000 Rupees a year.

172. The bandies in returning carry away salt, but the largely increased sales at Negapatam last year, as may be seen in the margin, have slightly affected the sales at Adrampatam, and I doubt not will do so very materially when good salt, in sufficient quantities, can be procured at Negapatam. It requires ten country carts to carry away a garce of salt, and the hire of one cart from Adrampatam to Combaconum is about 4 Rupees, while that to Trichinopoly is 6 Rupees. The rail charge is 4 Annas a garce a mile, and 2 Annas a ton for carriage, from the platform to the station, making the whole charge for carriage of salt by rail to Trichinopoly Rupees 20-4-0; to Nedamungalam, the station nearest to Combaconum, Rupees 8. The whole charge for the carriage of a garce of salt by rail and by cart, from Negapatam to Combaconum, would be about Rupees 28-4-0 against 40 Rupees by cart the whole way. To Tanjore the rail charge would be Rupees 12-12-0 against 30 Rupees by cart. It is clear, therefore, that when we can supply the trade with good salt in sufficient quantities at Negapatam, the salt trade at Adrampatam must fall off. It will not pay the carters to bring back salt to Tanjore, as a return load even, much less to go to Trichinopoly. The wear and tear of their bullocks and carts in dragging the load would not be compensated by the price they would get. It is only the very necessities of the people arising from our mismanagement in producing so little of the stuff that is called salt of Negapatam, that keeps up the trade at Adrampatam.

	Sales of Fasli 1273.	Average sales in ten years.
Negapatam...	1,55,396	1,00,623
Tambikanallavankottai	80,000	70,460
Tamarankottai	38,218	36,618
Adrampatam	39,342	68,893
Magalankottai	49,898	43,945
	2,07,458	2,19,916

173. But there is just now a new trade springing up, viz., with Travancore. How long this may last is uncertain. The Travancore Government has hitherto drawn its supply of foreign salt from Bombay, and our East Coast salt is certainly inferior in quality to the Bombay salt. In the last Administration Report of Travancore, I observe, it is proposed to increase and work more effectively the Travancore pans so as to render that country independent of foreign aid. I fancy, therefore, this new trade will be maintained only for a short time. At present we sell our exported salt at 18 Rupees a garce, and bear all the expense of shipping. I think it would be better that we should discontinue to ship the salt and sell it to the exporter at its prime cost to us. The export trade of salt is now a losing concern to us. I do not see why we should bear the expense and trouble of shipping. The arrangements for doing so would be cheaper and better made by private enterprize. However, while this demand of salt for Travancore lasts, it will be necessary to have a supply of salt on hand in Tanjore and Tinnevelly to meet it. No doubt the protected bay at the south of our Presidency offers greater facilities for shipping salt than other parts of the sea-board, and if the export trade is to be kept up, the stores at Cuttumavady and Adrampatam should be largely increased.

174. In the Adrampatam division there are two stations, one at the Cusbah and one at Magalancottai. The latter is about two miles to the south-west of Adrampatam.

175. The average yearly manufacture at Adrampatam is 71,067 Indian Maunds, that at Magalancottai is 46,928. The largest quantity manufactured in Adrampatam is 1,08,674 Indian Maunds made in Fasli 1265. In Fasli 1269 the largest quantity was made at Magalancottai; it amounted to 93,447 Indian Maunds. The average sales at Adrampatam have been 68,893 Indian Maunds a year; those at Magalancottai have been 43,945 Indian Maunds a year. The highest sales at Adrampatam were in Fasli 1265, and amounted to 1,12,306 Indian Maunds; the highest sales at Magalancottai were in Fasli 1269, when 73,747 Indian Maunds were sold. The combined average sales at the two places were 1,12,838 Indian Maunds; the combined highest sales amounted to 1,86,053 Indian Maunds.

176. It may not be safe to close Magalancottai at once, but I doubt not that if the sales be watched at this place, in a few years its reduction would be possible and necessary.

177. It was proposed by Mr. D'Monte to increase and extend the manufacture at Adrampatam by opening 2,000 new pans. If this increase be still in contemplation, it appears to me that the principle proposed by the Collector in his letter of the 5th May last, No. 480, forming an appendix* to this report, cannot for a moment be maintained. Nor do I see the advisableness of such a course. A cultivator of the ground or Mirassidar, may be a most *worthy* man, and deserving of encouragement, but I cannot see what he can know of salt making, nor why, when it is proposed to open new salt pans, and the salt Mirassidars possess salt land, a share in that extension should of right be claimed for the *village* cultivator. I should not employ a potter however worthy he may be, to make me a chair, and I can see no less incongruity in employing a cultivator of the ground to make salt.

* Appendix A.

178. The following out of so unintelligible a rule has led to the deterioration of our manufacture of salt in Tanjore. The new pans should be divided among the present salt makers, and they should be left to make arrangements with the owners of land if they have none of their own, to open up fresh pans. But many of the present pan-owners lay claim to, and appear to have a most strong *primâ facie* right to the waste lands adjoining their pans. Why these rights should be set aside, and pretensions which are wholly unsustainable should be recognised, I cannot see. It is clear that the Karayurans and a Mercayan have rights in the land. The latter holds a decree which is unassailable, showing him to be possessor of several velies of waste. It is most clear that Shiek Tambi Mercayan possesses a very large extent of available waste land, and there is no reason for his claim being ignored. It may be found that many others like him can show a right in the salt swamp.

Faslis.	Sales. I. Mds.
1263	47,621
1264	59,223
1265	1,12,306
1266	36,777
1267	97,451
1268	71,652
1269	60,962
1270	61,103
1271	84,940
1272	57,095
	6,88,930
Indian Maunds ..	68,893 average.

179. The average annual sales at Adrampatam, as may be seen in the margin, are 68,893 Indian Maunds; these are chiefly for the home market. The sales at this place are continually closed to enable us to get rid of salt accumulating at the Tambikanallavankottai division, or at Magalancottai, so that it is difficult to determine what would be the natural sales at either place.

180. There are three platforms at Adrampatam, and one at Magalancottai. The pans attached to the second and third platforms are at present nearly surrounded with low jungle. This should all be cleared away, both in front and in the rear. The platforms are in fair order, and there is but one drying ground, which is in front of the platform and is hedged in. This is an improvement on the practice followed in the northern divisions of having innumerable drying grounds dotted about the works.

181. There is a small dark building in the town of Adrampatam used as a Salt Cutcherry. This building is wholly unfit for its purpose. A new office is urgently needed, and should be constructed by the Collector, on the platform, on the plan suggested above.

182. The next division is the old Shembai division which was closed in May 1863. The closed works consisted of three stations, Shembai, Corukun, and Sendalai. Shembai is eight miles to the south-west of Magalancottai; Corukun is two miles south of Shembai, and Sendalai, one mile south of Corukun. The old division further possessed the stations of Shembai, Mahadevi, and Cuttumavady. The last two stations are retained, and form with Ayapatam, the new division

of Ayapatam. The average sales of the stations closed were annually 43,287 Indian Maunds but they had of late years fallen below this average, and could only by kept up by closing othes stores.

183. We next come to the new division of Ayapatam, which consists of the three station of Shembi, Mahadevi, Cuttumavady, and Ayapatam.

184. Six miles to the south of Sendalai is the station of Shembi Mahadevi, one of the outlying stations of the new Ayapatam division.

185. This station comprises a few salt pans, 687, and one platform. It is in the midst of a jungle, is very isolated, and produces and sells very little salt. The annual average manufacture is 9,947 Indian Maunds, the annual average sales 5,178 Indian Maunds. The sales are chiefly for inland consumption. There is a road from Cuttumavady to Arantanghy, and thence to Poodoocotta and Trichinopoly. The home sales at the Shembi Mahadevi station are very small indeed. They have fallen to about 584 Indian Maunds, or four or five garce a year, while the inland sales do not exceed 5,000 Indian Maunds or 46 garce a year. I would strongly recommend the immediate closing of this place.

186. Cuttumavady lies at about one mile to the south of Shembi Mahadevi. It is well situated in an open place near the sea, and there is a road of some sort which connects this station with the interior, and there are as many as 1,857 pans, capable of producing above 1,00,000 Indian Maunds of salt.

187. The average manufacture at Cuttumavady, during the last ten years, is 23,430 Indian Maunds a year, the highest manufacture attained being 90,430 Indian Maunds made in Fasli 1263. The average sales in the same period are 20,425 Indian Maunds a year, of which nineteen parts are for inland consumption and one part for home consumption. The highest sales occurred in Fasli 1267, when 47,952 Indian Maunds were sold. The sales last year, including 208 Indian Maunds sold to the Travancore Government, only amounted to 17,619 Indian Maunds.

188. There are two platforms at Cuttumavady, one capable of holding 40,800 Indian Maunds, and the other capable of holding 66,000 Indian Maunds. It would be enough, unless the sales increase very much in this place, to use only platform No. 2, and to close the other one, and so reduce the number of guards to be employed.

189. If Ayapatam is closed, and it might be done immediately, a Salt Cutcherry should be added to the platform retained at Cuttumavady. If Ayapatam be retained, a new Cutcherry at that place is necessary. The present building is a mere leaf hut on the platform, both unfit for a Cutcherry, and unsafe as a place for the custody of money.

190. I found that the number of fixed guards allowed to this and the neighbouring divisions was not employed at them. One-third of the guard was absent. It is not right to charge the salt revenue with guards not employed.

191. I have already spoken above of the condition of the roads in this part of the district. There are, in fact, none at all, unless rows of trees constitute a road. Trade is severely suffering from want of good communications in this part of the district.

192. Ayapatam, the chief station of the 8th Division, is situated about nine miles south of Cuttumavady. The pans are situated in the Mahomedan village of Ammapatam, where there is also a small port. The trade of the port is falling off. There are at this station 761 pans, fifty having been lately opened by Mr. D'Monte. This extension appears to me to have been an unnecessary proceeding, for while the existing pans are capable of producing 60,000 Indian Maunds of salt, the average sales were only 14,503 Indian Maunds a year, and they have fallen even below this rate of late. I found on the platforms old salt of four years' date, the sales were so slack. It is true that the road leading to the interior has been quite washed away, which may account for the falling off in the sales, but the old pans were ample for the production of the quantity of salt required at Ayapatam. The new pans too, have been opened out in most inconvenient places, quite separate from the old ones, and in the rear of the village.

193. I very much question the necessity or desirableness of keeping up this station with Cuttumavady so near, where all the salt required for this part of the district can be made. The home sales at Ayapatam do not average 20 Garce a year. They would not amount to this standard if the station of Cuttumavady were always kept open. I would recommend the abolition of Ayapatam. If the station is retained only one of the platforms should be used; either of the two is able to hold all the salt made and required at Ayapatam.

194. At about twelve miles south of Ayapatam is the salt division of Arasanagherry, which is a border station, and is ten miles north of the adjoining division of Vuttanum in the district of Madura.

195. There are 1,033 pans at Arasanagherry, capable of producing 1,50,000 Indian Maunds of salt a year. The salt is good, but it does not find a ready sale.

196. The Arasanagherry Division contains but one station.

197. There are three platforms each capable of containing respectively, 34,800 Indian Maunds, 45,600 Indian Maunds, and 40,800 Indian Maunds.

198. The home sales at Arasanagherry are very small, averaging only 20 Garce a year, the inland sales are about 400 Garce, making in all about 50,000 Indian Maunds a year. But of late years the sales have fallen off very greatly. Last year, Fasli 1273, they amounted only to 7,941 Indian Maunds, the year previous to 18,177 Indian Maunds, and in Fasli 1271, to 37,263 Indian Maunds.

199. The three platforms are only wanted in consequence of the pans being so straggling and so far apart.

200. There was much old salt in store at this station showing that the sales were very slack. It appears to me, therefore, if they do not increase, it would be desirable to do away with one of the platforms, and close the pans connected with it, and to concentrate the pans either about the centre platform, or about the two first platforms, if not to give up the station altogether.

201. It is on the high road leading to the platforms of this station that the elephant's hole is to be found; and further, it is to be observed that the salt works are separated from the village of Minpesal where the servants reside, by a deep and rapid river, and that they are three miles distant from the village. It must be difficult for the servants to get to the salt stores in the rainy weather. They should, therefore, live somewhere in the neighbourhood of the pans.

202. The Salt Cutcherry too is in the village of Minpesal; it should be removed to the works and a building resembling the Madura Salt Cutcherries should be added to platform No. 1, through the agency of the Collector's Department.

203. The Superintendents, with the exception of those employed at Negapatam, Adrampatam, and Arasanagherry, were Sub-Magistrates found unfit for their duty. The Assistant Superintendents are old salt servants. Some of these officers, both Superintendents and Assistant Superintendents, apparently are unfit for their post, either from ignorance of their duties, or former misconduct. The antecedents of several of the inferior officers are not good.

204. The Deputy Collector should endeavor to improve the staff of his officers, and should see that those employed attend to their duties. Those that are too old should be immediately required to apply for pensions, or should otherwise be provided for in order to make way for more efficient and honest men.

205. If my views and suggestions in regard to Negapatam and Vedarniem are adopted, it will be necessary to strengthen the establishment at these places, but this can be done without entailing any additional expense on Government if the reduction suggested by me in other quarters be carried out.

206. The alterations I would propose are specified below, and the increase on the one hand and the reductions on the other are contrasted and compared.

STATEMENT showing the Financial results of changes proposed in the Salt Department of the Tanjore District.

Present Establishment.			Salary. Per month.	Salary. Per annum.	Proposed Establishment.			Salary. Per month.	Salary. Per annum.
			RS. A. P.	RS. A. P.				RS. A. P.	RS. A. P.
NEDAVASAL.					NEDAVASAL.				
Division Establishment.					*Division Establishment.*				
	RS. A. P.					RS. A. P.			
1 Superintendent	60 0 0				1 Superintendent	60 0 0			
1 Clerk	15 0 0				1 Clerk	15 0 0			
1 Shroff	10 0 0				1 Shroff	10 0 0			
2 Measurers at 6 Rs. each	12 0 0				2 Measurers	12 0 0			
3 Peons at 6 Rs. each	18 0 0				3 Peons	18 0 0			
1 Vettyan	5 0 0				1 Vettyan	5 0 0			
		120 0 0					120 0 0		
VADAPATHY.					VADAPATHY.				
Station Establishment.					*Station Establishment.*				
1 Assistant Superintendent	15 0 0				1 Assistant Superintendent	15 0 0			
3 Vettyans at 5 Rs. each	15 0 0				3 Vettyans	15 0 0			
		30 0 0					30 0 0	150 0 0	1,860 0 0
Kilayur.									
1 Assistant Superintendent	20 0 0								
2 Vettyans at 5 Rs. each	10 0 0								
		30 0 0	180 0 0	2,160 0 0					
CHENDRAPADY.					CHENDRAPADY.				
					when removed to the north of the river Nandalar.				
Division Establishment.					*Division Establishment.*				
1 Superintendent	50 0 0				1 Superintendent	50 0 0			
1 Measurer	6 0 0				1 Clerk	15 0 0			
2 Peons at 6 Rupees each	12 0 0				1 Shroff	10 0 0			
1 Vettyan	5 0 0				2 Measurers	12 0 0			
		73 0 0			3 Peons	18 0 0			
							105 0 0		
Station Establishment.					*Station Establishment.*				
1 Assistant Superintendent	15 0 0				1 Assistant Superintendent	15 0 0			
2 Vettyans at 5 Rupees each	10 0 0				2 Vettyans	10 0 0			
		25 0 0	98 0 0	1,176 0 0			25 0 0	130 0 0	1,560 0 0
Preventive Establishment, for Nedavasal and Chendrapady.					*Preventive Establishment for Nedavasal and Chendrapady.*				
2 Head Constables	40 0 0				2 Head Constables	40 0 0			
3 Deputy do.	31 8 0				2 Deputy do.	21 0 0			
31 Constables	201 8 0				25 Constables at 6½ Rs. each	162 8 0			
			273 0 0	3,276 0 0				223 0 0	2,676 0 0
NEGAPATAM.					NEGAPATAM.				
Division Establishment.					*Division Establishment.*				
1 Superintendent	85 0 0				1 Superintendent	120 0 0			
1 Clerk	20 0 0				1 Clerk	20 0 0			
1 Do.	15 0 0				2 Do. at 15 Rupees each	30 0 0			
1 Shroff	15 0 0				1 Shroff	15 0 0			
2 Measurers	12 0 0				8 Measurers at 6 Rs. each	48 0 0			
4 Peons at 6 Rupees each	24 0 0				7 Peons at 6 Rupees each	42 0 0			
1 Vettyan	5 0 0				2 Vettyans	10 0 0			
		176 0 0					285 0 0		
PAPACOVIL, &c.					*1st Station.*				
Station Establishment.					1 Assistant Superintendent	25 0 0			
1 Assistant Superintendent	30 0 0				3 Vettyans	15 0 0			
8 Vettyans at 5 Rs. each	40 0 0						40 0 0		
		70 0 0	246 0 0	2,952 0 0	*2nd Station.*				
COVILPUT.					1 Assistant Superintendent	20 0 0			
Division Establishment.					3 Vettyans	15 0 0			
1 Superintendent	50 0 0						35 0 0		
1 Measurer	6 0 0				*3rd Station.*				
2 Peons at 6 Rupees each	12 0 0				1 Assistant Superintendent	10 0 0			
1 Vettyan	5 0 0				2 Vettyans	10 0 0			
		73 0 0					20 0 0	380 0 0	4,560 0 0
Station Establishment.									
1 Assistant Superintendent	15 0 0								
2 Vettyans	10 0 0								
		25 0 0	98 0 0	1,176 0 0					

Statement showing the Financial results of changes proposed in the Salt Department of the Tanjore District.—(*Continued*).

Present Establishment.		Salary. Per month.	Salary. Per annum.	Proposed Establishment.		Salary. Per month.	Salary. Per annum.
		Rs. A. P.	Rs. A. P.			Rs. A. P.	Rs. A. P.
Vedarnien.				**Vadarnien.**			
Division Establishment.				*Division Establishment.*			
	Rs. A. P.				Rs. A. P.		
1 Superintendent	60 0 0			1 Superintendent	85 0 0		
1 Clerk	20 0 0			1 Clerk	20 0 0		
1 Shroff	10 0 0			1 Do.	15 0 0		
2 Measurers at 6 Rs. each	12 0 0			1 Shroff	10 0 0		
2 Peons at 6 Rupees each	12 0 0			4 Measurers	24 0 0		
1 Vettyan	5 0 0			4 Peons	24 0 0		
	119 0 0			4 Vettyans	20 0 0		
					198 0 0		
Station Establishment.				*Spontaneous salt.*			
1 Assistant Superintendent	20 0 0			1 Assistant Superintendent	25 0 0		
2 Vettyans	10 0 0			8 Vettyans	40 0 0		
	30 0 0	149 0 0	1,788 0 0		65 0 0		
				Manufactured Salt.			
				1 Assistant Superintendent	20 0 0		
				2 Vettyans	10 0 0		
					30 0 0	293 0 0	3,516 0 0
Preventive Establishment for Negapatam and Vedarnien.				*Preventive Establishment for Negapatam and Vedarnien.*			
2 Head Constables	40 0 0			2 Head Constables	40 0 0		
3 Deputy do.	31 8 0			2 Deputy do.	21 0 0		
32 Constables	208 0 0			27 Constables at 6½ Rs. each	175 8 0		
		279 8 0	3,354 0 0			236 8 0	2,838 0 0
Adrampatam.				**Adrampatam.**			
Division Establishment.				*Division Establishment.*			
1 Superintendent	60 0 0			1 Superintendent	60 0 0		
1 Clerk	20 0 0			1 Shroff	15 0 0		
1 Shroff	15 0 0			2 Measurers	12 0 0		
2 Measurers	12 0 0			2 Peons	12 0 0		
2 Peons	12 0 0			1 Vettyan	5 0 0		
1 Vettyan	5 0 0				104 0 0		
	124 0 0						
Station Establishment.				*Station Establishment.*			
1 Assistant Superintendent	15 0 0			1 Assistant Superintendent	15 0 0		
2 Vettyans	10 0 0			2 Vettyans	10 0 0		
	25 0 0				25 0 0	129 0 0	1,548 0 0
Magalancottai.							
1 Assistant Superintendent	20 0 0						
2 Vettyans	10 0 0						
	30 0 0	179 0 0	2,148 0 0				
Tambikanallavancottai.				**Tambikanallavancottai.**			
Division Establishment.				*Division Establishment.*			
1 Superintendent	50 0 0			1 Superintendent	50 0 0		
1 Clerk	20 0 0			1 Shroff	10 0 0		
1 Shroff	10 0 0			2 Measurers	12 0 0		
2 Measurers	12 0 0			2 Peons	12 0 0		
2 Peons at 6 Rupees each	12 0 0			1 Vettyan	5 0 0		
1 Vettyan	5 0 0				89 0 0		
	109 0 0						
Station Establishment.				*Station Establishment.*			
1 Assistant Superintendent	15 0 0			1 Assistant Superintendent	15 0 0		
6 Vettyans	30 0 0			2 Vettyans	10 0 0		
	45 0 0	154 0 0	1,848 0 0		25 0 0	114 0 0	1,368 0 0
Preventive Establishment for Adrampatam and Tambikanallavancottai.				*Preventive Establishment for Adrampatam and Tambikanallavancottai.*			
3 Head Constables	60 0 0			2 Head Constables	40 0 0		
3 Deputy do.	31 8 0			2 Deputy do.	21 0 0		
39 Constables	253 8 0			25 Constables at Rs. 6½ each	162 8 0		
		345 0 0	4,140 0 0			223 8 0	2,682 0 0

STATEMENT showing the Financial results of changes proposed in the Salt Department of the Tanjore District.—*(Continued.)*

Present Establishment.			Salary. Per month.		Salary. Per annum.		Proposed Establishment.			Salary. Per month.		Salary. Per annum.	
			Rs.	A.	P.	Rs.				Rs.	A.	P.	Rs. A. P.
AYAPATAM.							**CUTTUMAVADY.**						
Division Establishment.							*Division Establishment.*						
	Rs. A. P.							Rs. A. P.					
1 Superintendent	50 0 0						1 Superintendent	50 0 0					
1 Clerk	15 0 0						1 Shroff	10 0 0					
1 Shroff	10 0 0						2 Measurers	12 0 0					
2 Measurers	12 0 0						2 Peons	12 0 0					
2 Peons	12 0 0						1 Vettyan	6 0 0					
1 Vettyan	5 0 0								90 0 0				
		104 0 0											
Station Establishment.							*Station Establishment.*						
1 Assistant Superintendent	15 0 0						1 Assistant Superintendent	15 0 0					
2 Vettyans	10 0 0						2 Vettyans	10 0 0					
		25 0 0							25 0 0	115	0 0	1,380	0 0
Shembi Mahadevi.													
1 Assistant Superintendent	25 0 0												
3 Vettyans	15 0 0												
		40 0 0	169	0	0	2,028 0 0							
ARSANAGHERRY.							*Arsanagherry (Division Establishment) (if retained.)*						
Division Establishment.													
1 Superintendent	50 0 0						1 Superintendent	50 0 0					
1 Shroff	10 0 0						1 Shroff	10 0 0					
2 Measurers	12 0 0						2 Measurers	12 0 0					
2 Peons	12 0 0						2 Peons	12 0 0					
1 Vettyan	5 0 0						1 Vettyan	5 0 0					
		89 0 0							89 0 0				
Station Establishment.							*Station Establishment.*						
1 Assistant Superintendent	15 0 0						1 Assistant Superintendent	15 0 0					
3 Vettyans	15 0 0						3 Vettyans	15 0 0					
		30 0 0	119	0	0	1,428 0 0			30 0 0	119	0	0	1,428 0 0
Preventive Establishment for Ayapatam and Arsanagherry.							*Preventive Establishment for Cuttumavady and Arsanagherry.*						
2 Head Constables	40 0 0						2 Head Constables	40 0 0					
2 Deputy do.	21 0 0						20 Constables	130 0 0					
26 Constables	169 0 0									170	0	0	2,040 0 0
			230	0	0	2,760 0 0							
Total			2,519	8	0	30,234 0 0	*If Arsanagherry be abolished.*						
							1 Head Constable	20 0 0					
							10 Constables	65 0 0					
										85	0	0	1,020 0 0
							Total (If Arsanagherry be retained)			2,283	0	0	27,396 0 0
							,, (If Arsanagherry be abolished)			2,079	0	0	24,948 0 0
							Saving, if Arsanagherry be retained			236	8	0	2,838 0 0
							Saving, if Arsanagherry be abolished			440	8	0	5,286 0 0

207. All the pans in the district need to be concentrated and to be surrounded by good defences. The Deputy Collector will, I am sure, use his best endeavours to carry out these improvements.

208. The heaps that I examined at the several stations I visited, are given below, and the result of those examinations. I was in some instances prevented examining heaps by the stormy state of the weather:—

Name of Station.	No. of Platform.	Date of storage of heaps.	Result of Examination.		
			Garce.	Mer.	Mea
Kilayur...	No. 1	29th July 1864.	10	212	...
Tempady	,, 1	22nd ,, ,,	9	350	...
,, ...	,, 1	23rd August ,,	9	386	...
Negapatam	Near the Beach	6th ,, ,,	9	395	...
,, ...	No. 3	25th May ,,	10	7	...
Vedarniem	,, 3*	7th September 1863.	9	168	...
,, ...	,, 3	8th ,, ,,	8	318	...
,, ...	,, 3	1st November ,,	9	124	...
,, ...	,, 3	11th September 1864.	9	408	...
Adrampatam	,, 1	11th ,, ,,	9	407	10
Cuttumaavdy...	,, 1	17th July 1860. ,,	9	66	...
,, ...	,, 2	14th December 1863.	10	183	15
Ayapatam	,, 2	16th ,, ,,	9	416	...

209. In new salt I often found an excess. I was on inquiry informed that it is the practice in the Tanjore District, and has been so for many years past, to receive salt into store in a different way from that in which it is sold. In the former case the mercal is driven with great violence into the heap, and is then filled up from a basket, the salt being thrown in with much dexterity and much force, and often the basket is pressed down on the salt. In selling, the mercal is driven in without violence, and the salt is gently poured in from the basket to fill the measure. The mercals are sometimes clean struck when salt is received into store; but generally a little salt is left in the measure above the rim.

210. I made some experiments to discover the difference between the several modes of measuring. The result is shown below :—

Number of men employed to measure.	Description of measurement.		Quantity found when measured as prescribed at Government sales.	Equivalent of one Garce.	Equivalent of 10 Garce.	Per centage of difference.
		MER.	MER. MEA.	G. M. M.	G. M. M.	
1	Quantity of salt measured with force and with struck mercals...	6	6 3½	1 29 5	10 292 10	6 9
1.	Quantity measured lightly and with unstruck mercals	6	6 4⅛	1 36 8¾	10 364 7½	8 6
	Quantity found equal to 3,200 Rupees, the equivalent of one Indian Maund	...	3 4⅛	1 0 13¾	10 6 17½	...

211. The charge of the Salt Department in the District of Tanjore is no light one, but I expect very much from the energy, character, and intelligence of Mr. Ricketts. He has already begun to introduce some improvements. I trust he may soon be able to correct the numberless irregularities and defects which I have endeavoured to point out in my remarks on the several stations of the district.

* Of this heap 275 Mercals had been transported to Negapatam

212. Much needs to be done to put the Department on an efficient footing, both in introducing material improvements, and in organising the establishment. One step should be immediately taken, viz., that of only employing in the lower grades, parties who can and will perform the duties of the offices laid down by Mr. Pelly in the scheme he has drawn up. Peons' and Vettyans' salaries should not be disbursed to Clerks, nor should Curnums be employed in the place of Measurers. Peons and Vettyans should strictly do the duties of Peons and Vettyans, and Measurers, those of Measurers.

213. The heaps are all covered in Tanjore at the expense of the manufacturers, who are also employed to measure into store, and to merchants gratuitously, the salt produced by them. In Madura the manufacturers are paid for these duties, but they begged that this extra payment might be discontinued, and that their Kudivaram or, the price paid to them for salt increased. I, believe that as long as we retain the monopoly, this would be the best way to deal with the manufacturers, to pay them a good and fair price for their salt, and require them to aid in measuring storing, and covering it. From the paucity of Measurers and Vettyans allowed in this district and the number of outlying stations, it is impossible that the measuring and protection of the heaps can be done by the Government servants.

214. The Deputy Collector's office in Tanjore prepares and compiles the periodical accounts and statements. Measures should be adopted for relieving it of this duty, which has been ruled not to belong properly to it, but to the Treasury Deputy.

215. I have to acknowledge, with thankfulness, the great assistance I have derived from Mr. Ricketts, who accompanied me on my tour through the district, and also the assistance rendered me by the able and zealous Collector in furnishing me with information when applied to, and doing all in his power to facilitate my passage through his district, and render it as useful as practicable.

216. As I was not able to see Mr. Cadell after I had visited the salt works in his district, as is customary with me, I sent him my manuscript report, with a private note, and asked him kindly to comment on it, and point out any errors I may have fallen into. Mr. Cadell returned me my report with a public letter, and his remarks drawn up in a formal manner. I availed myself of his suggestions, and immediately altered my report in consequence in some places. There are one or two points on which Mr. Cadell and I have not agreed. I have, therefore, thought it desirable to forward Mr. Cadell's remarks, and the correspondence which has arisen out of it, for the information of Government. I have appended a few hand notes to Mr. Cadell's remarks.

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

MADURA DISTRICT,
Ramanad, 1st November 1864.

Member, Board of Revenue.

Exd. J. Wright.

APPENDIX A.

From W. M. CADELL, Esq., Collector of Tanjore, to E. G. RICKETTS, Esq., Acting Deputy Collector in charge of Salt Department, Tanjore, dated Orattanad, 5th May 1864, No. 480.

1. Adverting to the correspondence marginally noted, I have the honor to observe that, on a careful consideration of the claims urged by the several contending parties, I am of opinion that all the Mirassidars of the village are equally entitled to the privilege of manufacturing salt in the new pans, proposed to be opened at Adrampatam. The principle, which governs the granting of waste lands for agricultural occupation, it appears to me, applies equally to the granting of, salt pans, and the priority of claim, which the Mirassidars have, in the one case, is, by analogy, vested in them also in the other.

To Deputy Collector Salt Department, dated 13th June 1863, No. 60, Tamil Memorandum.
From do. do. dated 20th do No. 53 do
To do. do. dated 26th do. No. 65 do.
From do. do. dated 28th July 1863, No. 52, English letter.
From do. do. dated 5th August 1863, No. 13, Tamil Memorandum.

2. The individual, Sevutambi Markayen, who was authorized, by the order of the late Deputy Collector, since cancelled, to open 500 pans, has no independent right thereto, to the exclusion of the other Mirassidars of the village. The paper alleged to be a copy of the Court's decree, and produced by that individual, refers only to a certain set of pans, which formed the subject of a dispute between his father and another party, and it is clear, can give him, no possible claim to all the waste lands of the village, any more than to lands held by other parties and in other villages.

The decree refers to waste lands, as well as to pans, in fact to the whole Salt swamp; and he is entitled to all that the decree gives him, which is all that he wants. T. C.

3. With regard to the plea of his having lost pans in Sendelai by the abolishment of that station, it is simply absurd. If he had indeed any claim to compensation on that account, that claim must be considered by itself, and cannot, with any show of justice, be made a ground for the rights of others being invaded. The question, however, whether the Salt Mirassidars of the station, which have been abolished, in this district, have any right to compensation or not, has already been finally definitively settled in the negative by orders of Government.

4. I had indeed no difficulty in deciding the dispute, as it lay between this Markayen and the Mirassidars of the *land*, but the claim, which was advanced on behalf of the Rajah's Chuttrum, at Rajahmatam, and to which institution the village belonged as a Survamaniem, had to be considered and disposed of, before arriving at a final decision in the matter. This claim, however, after careful consideration, I am of opinion cannot be maintained, and have consequently resolved that all the Mirassidars of the village should be allowed to cultivate salt, in the new pans proposed to be opened.

5. I have to request, therefore, that you will at once issue orders to the Superintendent of Adrampatam directing him to call upon the Mirassidars of the land, and not the present Salt Mirassidars, to open such a number of new pans as the extent of waste land available there for will admit, distributing them among the several Mirassidars, in the proportion in which they hold Mirassi shares in the village. Should any one of them refuse or neglect to do so, you are at liberty to grant his share of the pans to any one else that may offer to take them up, taking due care, however, that he is capable of forming the pans, and cultivating the salt proprely.

Sic in orig.

(True Copy.)

(Signed) E. G. RICKETTS,
Deputy Collector.

APPENDIX B.

GENERAL AND INTRODUCTORY REMARKS.—I entirely concur with Mr. Clarke, in what he says of the state of our communications, and I have again and again represented the matter to the Board and Government. At the same time, and while fully admitting the great superiority of "*metalled*" roads, I am not prepared to acquiesce in the sweeping condemnation passed on "*mud*" roads. I know and can speak from experience, that with a little care and attention to the materials made use of in forming these roads, much may be done to make even a mud road passable at all

seasons, with an ordinary amount of traffic, and looking to the state of our finances, and to the utter hopelessness of our being able to metal more than a few miles of road every year, I cannot but think that the wisest course is to make the most of the materials we have, and were the repairs of the roads again entrusted to this department, I have every reason to believe and hope that, with the assistance and co-operation of the Mirassidars generally, we might at least restore our roads to the condition in which they were some eight or ten years since.

With regard to Mr. Clarke's recommendation, that the usual per centage of the Land revenue, as also of the Salt revenue, should be set aside for local improvements, I most earnestly hope the Government will accede to this proposal. In respect to the per centage on the *Land* revenue, I have already, in my Public Works Report for the past official year,* made the same recommendation, and although I have not been fortunate enough to meet with the support of the Board, I trust that the sanction of Government, for the adoption of this measure, will not be long withheld.

* 16th September 1864.

It may be observed, that the land assessment of Tanjore is based on the assumption that Government, with a few trifling deductions, take fifty per cent. of the gross produce, and however this assessment may in practice be found to be light when compared with other districts of this presidency, I cannot for a moment think that in these days it is the intention or desire of Government that the land assessment should be enhanced.

I most earnestly trust, therefore, that Government will accede to this request, and that this fine district, which has for so many years past been the mainstay of the Land revenue of the presidency of Madras, may not any longer be allowed to lag behind in the march of progress, from a neglect of its internal communications.

I also agree with Mr. Clarke in the recommendation made by him, that the number of our manufacturing stations should be reduced, and that our manufacture should be more concentrated. The same recommendation was made by myself to the Board in the year 1860. It must, however, be borne in mind that since the year 1825, no less than forty stations have been abolished in Tanjore, and that even with all the stations we now have, during the past six years, we have never been able to keep up our stock ; but that on the contrary, Government has been put, on one occasion, to great expense in importing salt, and that we can, with difficulty, meet our present demands. I am, therefore, most strongly of opinion that till we have fully replenished our stocks, and till these have attained the standard directed to be maintained by the orders of Government, no further reduction should be made, and then only gradually as circumstances may admit.

I would, however, make an exception in the case of the Kovilput station, and which I concur with Mr. Clarke in thinking should be at once abolished. I would also remove the station at Chendrapadi to the north of the Nandalar.

I also admit the great desirability of having our pans, platforms, &c., laid out on a uniform and compact plan, and where new pans are to be made, (as near Tranquebar,) the plan adopted at Bimlipatam will be at once followed. With regard to existing pans, I think, however, we ought to proceed very gradually. Salt pans in Tanjore are a valuable and marketable commodity, and though Government doubtless have the right to declare when salt shall be manufactured, and when not, I do not think it would be wise or politic to exercise that right in all cases, and merely for the purpose of introducing a uniformity of system. For the same reason, I do not think it would be wise to make any very great or sweeping changes in existing establishments ; these only came into operation on the first of the present year ; they were drawn out during my own absence on leave, and though I am free to admit that in my judgment the establishments are somewhat large, I think anything is better than these constant changes in the details of our administration. They often press hard on individuals, and are productive of much distrust and dissatisfaction.

So they are elsewhere. T. C.

What were urged are improvements tending to make larger quantities of a better and real saleable salt, and to secure more efficient supervision over Government property. T. C.

None are suggested, only an adherence to the changes sanctioned. T. C.

I now proceed to notice some of the remarks made in Mr. Clarke's report, and upon which, I presume, I will be expected to offer some explanation.

At page 84, Mr. Clarke remarks that the Salt Department has "received less attention than it deserved or was desirable from the Collector."

To this assertion I feel myself obliged to give a flat and unqualified denial. I took charge of the district in the beginning of the year 1859, and although I have since been absent for fifteen months, I have twice visited every salt station in the district. During this time I have seldom had any Assistant, and for months have frequently had no Head Assistant ; hence much detail work has been thrown on me both in connection with the administration of the district generally and with the agency ; but with regard to the Salt department, I think the records of the Board and Government will show that I have never at any time lost sight of its importance, and since my return from Europe in June 1863, the department has received my special and unremitting attention. But on this subject, I will only further take leave to add, that the manufacture of salt in the year, 1860* reached the unprecedented amount of nearly †12,000Garce, and that in the present year, when the season has been most adverse,‡ and the out-turn of spontaneous salt at Vedarniem has proved an *entire* failure, the quantity manufactured and stored has been Garces 4,823 § In the preceding year 1863, it may be observed the *whole* out-turn of the district was 2,627 Garces and of which no less than 1,213‖ Garces was the produce of *one* station, viz., at Vedarniem!!!.

* Mr. D'Monte did not join the district till May 1860.

† Badly distributed. T. C.

‡ I do not think this can be said with propriety, for it was a more than ordinarily good season for the manufacture. It was only in the latter part of it that it was unfavorable. T. C.

§ Up to the 8th December 1864.

‖ Not much short of half.

With regard to the manufacture of salt at Vedarniem, Mr. Clarke lays great stress "on the manufacture so widely and effectively established by Mr. Morris and Mr. D'Monte," and again further on he contrasts the success of that experiment¶ with the non-success of that made in the present year. Mr. Clarke, however, seems entirely to have lost sight of the fact that the small manufacture ordered by me this year, was an experiment made simply with the view of ascertaining the price at which the simple process required at Vedarniem for making salt might be effected ; the quantity ordered to be manufactured was therefore only 100 Garce, and of this, notwithstanding the extremely unfavorable nature of the season, (and which it will be remembered was such as to destroy** the whole of the spontaneous manufacture,) upwards of 63 Garces, or nearly two-thirds of the whole quantity were manufactured at a cost of Rupees 7-12-0 per Garce, instead of Rupees 10-10-0, the price given last year. As regards the cost of the manufacture, I may also observe, that in covering the heaps this year, an extra expenditure was incurred on account of mats, &c., &c., in order to preserve the purity of the salt, (and which was of a very superior quality,) and if the expenses of covering, &c., be deducted, the actual cost, and this during a particularly adverse season, would have been only Rupees 6-13-6. Further, if the expenditure incurred had been spread over a larger quantity, the result would have been still more favorable, and I may observe in passing, that in the manufacture as carried on this season nearly all the coolies employed were paid 4 Annas†† a day. I beg particular attention to this fact, and submit that the result of this year's experiment has been anything but unsuccessful, and that at all events, it has been established beyond all contradiction that the manu-

¶ Page 74.

** This was an accident which might perhaps have been avoided. T. C.

This was for making salt in beds already formed, and with the aid of instruments borrowed from the late manufacturers ; but taking Mr. Cadell's own estimates for forming the beds, and sinking the wells, the cost would be 9-12-7 a Garce. This is exclusive of profits, and the expenditure incurred by the manufacturers in 1272 on unfinished beds, and on the channel cut from the sea to the works ; I believe salt may be manufactured under Rupees 10-10-0 a Garce, but when interest on capital, profits, and risks are all allowed for, the profit will not be found large, if it be remunerative. T. C.

†† This is the ordinary rate of cooly hire at Vedarniem ; at the large sea port towns it is 6 Annas a day. T. C.

facture at Vedarniem can be carried out at a much smaller rate of Kudivaram than Rupees 10-10-0. I may also further mention, that my reasons for not manufacturing salt at Vedarniem this year were simply that it was *not* necessary, as the Negapatam depôt, under proper arrangements, could be readily and fully supplied by manufacturing on the spot.

It has never yet been so supplied and the demand will continue to increase so very largely as the rail is opened to the west-ward, that I think it would not be wise at present to depend on the Negapatam manufacture as our only source of supply for the rail. T C.

Mr. Clarke, however, in his report speaks in a complaining tone of the injury and injustice done to the people who manufactured salt in the pans in the year 1863, and accuses us of having made use of their tools, &c, and again of their having been "*done*;" in another place he speaks of the large expenditure these manufacturers must have incurred, and urges that they should again be allowed to manufacture salt at the same rate as given in the year 1863.

As to our using the tools of these ill-used individuals, I presume Mr. Clarke refers to the fact that in the manufacture of this season we did make use of the same ground as was used, and of the holes or pits which had been dug last year; doubtless we to a certain extent did; but it must also be remembered that the storm and inundation of the 19th and 20th October 1863, had swept over the whole swamp, that the embankments were entirely destroyed, the road to Point Calimere carried away, and 85 Garce of salt washed off the platform. It may therefore be readily supposed, as was indeed the actual fact, that the pans made in 1863 were to a large extent obliterated, and the wells or pits filled in, and that the manufacture had indeed to be commenced *de-novo*.

Mr Ricketts told me that the salt made in the last Fasli was chiefly made by theaid of borrowed tools.

This could not be the case, for I saw the pans that had not been worked in the last Fasli, and they old pans were not obliterated, nor were the wells filled up. T. C.

But as regards the manufacture at Vedarniem, it must be remembered that the process required at that station is a very simple one, and that indeed the production of salt there is at any time, and under any circumstances all but spontaneous. It is carried on in the bed of an old reservoir used for producing spontaneous salt, and all that ever has been done, or requires to be done, is simply to dig a few pits or wells at the most three or four feet deep, and costing not more them 3 or 4 Rupees. No very large or expensive preliminary arrangements are therefore necessary, and in the process, as carried on in the year 1863, it is specially and particularly to be observed that the "manufacture" did not really commence till the high tide in May had filled the reservoirs for making spontaneous salt with salt water, and the new pans being in close proximity to the embankments of these reservoirs, the procuring of brine for the making of salt in the pans was by no means a matter of difficulty.

The manufacture of salt is as expensive here as elsewhere. From the ground perhaps being well saturated with salt, and being not porous, the quantity of salt produced may be a little larger than in places not so circumstanced; but the difference in produce between the Vedarniem beds and Government beds elsewhere would not be very great. T. C.

The process of preparing beds in one place is almost similar to that in another; the tamping and hardening the flooring the raising the ridges and preparing the channels. The wells, I am told, cost different sums according to their varying sizes. I believe Mr. Cadell's estimates are too low. Then there is the raising the water, the filling the beds, keeping them clean and renewing them at stated periods. Afterwards the scraping and storing the salt. T. C.

In proof of the statements above made, I beg to add the returns given below:—

		Garce.
Manufacture at Vedarniem.	Up to 31st May	52
	From 1st June	745
	Total	797
	Add spontaneous salt do...	423*
		1,220

* Including loss and wastage, 85 Garce.

It is thus clear, that the manufacture scarcely can be said to have commenced till the reservoirs for producing spontaneous salt were filled, and the proportions of salt produced are certainly not a little instructive.

The delay was one of necessity, not of choice; the beds were only begun in 1863, and until they were ready, which was late in the season, the manufacture could not commence. T. C.

In the face of these facts, and notwithstanding the result of the experiment made this year, Mr. Clarke again urges that the pans used in 1863, should be restored on the some terms to these ill-used individuals, and who, he further states, were assured that so long as the manufacture was continued, they would be given to them. There is nothing on record to show that any such assurance was given, and on the contrary Mr. Morris told these manufacturers that the giving of the pans conferred no right or title to the land, and with the orders of Government of the 10th February 1863, it is incredible to believe Mr. Morris would have given any such assurance.

But if any thing further were wanting to show that the manufacturers of 1863 at Vedarniem are not the parties deserving of the commisseration extended to them by Mr. Clarke, a glance at the List* of who they are is sufficient to dispel that illusion. The most of them are wealthy and well-to-do Mirassidars in the neighbourhood; one of them is a soucar and salt merchant at Negapatam, the notorious P. Venkatesa Chetty, Mr. D'Monte's banker and favorite, and another "Roman Catholic Church," &c. &c.

* This List is before the Board of Revenue.

It is simply impossible to believe that these parties were attracted to the spot by anything but motives of gain and the bait held out of Rupees 10-10-0 per garce for going through a process called manufacturing salt, but which in reality amounted to nothing, and it is not a little strange that, notwithstanding the crying injustice which has been done to these ill-used individuals, neither the Government, the Board, nor myself have heard anything about it till Mr. Clarke's visit.

This is the only object that induces any one to embark in any profession or trade, and as the profits are not excessive, I questioned and still do the desirableness of the Government embarking in the manufacture to the prejudice of those who commenced it, and have embarked capital in the enterprise; and the manufacture at Vedarniem is essentially the same as elsewhere. T. C.

In my report of the 18th January last to the Board, I stated that after very careful inquiries, and after making the most ample allowance for all the expenses incurred, the profit of the manufacturers on each Garce could *not* have been less than Rupees* 3-10-0, and when again at Point Calimere this year, I instituted the most particular inquiries on the subject, and visited the pans when the manufacture was going on, and I have now no hesitation in saying that the profit has not been understated, and that on the contrary it was probably one-half of the price paid. It is, I think, therefore proved beyond all question that not only have the manufacturers of the year 1863 not been "done," as has been misrepresented to Mr. Clarke, but that on the contrary they must have realized a very handsome profit; no neccssity therefore, I submit, exists for their alleged claim to commisseration, and of which, I confess, I had not even heard till I was favored with a sight of Mr. Clarke's report.

* Or about 33 per cent.; not very large profits on so precarious a trade; but this is an exaggerated estimate of the profits.
Take Mr. Cadell's own estimates—see Memorandum answer to 6th question T. C.

	Rs.	A.	P.
Cost of forming 4,226 pans	1,214	11	2
Of 120 wells	1,478	13	2
Cost of working the above pans	7,811	4	1
Of storing the salt produced...	1,040	7	1
	11,544	3	6
A channel was cut estimated by Collector at	100	0	0
And interest at 12 per cent would be	1,397	6	9
Making in all...	13,042	10	3
While the manufacturers received only... ...	8,471	13	6

or 44½ per cent less than they expended.

Before leaving the subject of the manufacture of salt at Vedarniem, I may, however, be permitted to offer a few further remarks. It would be altogether unbecoming in me to comment on the acts of my predecessor, and to call in question the wisdom or policy of his measures, the more especially as these have received the sanction and approval of the Board of Revenue, but as comparisons have been made invidious to myself, and as my administration of the Salt Department has been called in question, I would take leave to observe that when salt was recommended to be made at Vedarniem in January 1863 on account of the lowness of the stocks at Negapatam, there were no less than 909 Garce in store. Of this, however, there were only 535 Garce stated

to be fit for Railway traffic, and which according to Mr. Morris's *data* was 208 Garce per month. How Mr. Morris arrived at this data, I have been altogether unable to ascertain, for even in the year 1863, and when the WHOLE quantity of salt sold was the highest known, the amount was only 1,863 Garce, or about 150 Garce per month. But even taking Mr. Morris's data to be correct, there were nearly not three months' supply in hand, and which therefore would not last beyond, at furthest, the 15th April. It is therefore to be presumed, that the manufacture at Vedarniem would have been pushed on with the utmost vigour in order to meet the expected deficiency, but as has been already shown, up to the end of May, the manufacture had only amounted to 52 Garce, and I therefore submit that looking to the circumstances under which the manufacture was sanctioned, the measure of success would not appear to have been so great as represented by Mr. Clarke.

It was pushed on. When had to be collected, beds had to be formed, and salt produced, all was done, and a large stock the result; but even this stock was insufficient. T. C.

With regard to the Vedarniem canal, I would also take leave to point out that its construction was projected with the special view of bringing the spontaneous salt to market, and in consideration of the fact, that the salt there being gathered at the small cost of 3 or 4 Rupees, might be brought by the canal and laid down at Negapatam cheaper than salt could be manufactured on the spot. If, however, salt is to be first manufactured at Vedarniem at Rupees 10-10-0, and then brought to Negapatam, the conditions are entirely altered, and what was expected to be a wise and remunerative expenditure, becomes a useless and unprofitable outlay and waste of public money. Even assuming that salt can be manufactured and delivered at Negapatam by contractors at Rupees 15, as *conjectured* by Mr. Clarke, to this must be added the following items:—

But spontaneous salt will not sell, it is not liked, though a fine product, we cannot close our eyes to its marketable value. T. C.

	RS
Interest on outlay on canal (35,065 Rupees) at 5 per cent...	1,778
Annual maintenance allowance, Rupees 250 per mile	7,500
	9,278

Credit must be given for tolls, and we cannot bring down an article thirty-six miles without outlay; we do not in our cost of salt include the cost of the making and maintaining all the salt roads, though I think we ought to do so. T. C.

Assuming a large increase in the sales, and allowing an annual sale of Garces 2,000, the additional cost, and without making any allowance for wastage, would be Rupees 4-10-0 per Garce. The salt would thus cost Government Rupees 19-10-0 *on the very lowest calculation*, or Rupees 4-10-0 per Garce more than the highest rates for which salt can be manufactured at Negapatam.

"The largest quantity of salt ever sold in one year even with the special rate of discount was only 447 Garce." T. C.

Because there was no more to sell when the sales were the largest. A garce at the assumed rate would secure to Government a profit of 160 Rupees, which is better than no profit at all because there is no salt, or a loss from insufficiently employed establishments and from smuggling.

As to the prejudice against the spontaneous salt, I have the means of knowing that it is altogether unfounded, and that it was fast passing away, and I think it is much to be regretted that a person in the high position of Mr. Clarke should again give currency to a prejudice of this nature. It is a known and established fact that owing to the concentration of brine which the spontaneous salt contains, it is much stronger than other salt, and if taken in the same quantities as other salt, it would doubtless prove injurious. The remedy however is simple, namely, to reduce the quantity, and I cannot understand what Mr. Clarke means when he says it is not suited to the culinary purposes of the people knowing as he must, that a mortar and a pestle are to be found almost in every hut in the presidency.

This is a mistake. Enquiries made in all the Southern Districts enables me to state that Mr. Cadell labours under a mistake in this matter, and I think even in his own district men of respectability and high standing could give him their own experience, which would remove his present impressions. T. C.

My experience is, that the outcry against the spontaneous salt, has been raised by the salt Mirassidars, and that the objection by the people to using it, is simply because it is something new.

Whatever the objection may be it exists. I do not believe the Mirassidars have any thing to do with it; it is the buyer, not the producer, that is prejudiced. It has been in use above 60 years. T. C.

Mr. Clarke again remarks, that the importance of Negapatam does not appear to have been sufficiently realized by the local officers, whose attention has been divided between it and Adrampatam; and again he states that the quantity at Negapatam has been insufficient to meet the demand, both in Faslis 1272 and 1273.

With regard to the first of these remarks I may observe, that my correspondence with the Board in the years 1860 and 1861, and after my return in 1863, will show that Mr. Clarke is entirely mistaken. On the contrary I have been most anxious to provide this important station with a full and adequate supply. In the year 1861, I urged the bringing up of Vedarniem salt by sea; my plans were, however, not then approved of, and again last year, shortly after my return from England, and seeing that our stocks at Negapatam must be replenished, I again asked and obtained leave to bring up 1,000 Garces from Vedarniem by sea, and of this quantity 910 Garces were shipped and brought to market. Again in the present year, I asked and obtained leave to raise the rate of Kudivaram and by the exertions made, the quantity manufactured at Negapatam in this season, and which it is well known has been the reverse of favorable, has been no less than 1,760 Garces, the highest quantity ever turned out in any former year having been 1,510 Garces, and the average of ten years being 717 Garces only. Again with regard to the alleged insufficiency of stock at Negapatam in Faslis 1272 and 1273, I beg to annex the following statement showing the stock of salt on the 1st of each month at that station, while it is also shown that the average sales per month were only 150 Garce:—

The state of the works at Negapatam, the character and quantity of the salt produced led me to form the opinion. With a little more care and arrangement, the works might have been made capable of producing four times the quantity now produced, and the salt as has been seen and proved, could easily have been improved. T. C.

The sales would have been largely increased had salt been in store, and more than once has the stock in hand been *nil*, and sales have been restricted; but a large quantity of the salt in store in 1272 was unsaleable. These figures therefore prove nothing

Stock of Salt at Negapatam on the following dates.	Garces.	Total amount of sales in 1863.
January 1863	1,016	
February „	820	
March „	635	12) 1863
April „	434	
May „	370	150 Average rate of monthly sales.
June „	406	
July „	500	
August „	467	
September „	401	
October „	183	
November „	437	
December „	278	

I beg also to annex a similar Statement for the year 1864 up to 1st December.

	Manufactured.	Spontaneous.	Total.	Total sales.	Of this sent by rail.
Stock on hand 1st January	180	...	180	67	30
1st February... ...	112½	...	112½	36½	...
1st March...	82	...	82	58½	10
1st April	216	8	224	46	...
1st May	445	22	467	110¼	60
1st June	695	82½	777½	157	110
1st July	1,163¾	186	1,349¾	14¼	90
1st August	1,292½	91¾	1,384¼	150¾	100
1st September... ...	1,353¼	...	1,353¼	217	150
1st October	1,452¼	...	1,452¼	144½	90
1st November ...	1,346	...	1,346	281	170
1st December... ..	1,135	...	1,135	...	...
				1,410	810

Again Mr. Clarke deprecates the attention of the local officers having been divided, and time between Negapatam and Adrampatam, and seems to think that the latter is gradually entirely to cease as a salt station. To these views I entirely demur, and for the following reasons.

If good salt is procurable at Negapatam in sufficient quantities, the other depôts must be abandoned. Salt at these depôts will not pay as a return load though carried free; the difference in the carriage of salt between the rail and the common cart is 11 Annas per mile per Garce; by rail it is 4 annas, by cart it is 15 Annas. Adrampatam is 40 miles from Tanjore while Negapatam is only 49 miles by rail, the cost of carriage would therefore be 12 Rupees 4 Annas to Negapatam by rail against 37 Rupees 8 Annas to Adrampatam by cart. T. C.

Looking at Negapatam as a port, it is situated on a coast where it is dangerous for ships to lie at certain seasons of the year, and where communication with the shipping is always tedious owing to the closing of the bar; it possesses nothing which can be called a harbour, and what it did possess has been gradually deteriorating. On the south of the district we have an equal length of coast as on the east, but where there is no surf, and where ships can lie in safety at all seasons of the year, the communication with Ceylon, our chief market, is shorter, and we have already two large and flourishing sea-ports, Adrampatam and Muttupettai, which bring in a revenue of nearly 60,000 Rupees yearly.

I may also observe, that notwithstanding the facilities afforded by the railway, and the cheapness with which goods are carried thereon, the trade of our southern ports has not been in the slightest degree affected by the railway, and as regards the one article of salt, and although the line has been open for nearly three years, and the greatest efforts have been made to divert the salt trade to Negapatam, and to force the traders to have recourse for their supply to that station, it is a fact that at present not quarter of the salt sold in the district goes by the rail, and I have even been assured that bandies are sent from Combaconum and Tanjore *empty* to bring back salt from Adrampatam and Tambikanallavankottai. This, I conceive, is conclusive proof that trade in salt, or indeed in any other commodity cannot and will not be forced into any particular channel.

Because the salt is so bad, and has been so little at Negapatam that the trade has not had fair play. It is necessary to mix Adrampatam salt with Negapatam salt to make the latter a saleable product

It need not be forced; the advantages of the rail in the south will be as apparent as elsewhere, and will consequently be equally availed of. T. C.

I quite admit the fact, that the small quantity of salt carried by the railway may in some measure be owing to the inferior quality of the article made at Negapatam, and I do not doubt that the quality can be considerably improved, but I cannot for a moment conceive that it is the intention or desire of Government, that the interests of a large part of the district are to be sacrified simply because the railway happens to have its terminus at the port of Negapatam. It must also not be lost sight of, that the pans on the southern coast supply us with a very large proportion of our stock, that salt of a very superior quality (and which is preferred by the public generally to any other salt) is made at about two-thirds of the price at which it can now be made at Negapatam, and that even with all the pans we have on *both* coasts for the last five years the manufacture has not even kept pace with our annual sales, and notwithstanding all the exertions which have been made.

I never advocated any force, but simply the watching what I think must be the natural effect of the railway, and the reduction of our inland stores as they become useless.

	Garce.
Average sales past five years ...	5,256
Average manufacture in do. ...	5,035

But the sales have been restricted in some pleses and salt has remained unsold in others. T. C.

From these remarks, I think, any reasonable person will be prepared to admit, that the local officers have not been wanting in their duty in keeping up the manufacture at Adrampatam, and as has been already shown, the manufacture at Negapatam has not been neglected, but on the contrary, has been vigorously and successfully carried on.

I have now been some years in Tanjore, and after much careful consideration on the subject, I have come to the conclusion that what is now most wanted for the further development of this noble district, and also for the expansion and improvement of our Salt and Sea Customs Revenue, is the construction of a branch line of rail from Tanjore to Adrampatam and Muttupettai; these ports as has already been shown possess many advantages over Negapatam; they have already a large and flourishing trade, and this notwithstanding nothing has ever been done, or ever attempted to be done to improve their advantages. A line of railway from Tanjore to Adrampatam would be only about 4½ miles longer than one from Nedamangalam to Adrampatam (a project which has been often talked of,) it would cross few or no rivers and interfere with little are no wet cultivation. It could therefore probably be made for one-half the cost of the line to Nedamangalam, and now that the railway is being extended westward, and that Tanjore is again gradually becoming the chief and most important town in the province, it seems to me that Tanjore is the place whence a branch to Adrampatam, and one also to Combaconum should be taken off with the greatest possible advantage to the district generally; I believe also these lines would prove highly remunerative, and by the gradual extension and concentration of our principal salt manufacture at Negapatam and Adrampatam, our salt revenue would, I conceive, in course of time attain a magnitude of which at present we can scarcely form an idea.

Mr. Clarke comments in the severest terms on the character of some of the Superintendents, and condemns the whole, both of the Superintendents and Assistant Superintendents, as unfit for their duties; from his remarks he would also seem to imply that a preponderance of Brahmins have been introduced into the department and generally that there has been a wholesale system of jobbery in filling up the new establishments: he further dwells in strongly condemnatory terms on the fact of persons holding one office and doing the duties of another, &c., &c.

Mr. Cadell mixes up what I say specially in regard to his district, with the remarks I have made of the practice obtaining in the southern districts generally. T. C.

I will reply to these statements as shortly and succinctly as I can.

First.—With reference to the character of the Superintendents and Assistant Superintendents. For five Peshkars on the old establishment no less than nine Superintendents were allowed on the new, and of the former three were made Superintendents, and the remaining two (and whose previous character and antecedents did certainly not warrant their promotion to a higher grade) were provided with Assistant Superintendentships, but on larger salaries than they drew as Peshkars on the old establishments. For the remaining six Superintendentships there was no one on the old establishment above the grade of Moniagar on a salary of Rupees 10-8-0 per mensem, and under these circumstances, and considering that any officials in the other departments could not by any possibility be more corrupt or dishonest than those in the Salt Department, I determined to transfer to the new establishments officers from the Revenue Department. Of the six officers thus transferred, four were Sub-Magistrates, one was a Choukidar of Land Customs, and a man of irreproachable character, (he has since been promoted to the responsible office of Superintendent of Chuttrums,) and one was an Inspector of Police, but out of the six thus selected, there were only two who did not bear a good repute as Sub-Magistrates, but still against whose character there was nothing tangible, and who I certainly would not have been allowed to remove from their posts without making other provision for them. Against the other three Sub-Magistrates there was positively nothing whatever except that they were somewhat advanced in life, and not capable of mastering the intricacies of the Penal and Criminal Procedure Codes. They had all been Deputy Tahsildars, and two of them had in particular proved themselves to be energetic and useful servants in the Maramut Department, and with regard to the remaining Superintendent, who was an Inspector of Police, and also formerly a Deputy Tahsildar and Sub Magistrate, he has always borne an irreproachable character, and has also had much experience in Maramut work.

As to the persons appointed as Assistant Superintendents, personally I do not know much further than that they belonged to a department, which under its late Head had become utterly demoralized. Measures will, however, be taken in conjunction with Mr. Ricketts for the gradual removal of these parties, and nothing shall be wanting in my part to improve the *morale* of the officials of the Salt Department, and which, I am free to admit could not have been worse than it lately was.

As to the *supposed* preponderance of Brahmins in the new establishment it is sufficient to state that the supposition is entirely a mistake the number of Brahmins on the old establishment was nineteen, on the new fourteen. Again, and with reference to the jobbery which is sup-

I have made no charge of jobbery. I have noticed the undesirableness in a newly formed establishment of placing men on the list under one name, and employing them on duties different from the office they hold. T. C.

posed to have taken place in the filling up of the new establishments, I may observe that out of the whole number (118) only nine were persons newly introduced; of these as has been already stated, and for reasons already given, six were Superintendents, and of the remaining three, two were Gumastahs in the Collector's office of fourteen and thirteen years' service respectively; (one being a Tamil Brahmin, and the other a Canarese Brahmin,) while the third is a well educated Native Christian. I would also add that for the three Clerks thus transferred to the salt establishments provision was made for three salt servants on the Land Revenue Establishments, and that the reason for the arrangement thus made simply was that the servants on the Collector's establishment were old servants deserving of promotion, while the servants transferred from the salt establishments had been merely Sampratties or Kurnums on 7 or 5¼ Rupees, and who however were also themselves promoted in the arrangement made.

I come now to the statement made and condemned in such strong terms that persons holding one office, are doing the duties of another, and I admit at once than in the case of five out of 118 the statement holds good; under what circumstances I shall now proceed to explain. I may, however, premise that in the filling up of the new establishments every attention was paid to the wishes of the Board of Revenue to give priority of claim to the servants on the old establishments, and first as regards what are termed Vettyan; on the old establishment there were no less than 107 men termed Peons, and in substitution for these twenty-one Peons and forty-six Vettyans were allowed on the new establishments; to fill up the latter the same number of *Peons* were appointed, for the former twenty Peons on the old establishment were provided with places. It was only in one case that a Curnum was appointed as a Peon, and this on the urgent representation of the Superintendent of Covilput (who, I may observe, is not an educated or a man of letters) that no Clerk was allowed to him on the new scale.

This man was introduced from another department, and bears a very bad character indeed in addition to being illiterate, and obliged to have the assistance of a writer when the work is most trifling. T C.

I may also observe that the duties prescribed for what are now termed Vettyans are precisely the same as those devolving formerly on the salt Peons, and it appears to me it was never the intention of Government, or of the Board of Revenue that the whole staff of Peons on the old establishment should be turned out without any provision, simply to make room for a class of men, who (as regards this district) have somewhat unhappily been termed Vettyans.

As regards the Measurers the number allowed on the new scale is sixteen instead of fifteen. Of the latter three and who belonged to establishments which had been abolished in May 1863 were not to be formed, but for the remaining twelve situations twelve of the old Measurers were appointed, and for the other four, persons who had held office as Curnums on the old establishment were appointed, and at places where the services of a Clerk were stated to be required.

Sic in orig.
These Clerks are set down as Measurers and receive the pay of Measurers, but do the work of Clerks. T. C.

Mr. Clarke himself admits that the number of Measurers allowed is so small that they can do no more than superintend the measurement, and that this duty can be as well performed by Curnums while at the same time they keep accounts also.

This is not quite what I say. T. C.

Mr. Clarke, however, again observes that in the south Brahmins and Sudras are employed as Vettyans; this is again simply a mistake. With the exception of the single Brahmin employed at Covilput no Brahmin ever was, or is employed as a Vettyan.

I referred to the south, and it is so in South Arcot and also in Tanjore as regards Measurers T. C.

Again Mr. Clarke remarks that an officer attached to the Neidavasal Division has been detached from the Collector's office to assist the Clerk; this is again a misapprehension; no officer belonging to the Collector's office has been deputed to any duty connected with the Salt Department, but two vacancies occurring in the extra Curnum establishment were conferred on two Salt Curnums, who had been thrown out of employ in the revision, and for the convenience of the public service, they were permitted to do duty at the stations to which they had been previously attached.

When I spoke of the Collector's Department I meant as contra-distinguished from the Salt Department. I find I might have been more correct in being more precise. T. C.

From what has been said above, I think I have shown satisfactorily that in the re-organisation of the Salt establishment every endeavour has been made to do every justice to the incumbents on the late establishment, while an attempt has also been made by introducing a limited number of persons from other establishment to raise the department from the utter state of demoralisation into which it had been permitted to fall. It is I confess but a small beginning, but the matter shall not be lost sight of, and I may be permitted to state that no exertion shall be wanting either on the part of Mr. Ricketts, or myself to raise the character and tone of the department.

Mr. Clarke, in the pages noted in the margin, condemns the practice of forcing the sale of salt in some depôts and of closing others; the same practice was strongly condemned by the Board in their Proceedings of the 13th January 1863, and yet in the teeth of these orders the sales at Adrampatam and some of the southern pans were closed for five months in 1863 by Mr. D'Monte, with a view to drive all the traders to Negapatam.

Pages 16, 17, 80, 83, 84, 85 and 97.

This was not known to me till some time after my return from leave, and when it was known, it did not escape my notice or reprobation, as will be seen from the correspondence marginally noted, and copies of which will be found in Appendix A.

From Deputy Collector Salt Department, 23rd July 1863, No. 50.
To do 31st do. No. 735.
From do. 3rd August, No. 53.
To do. 8th August, No 767.

In connection with this subject it may not also be out of place to observe, (and which is not even alluded to by Mr. Clarke,) that the falling off in the sales at Adrampatam in the present year with a corresponding increase at Tambikanallavankottai in the last Fasli is the result not only of the Adrampatam depôt having been closed, but of there having been no salt manufactured at that station in that year, the attention of the Deputy Collector having for that season been concentrated in the new manufacture at Vedarniem.

(Excepting thirty-three Garce.)

I really am not aware, whence Mr. Clarke derived his information regarding Government having purchased the lands required for the manufacture of salt when the monopoly was established, but the misapprehension has probably arisen in this way. The native Government had previously to the British rule alienated in favor of certain charitable institutions the right of collecting the salt revenue, as also of the Land and Sea Customs in certain places on the south coast, and when our rule was established, the whole of the salt monopoly, as also the powers of collecting Customs Revenue, &c., was resumed, and in lieu of this right, and as a compensation therefore, the British Government gave to these institutions grants of the Land Revenue in certain villages. It is therefore I presume this resumption of the sovereign right which has been taken for the purchase of the land by Government.

(Pages 94 to 96.)

No. 1 was told by the Huckdar of the village that Government had purchased the salt pans T. C.

Mr. Clarke goes on to argue the right of certain Sheik Tambi Marakayan, a protègè of Mr. D'Monte's, to certain waste lands, and urges that the cultivation of salt ought to be left to salt Mirassidars acquainted with the process, &c. But I presume I am not called upon to reply to these arguments, and that in a matter affecting the right of individuals to certain lands, it will be thought proper that the Collector is the proper person to adjudicate on such claims subject to the usual course of appeal. I may, however, be permitted to add that in Tanjore the proprietors of salt pans are generally, I might say almost entirely, the Mirassidars of the land, and that they are the former simply because they are the latter. The laborers employed in the manufacture of salt during the dry season are also the same as

Except where that right has been parted with, as in the case of the Mercoyen, who holds a decree, passed by the highest Court 60 years ago, in his favour. T. C.

those employed in agricultural operations at another season of the year, and Mr. Clarke is, therefore, entirely mistaken in thinking that any professional skill in the manufacture of salt is possessed exclusively by Sheik Tambi Marakayan, or any other Mirassidar.

(Signed) W. M. CADELL,
Collector.

From A. D'MONTE, Esq., Deputy Collector in charge of the Salt Department, to W. M. CADELL, Esq., Collector of Tanjore, dated Adrampatam, 23rd July 1863, No. 50.

1. I beg to bring to your notice that in another fortnight or three weeks we shall have disposed of all the salt in the southern (abolished) depôts.

2. I request to know whether we are to revert to Adrampatam, or direct the Adrampatam Peshkar to sell at Kuttumavady, (now included in the Arasanagherry Division,) where we have four years' manufactured salt on hand, which according to present sales we shall not be able to dispose of for another half a dozen years

3. We have had another downpour of rain last night more than the previous day, and it drizzled all night.

From W. M. CADELL, Esq., Collector of Tanjore, to A. D'MONTE, Esq., Deputy Collector in charge of the Salt Department, dated 31st July 1863, No. 735.

1. I have the honor to acknowledge the receipt of your letter of the 23rd instant, No. 50, and with reference to paragraph 2, beg to observe that the fact of the stock of salt at Kuttumavady being so large as to render it impossible to dispose of it in less than half a dozen years unless other depots be shut up altogether, clearly shows either that the manufacture at the place above mentioned has been carried on beyond all proportion to the demand, or that there has been something wrong in the carrying on of sales.

2 However that may be, the fact alluded to is no reason for restrictions being imposed on sales at such an important depôt as Adrampatam for upwards of four months. The sales at the different established depôts should be adjusted with reference to the wants and requirements of trade, and the forcible diversion of the trade from its natural course is highly objectionable.

3. I have therefore to request that you will at once direct the Peshkar of Adrampatam to return to his post, and open all the salt depôts in that division for sale. The Peshkar of Arasanagherry can be deputed to conduct the sales at both Kuttumavady and Sendalai.

(True Copy.)

(Signed) W. M. CADELL,
Collector.

From A. D'MONTE, Esq., Deputy Collector in charge of the Salt Department, to W. M. CADELL, Esq., Collector of Tanjore, dated Negapatam, 3rd August 1863, No. 53.

1. Immediately on receipt of your communication, I have issued the necessary orders to the Peishkars of Adrampatam and Arasanagherry that the former should return to his post and open all the salt depôts in his own division for sale, and the latter to receive charge of the remaining salt at and conduct sales in Sendalai; Kuttumavady he has had charge of, and was selling salt at that depôt for the past 4½ months.

2. In respect to the large quantity of stock of salt at Kattumavady, I would beg to state that the principle invariably observed in fixing the dittum in this district, was always apportioned with reference to the space available in the respective vadies, which practice I had followed up; the dittum statement and sales for the past four years, and sanctioned by your office are herewith enclosed* for your information.

* Requested to be returned when no longer required.

3. The diversion of the trade in salt has principally been the cause of the paucity of sales throughout all our southern depôts, and particularly at Kattumavady at which depôt also the roads are not only bad, but is actually dangerous to travel upon from ruts, &c.

4. I presume it is your intention to continue the restriction of wholesales at Aiyapatam and Arasanagherry, and I have therefore not revoked the order of the Acting Collector on this subject, pending further instructions.

(True Copy.)

(Signed) W. M. CADELL,
Collector.

From W. M CADELL, Esq., Collector of Tanjore, to A. D'MONTE, Esq., Deputy Collector in charge of the Salt Department, dated 8th August 1863.

1. In acknowledging the receipt of your letter of the 3rd instant, No. 53, I have to observe that the principle of apportioning the manufacture of salt to the space available in the vadies, irrespective altogether of the wants and requirements of trade, is simply absurd; but it does not seem necessary at present to refer further to transactions which belong to the past.

2. With reference to paragraph 4, I would observe that I do not clearly understand what is meant by the restriction of wholesales at Arasanagherry and Aiyapatam. If, as I presume, all wholesales have been stopped in those two stations, you will be so good as to inform me under what circumstances they have been so stopped, quoting at the same time any correspondence which may have passed between you and Mr. Morris on the subject. Any orders which that gentleman may have given as to restricting the sales, must of course have been based on your recommendation alone, and I shall be obliged therefore by your informing me on what grounds such recommendation was made by you.

3. Meanwhile, it is obvious, that any such prohibition of sales at the two stations in question is decidedly wrong, and I request therefore that you will at once remove it.

4. The object in imposing this restriction was probably to divert the trade to Kattumavady, where there has been an enormous accumulation of stock, but it is obvious that this object has, by no means, been gained as the sales of Kattumavady have notwithstanding the prohibition been infinitely small during the last four months as shown in the margin.

	Garce.
March	17
April	25
May	25
June	34

5. The only further effect of the prohibition would seem to have been that a similar accumulation of stock has taken place at Arasanagherry and Aiyapatam, and that from the entire diversion of trade from the southern depôts to Negapatam an undue pressure has been made on the depôt at that station.

(True Copy.)

(Signed) W. M CADELL,
Collector.

APPENDIX C.

From W. M. CADELL, Esq, Collector of Tanjore, to T. CLARKE, Esq., Member of the Board of Revenue, dated 2nd February 1865, No. 112.

With advertence to my letter of the 17th December last, and in connection with the remarks made by you in your Report on the Salt Administration of this district, as to the injustice supposed to have been practiced towards certain parties at Vedarniem, I have the honor to forward for your information and for submission to Government with my former Memorandum, copy of a letter just received from Mr. Ricketts, with its enclosures.

From E. G. RICKETTS, Esq., Deputy Collector to W. M. CADELL, Esq., Collector, of Tanjore, dated Negapatam, 31st January 1865, No. 19.

1. In reply to your letter, No. —, of the 23rd instant, I have honor to inform you that when Mr. Clarke visited Vedarniem in September 1864, the late manufacturers waited upon him in a body, and among other things complained that we had not only deprived them of their pans, but had carried on the manufacture with their tools, and Mr. Clarke asked me if there was any truth in the last statement, to which I replied there was, as I found that certain tools *had* been borrowed.

2. Agreeably to paragraph 2 of your letter under reply, I beg to forward the statement therein called for, together with another statement exhibiting what tools were purchased and from whom, as some of the vendors would appear to be the late manufacturers, their value, &c.

3. I also forward (herewith enclosed) a copy* of an order of the late Salt Deputy Collector, addressed to the Cotwall in charge of the Kodikarai jungle, which would lead one to think that the tools were, in the first instance, given from the Government jungle at Kodikurai, and I can find nothing on record to prove that they were ever paid for.

* Not forwarded, as the same is found unnecessary.

4. The delay in furnishing the above information has arisen from the fact that a reference had to be made to the Vedarniem Salt Superintendent, and whose reply † I enclose.

† Not forwarded, as the same is found unnecessary.

(True Copy.)

(Signed) W. M. CADELL,
Collector.

Statement showing the particulars of tools borrowed from the late manufacturers and made use of for manufacturing salt on Amani at Vedarniem in the year 1863.

Particulars of tools borrowed.	From whom received.	Probable value of old tools.*	Whence originally obtained.	Whether from Government jungle at Kodikarai or not.
1	2	3	4	5
4 Rammers	Vedarniem	1 4 0	.....	From the Kodikarai Government jungle.
6 Planks for collecting salt (Varupalagai)	Thiagaraja Pillai, agent of	0 15 0	From Negapatam.	Not from Kodikarai Government jungle.
4 Baskets for do. (Varukudai)	Venkatesa Chetty	1 0 0	.....	.....
Mamuties and baskets for excavating and removing the earth were supplied by the coolies engaged.	Total...	3 3 0		

* Not known whether these materials were obtained for price or not.

NEGAPATAM,
31st January 1865.

(Signed) E. G. RICKETTS,
Deputy Collector.

List of tools, &c., employed in the manufacture of salt on Amani at Vedarniem and purchased for cash

Particulars of tools made use of.	From whom received.	When received.	Total materials.	Price for each.	Value.
1	2	3	4	5	6
				RS A. P.	RS. A. P.
Baskets for baling ...	Panenir Mullia Purum Arumuga Deven	9 h March 1864.	8	0 4 0	2 0 0
Do. for collecting salt (Varukudai)	Do.	20th March ,,	5		
		25th March ,,	2		
		2nd April ,,	3		
		1st July ,,	2		
			12	0 8 0	6 0 0
Rammers...	Vedaraniem Thiagaraja Pillai, agent of Negapatam Vencatesa Chetty (Manufacturers of 1863)	12th March ,,	3	0 10 4	1 15 0
		7th April ,,	1	0 8 0	0 8 0
Do.	Sheik Mahamed				
Planks for collecting salt (Varupalagai.)	Negapatam Salt Superintendent	24th May ,,	6	0 5 4	2 0 0
Do.	Veden (Manufacturer of 1863.)	10th August ,,	2	0 4 0	0 8 0
			Coddy		
Talai Mats	Chinnappa Deven of Agastiumpulli	21st March ,,	5	1 0 0	
		15th April ,,	4	1 0 0	
Do.	Paru Veragatti do. ...	27th June ,,	2	1 0 0	
Do.	Murugan	4th August ,,	2	1 0 0	
		29th July ,,	1	1 0 0	
Do.	Peon Ramasawmy ...	10th August ,,	2	1 0 0	
		13th August ,,	2	1 0 0	
Do.	Virrappan	10th Sept. ,,	2	1 0 0	
Do.	Vettian Pariman				
			20	1 0 0	20 0 0
			...	... ...	0 4 0
Talai Rope	Namasivayem, son of Velen	1st April ,,	...	... ...	0 2 0
Do.	Aurumuga Naiken... ...	19th July ,,	...	... ...	0 2 0
Do.	Peon Ramasamy..... ...	10th August ,,	...	... ...	
				Total...	33 7 0

(True Copy.)

(Signed) E. G. RICKETTS,
Deputy Collector,

31st January 1865.

(True Copy.)

(Signed) W. M. CADELL,
Collector.

APPENDIX D.

From W. M. CADELL, Esq., Collector of Tanjore, to T. CLARKE, Esq., Member of the Board of Revenue, dated 8th March 1865, No. 246.

1. As requested in your letter of the 10th ultimo, I have the honor to forward herewith a Statement I., together with four enclosures, A., B., C., D., and which I trust will be found to contain all the information required in your letter under acknowledgment.

2. I regret the delay which has taken place in replying to your letter, and which has been occasioned by a reference having to be made to Mr. Ricketts on the subject, and to the absence of that gentlemen on duty. Mr. Ricketts's reply only reached me on the evening of the 6th, and having, in the meantime, myself had occasion to proceed to Negapatam, (whence I only returned this forenoon,) I now take the first opportunity of answering your communication.

ENCLOSURE No. 1.

Memorandum.

Questions.	*Replies.*
I.—1. The number of salt beds made in Fasli 1272 at Vedarniem for manufacturing salt.	4,226 salt beds.
2. The number of those employed by you in Fasli 1273.	206 salt beds.
II.—1. The quantity of salt made by you in Fasli 1273.	Garces 63, Mercals 58, Maunds 6.
2. The cost of the salt per Garce, and per Maund.	Rupees 7-12-5. Rupees 0-1-$\frac{7}{6}$.
4. Each several item of cost being detailed.	See Appendix A.
III.—1. The number of men employed by you.	The number employed each day varied from one to thirty-five, the total number employed during the whole period being 1,664.—Vide Appendix B.
2. The number of days they were so employed.	129 days.
3. The quantity of salt scraped each day showing date.	Vide columns 1 and 6 in Appendix B.
4. The quantity of salt scraped (not average) from *each* bed.	No accounts have been kept to show these particulars; but column 5 in Appendix B. exhibits the number of beds scraped each day.
IV.—1. The depth and size of the wells whether they were used or not by you in Fasli 1273.	Vide Appendix C. Only six of the wells first entered were used in Fasli 1273.
V.—1. The date at which you commenced your operations in Fasli 1273, and	8th March 1864.
2. The number of days your operations continued.	129 days, as per note in Appendix B. annexed.
3. Showing how that interval was employed.	Engaged in preparing pans, baling water, and collecting salt.—Vide column 2 in Appendix B., annexed.
VI.—1. The expense of making the beds, and of	4,226 beds at Annas 8 Pice 4$\frac{37}{64}$ each = to Rupees 2,213 12 5
2. Sinking the wells in Fasli 1272, as given by manufacturers, and	120 wells at Rupees 17 15 4$\frac{11}{64}$ each = to Rupees 2,155 4 11
	4,369 1 4
3. Your estimated cost of the same.	Beds at Rupees 0 4 7$\frac{3}{16}$ each = to Rupees 1,214 11 2$\frac{1}{2}$ Wells at Rupees 12 4 8$\frac{3}{4}$ each = to Rupees 1,478 13 2$\frac{1}{2}$ 2,693 8 5

From the estimated cost of making the beds, however, Rupees 345 should be deducted on account of 1,200 beds not made use of, thus reducing this item to Rupees 869-11-2$\frac{1}{2}$, and the total of the two items, beds and wells, to Rupees 2,348-8-5.

4. The interest on the capital calculated on your estimate.	The rate at which and the mode in which the interest is to be calculated on this capital, not being stated, I am unable to specify the amount thereof, but the same may easily be calculated in such manner as may be thought proper. It is to be observed, however, that if any interest is calculated on this capital the interest similarly calculated on the Kudivaram of Rupees 8,472, which the manufacturers have received from Government, must be set off against the former.
5. On the manufacturer's statement also.	
6. What you consider should be fair profits for the manufacturers working a whole season in making salt, and the mode by which you calculated such profits.	I consider that Rupees 3 per Garce for salt delivered into the store, after deducting all expenses, would be a fair profit to the manufacturer. The Appendix D., as submitted by the Deputy Collector in charge of the Salt Department, shows the mode in which the probable profit that can be realized by the manufacture of salt at Vedarniem out of a Kudivaram of Rupees 10-10-0 is calculated. It is, however, to be observed, that the first two items shown in the said Appendix are of a nature that will not recur annually, but after making allowance for such annual repairs to wells and beds as may be found necessary, I am of opinion that the cost of manufacture at the station in question can be fairly set down at Rupees 5-8-0 per garce. The late Salt Deputy Collector, Mr. D'Monte, reported that Kudivaram might, after the first year, be reduced to Rupees 6 a garce, and the late Acting Collector was also of opinion that the same as paid in Fasli 1272 might be reduced. It is true that the actual cost as incurred in Fasli 1273 in manufacturing salt under Amani, amounted on an average to Rupees 7-12-5 per Garce, but the manufacture was carried on under the most unfavorable circumstances, and forms no fair criterion to judge of what the cost under ordinary circumstances would be. The manufacture in Fasli 1273 was as has been elsewhere stated carried on, on a limited scale, and the larger the out-turn, the smaller would be the average rate of the cost.

(Signed) W. M. CADELL,
Collector.

TANJORE,
8th March 1865.

APPENDIX A.

Showing cost of the several Items for the quantity of Salt manufactured in Amani at Vedarniem, for Fasli 1273.

Item of Cost.	Number.	Rate.	Amount.
		Rs. A. P.	Rs. A. P.
Rammers	3	0 10 4	1 15 0
Do.	1	0 8 0	0 8 0
Baskets for bailing water	8	0 4 0	2 0 0
Do. for collecting salt (Varukudy)	12	0 8 0	6 0 0
Talay ropes	...	... ...	0 8 0
Planks for collecting salt	8	0 5 0	2 8 0
Laborers for repairing pans and bailing water	1,488	0 4 0	372 0 0
Do. do.	39	0 3 0	7 5 0
Do. do.	119	0 2 0	14 14 0
Do. do.	2	0 2 6	0 5 0
Labourers for repairing six wells	16	0 1 0	1 0 0
Carpenter's hire for preparing planks for collecting salt..	2	0 4 0	0 8 0
	Garce.		
Cost of measuring for 63$\frac{1}{16}$ Garces	1	0 6 3	24 10 7
Cost of conveying do. for storage	do.	0 5 0	19 11 8
Cost of covering heaps for do. by Talay mats	do.	0 5 $\frac{15}{16}$	20 0 0
Do. do. do. by sand	do.	0 1 10$\frac{1}{2}$	7 6 5
Do. do. do. by clay	do.	0 2 6	9 13 0
Total...	...	... ...	*491 0 8
Deduct sale of old baskets...	...	... ...	4 6 0
Actual expenditure...	...	... ...	486 10 8

* Average per Garce, Rupees 7 12 5
Do. per Maund „ 0 1 $\frac{7}{16}$

TANJORE,
8th March 1865.

(Signed) W. M. CADELL,
Collector.

APPENDIX B.

Showing the number of men engaged, and the number of days they were so employed, the quantity of salt scraped each day, showing date, the quantity of salt scraped from each bed in Amani at Vedarniem.

Date	Showing how that interval was employed.	Number of men employed.	Number of days they were so employed	Number of beds scraped.	Quantity of salt scraped	Date.	Showing how that interval was employed.	Number of men employed.	Number of days they were so employed.	Number of beds scraped.	Quantity of salt scraped.
1	2	3	4	5	6	1	2	3	4	5	6
					G. M. M.						G. M. M.
1864.						May.					
March.						6th.....	Preparing pans.	8	1	...	... ...
8th.....	Repairing salt pans.	13	1	...	... ...	7th.....	Collecting salt &c.	11	1	3	... 15 18
9th.....		26	1	...	... ...	8th.....	Preparing pans.	11	1	...	... ...
10th.....		33	1	...	... ...	9th.....		8	1	...	... ...
11th.....		35	1	...	... ...	10th to 12th.	Rain.....	...	...	...	... ...
12th.....		34	1	...	... ...	13th.....	Preparing pans.	5	1	...	... ...
13th.....		28	1	...	... ...	14th.....		12	1	...	... ...
14th.....		23	1	...	... ...	15th to 24th.	Rain.....	...	...	...	... ...
15th.....		29	1	...	... ...	25th.....	Preparing pans.	2	1	...	... ...
16th.....		20	1	...	... ...	26th.....		5	1	...	... ...
					15 18	27th.....		5	1	...	... ...
17th.....		17	1	9	... 21 4	28th.....	Collecting salt, &c.	8	1	2	... 10 12
18th.....		19	1	10	... 10 12	29th.....		7	1	2	... 10 12
19th.....		19	1	4	... 53 ...	30th.....		9	1	8	... 42 8
20th.....		16	1	10	... 53 ...	31st.....	Rain.....	...	...	...	... ...
21st.....		16	1	10	... 63 12	June.					
22nd.....		22	1	4	... 15 13	1st.....	Preparing pans.	9	1	...	... ...
23rd.....		24	1	39	... 318 ...	2nd.....		9	1	10	... 63 12
24th.....		24	1	31	... 212 ...	3rd.....	Collecting salt, &c.	11	1	10	... 53 ...
25th.....		7	1	26	... 132 10	4th.....		10	1	8	... 42 8
26th.....		20	1	26	... 164 6	5th.....		...	...	...	... ...
27th.....		16	1	40	... 318 ...	6th.....	Preparing pans	10	1	...	... ...
28th.....		19	1	30	... 265 ...	7th.....		14	1	...	... ...
29th.....		22	1	30	... 212 ...	8th.....	Collecting salt and preparing pans.	10	1	20	... 159 ...
30th.....		26	1	30	... 159 ...	9th.....		13	1	20	... 159 ...
31st.....		26	1	20	... 159 ...	10th.....		12	1	10	... 53 ...
April.						11th.....		12	1	20	... 106 ...
1st.....		15	1	20	... 318 ...	12th.....	Preparing pans.	6	1	...	... ...
2nd.....		15	1	30	... 212 ...	13th.....		8	1	8	... 53 ...
3rd.....		11	1	40	1 53 ...	14th.....		13	1	25	... 212 ...
4th.....		14	1	40	... 318 ...	15th.....		9	1	25	... 212 ...
5th.....		13	1	50	1	16th.....		10	1	32	... 318 ...
6th.....		19	1	50	1 106 ...	17th.....		10	1	25	... 212 ...
7th.....		14	1	30	... 212 ...	18th.....		10	1	12	... 106 ...
8th.....		13	1	50	1	19th.....		12	1	40	1 ... ...
9th.....		14	1	40	1	20th.....		10	1	20	... 212 ...
10th.....		16	1	40	1	21st.....		10	1	30	... 318 ...
11th.....		15	1	40	... 318 ...	22nd.....		8	1	25	... 265 ...
12th.....	Collecting salt and repairing pans.	14	1	50	1 106 ...	23rd.....		11	1	40	1 106 ...
13th.....		14	1	40	1	24th.....		10	1	30	... 318 ...
14th.....		16	1	30	1 180 4	25th.....		10	1	50	1 ... ...
15th.....		14	1	50	1 106 ...	26th.....		11	1	50	1 ... ...
16th.....		12	1	50	1	27th.....		10	1	50	... 318 ...
17th.....		13	1	50	1 53 ...	28th.....		12	1	50	1 ... ...
18th.....		16	1	50	1	29th.....		12	1	50	1 ... ...
19th.....		14	1	50	... 212 ...	30th.....		12	1	25	... 212 ...
20th.....		14	1	50	1	July.					
21st.....		15	1	50		1st.....		12	1	48	... 371 ...
22nd.....	Preparing pans.	14	1	...	... ...						
23rd.....		5	1	...	... ...	2nd to 8th...	Rain	...	...	...	... ...
24th.....		1	1	...	... ...	9th.....	Preparing pans.	5	1	...	... ...
25th to 29th.	Rain.	2	1	...	... ...	10th.....		6	1	...	... ...
30th.....	Preparing pans.	5	1	...	... ...	11th to 13th.	Rain.....	...	...	...	... ...
May.						14th.....	Preparing pans.	7	1	...	... ...
1st.....		5	1	...	... ...	15th.....		7	1	...	... ...
2nd.....		5	1	...	... ...	16th.....		8	1	...	... ...
3rd.....	Collecting salt, &c.	5	1	8	... ...	17th.....		11	1	...	... ...
4th.....	Preparing pans. ...	10	1	...	... ...	18th.....		12	1	...	... ...
5th.....	Collecting salt, &c.	10	1	8	... 21 4	19th.....		13	1	...	... ...

Showing the number of men engaged, &c.—(*Concluded.*)

Date.	Showing how that interval was employed.	Number of men employed.	Number of days they were so employed.	Number of beds scraped.	Quantity of salt scraped.		
1	2	3	4	5	6		
1864.					G.	M	M.
July.							
20th	Collecting salt, &c.	13	1	10	...	79	10
21st		13	1	15	...	132	10
22nd		...	...	...	...	...	...
23rd	Collecting salt and preparing pans.	9	1	15	...	106	...
24th		9	1	25	...	159	...
25th		6	1	25	...	159	...
26th		8	1	35	...	318	...
27th	.....	...	...	...	...	...	...
28th	Collecting salt, &c.	11	1	45	1	...	...
29th		11	1	45	1	...	...
30th		11	1	45	1	...	...
31st	Rain	...	...	...	...	...	...
August.							
1st	Collecting salt and preparing pans.	11	1	25	...	212	...
2nd		11	1	30	...	265	...
3rd		12	1	20	...	159	...
4th		9	1	25	...	212	...
5th		11	1	50	1	...	...
6th and 7th.	Rain	..	...	...	...	...	...
8th	Collecting salt and preparing pans.	12	1	50	1	...	...
9th		14	1	55	1	106	...
10th		16	1	55	1	212	...
11th		14	1	55	1	212	...
12th		14	1	55	1	212	...
13th		14	1	13	...	106	...
14th		14	1	55	1	106	...
15th		14	1	55	1	159	...
16th		13	1	55	1	106	...
17th		14	1	55	1	212	...
18th		12	1	13	...	106	...
	Total...	1,664	129	...	59	249	2
	Gain by measurement in storage	...	...	...	3	233	4
	Total...	1,664	*129	...	63	58	6

* NOTE.— 8th March to 24th April 1864 48
30th April to 9th May " " 10
13th to 14th May " 2
25th to 30th May " 6
1st to 4th June " 4
6th June to 1st July " 26
9th to 20th July " 2
23rd to 26th July " 8
28th to 30th July " 4
1st to 5th August " 3
8th to 18th August " 11
Total days..... 129

(Signed) W. M. CADELL,
Collector.

APPENDIX C.

Showing the depth and size of the wells as excavated by the Salt Manufacturers in Fasli 1272.

Number of wells	Size. Length.	Breadth.	Depth.	Number of wells.	Size. Length.	Breadth.	Depth.	Number of wells.	Size. Length.	Breadth.	Depth.	Number of wells.	Size. Length.	Breadth.	Depth.	Number of wells.	Size. Length.	Breadth.	Depth.
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	YDS.	YDS.	YS		YDS	YDS.	YS		YDS.	YDS.	YS		YDS.	YDS.	YS		YDS.	YDS.	YDS.
1	14	6	¾	25	18	10	1	49	12	10	1	73	14	10	¾	97	10	8	1
2	16	10	¾	26	20	6	1	50	12	10	1	74	8	8	¾	98	14	8	1
3	14	12	¾	27	60	10	¾	51	16	8	1	75	14	8	1	99	15	10	1
4	14	12	1	28	38	10	1	52	16	10	1	76	12	8	1	100	12	10	1
5	12	12	1	29	24	12	¾	53	18	10	1	77	10	8	¾	101	28	10	1
6	12	12	1	30	22	8	¾	54	30	10	1	78	10	8	1	102	10	10	1
7	14	10	1	31	16	8	¾	55	20	10	1	79	12	8	1	103	14	10	1
8	14	10	1	32	10	8	1	56	16	10	1	80	12	8	1	104	16	10	1
9	10	10	1	33	14	8	1	57	10	8	1	81	12	8	1	105	24	14	1
10	12	10	1	34	14	8	¾	58	12	8	1	82	10	8	1	106	12	10	1
11	10	6	1	35	12	10	¾	59	14	8	1	83	10	8	1	107	10	8	1
12	58	10	1	36	12	8	¾	60	14	10	1	84	14	8	1	108	14	8	1
13	16	8	¾	37	12	8	¾	61	10	8	1	85	24	8	1	109	12	10	1
14	14	10	¾	38	12	6	¾	62	10	8	1	86	10	8	1	110	22	10	1
15	46	14	1	39	10	8	1	63	14	8	1	87	8	8	¾	111	16	8	1
16	36	10	1	40	16	8	1	64	28	12	1	88	12	10	¾	112	20	8	1½
17	30	12	1	41	12	8	1	65	12	8	1	89	10	8	¾	113	52	8	1
18	32	10	1	42	12	8	1	66	16	8	1	90	8	8	¾	114	12	8	1
19	18	12	¾	43	10	8	1	67	16	8	1	91	16	10	¾	115	12	8	1
20	12	12	1	44	16	8	1	68	14	8	1	92	10	8	1	116	14	8	1
21	14	8	1	45	8	8	1	69	14	8	1	93	14	8	1	117	12	8	1
22	12	10	1	46	34	10	1	70	12	8	1	94	16	8	1	118	12	8	1
23	12	10	1	47	32	10	1	71	16	8	1	95	26	8	1	119	12	8	1
24	22	10	1	48	12	10	1	72	8	8	¾	96	28	8	1	120	12	8	1

The numbers from 1 to 6 both inclusive were used for Amani cultivation in Fasli 1273.

(Signed) W. M. CADELL,
Collector.

TANJORE,
th March 1865.

APPENDIX D.

STATEMENT showing the mode by which the profits to the Manufacturers are calculated.

Items for preparing twenty pans with one (1) well.	No.	Rate.	Amount.	
1	2	3	4	
		RS. A. P.	Rs. A. P.	
1. Well 8×6×2=96	1	6 0 0	6 0 0	
Mamuties, ...	1	1 0 0	1 0 0	
2. Coolies for marking, clearing, claying, tammering, and watering twenty pans...	20	0 4 0	5 0 0	
3. Baskets for bailing water.	2	0 4 0	0 8 0	
4. Rammers	1	0 4 0	0 4 0	
5. Coolies for 4½ months for collecting salt and bailing water	270	0 3 0	50 10 0	
6. Plank for scraping salt...	1	0 4 0	0 4 0	
7. Baskets for collecting salt	2	0 6 0	0 12 0	
	Garce.			
8. Cost for measuring at ½ Garce per pan...	10	0 2 6	1 9 0	
9. Cost of conveying salt from beds (Alayerupu) to platform...	10	0 3 6	2 3 0	
10. Cost of covering by Talay mats	10	0 2 6	1 9 0	
11. Do. do. by clay...	...	0 2 6	1 9 0	After deducting the first two items.
		Total...	71 4 0	59 4 0
Cost per Garce.			7 2 0	5 14 10
Kuttivaram per Garce			10 10 0	10 10 0
Net profit to manufacturers to a Garce.....			3 8 0	4 11 2

TANJORE,
8th March 1865.

(Signed) W. M. CADELL,
Collector.

APPENDIX E.

From W. M. CADELL, Esq., Collector of Tanjore, to T. CLARKE, Esq., Member of the Board of Revenue, dated 27th March 1865, No. 336.

1. I have the honor to submit the following reply to your letter of the 15th, received on the 17th instant.

2. With reference to the inquiry contained in paragraph 2, I beg to state that beds and pans are one and the same.

3. As to the remarks made by you in paragraph 3, I would take leave to observe, that in estimating the cost to the manufacturer with reference to the profits realized by him, I was of opinion that the expenditure on pans not made use of, should not be set against the profits from those actually worked. It is, however, open to you to include he same in your estimate of expenditure, should you deem this course proper.

4. As regards the information called for in paragraph 4, the cost of working all the 3,026 beds which were worked in Fasli 1272, calculated according to the accounts of only three of the manufacturers who are now forthcoming, is as follows:—

Baling water and collecting

	RS.	A.	P.
Salt at 3-4-11 11/32 per Garce,...	10,016	3	8
Cost of storing, &c., at 5 annas and pice 1 5/32..... ...	968	12	3
Total...	10,984	15	11

The same as calculated by Mr. Ricketts from information furnished by the local officers:—

	RS.	A.	P.
Baling and collecting at Rupees 2-9-3⅜ per Garce...	7,811	4	1
Storing, &c., as above at 5 annas and pice 6	1,040	3	0
Total...	8,851	7	1

The number of beds or pans from which the manufacturers raised the salt purchased from them in Fasli 1272, was as already shown, 3,026. The number of days they were so employed, as also the further particulars as to the cost of each of the several operations, cannot now be ascertained, the manufacturers having all dispersed.

5. As regards the manufacturers' account of the cost of working the beds, it is scarcely necessary for me to offer any remarks as to their utter untrustworthiness proceeding as they do from interested parties. Nor am I prepared to place any reliance whatever on calculations made by the local Superintendent, and who is quite new to his office. The manufacture, which is now going on vigorously this year, will demonstrate practically what is now only an estimate, but it may be observed that it is in the highest degree improbable that any one would undertake to manufacture salt for Rupees 10-10-0, while the ordinary and incidental expenses of annual recurrence amounted to Rupees 11-1-7 per Garce.

6. I may here also take occasion to state, that the manufacture of salt carried on under Amani and under very unfavorable circumstances, cost only Rupees 7-12-5 per Garce, including the repair of wells and restoration of pans, and which, it will be remembered, had been seriously damaged by the hurricane and inroad of the sea in the preceding October. As I have already said, the annual cost of making salt at Vedarniem, by the ordinary process of manufacture, can on a fair calculation be set down at Rupees 5-8-0 per Garce.

7. As regards the information required in paragraph 5, I beg to state that no accounts have been kept distinguishing the cost on account of the two items therein specified. Mr. Ricketts states that the same coolies were employed indiscriminately in both operations, and hence it is impossible now to ascertain what was or may have been the cost separately of each.

8. With respect to your remarks in paragraph 6, I would beg further to observe that had it been necessary entirely to form new wells and pans instead of restoring those which had been previously worked, the manufacture of salt under Amani according to Mr. Ricketts's calculation would have cost an additional sum of Rupees 132-15-8 as follows:—

	RS.	A.	P.
6 wells at Rupees 12-4-8¾ each...	73	12	4
206 beds at ,, 0-4-7 3/16 ,, ...	59	3	4
Total...	132	15	8

9. As regards the observation made by you in paragraph 7, I beg to explain, that the cost of making beds and sinking wells, as shown in the Memorandum in reply to question 6, referred to wells and beds, as they were formed in Fasli 1272, while the items of cost, as entered in Appendix D., were intended to show merely what the cost for the manufacture of ten garces of salt at Vedarniem would ordinarily come to, and in thus calculating the cost, one well of a given size with twenty pans formed under it, was assumed to be capable of producing ten Garces, the proximate cost of such well and pans being specified. Hence, there is no correspondence between the cost, as shown in the Memorandum of wells and beds of different sizes as made in Fasli 1272, and that of one well with twenty pans on which calculations were made in Appendix D.

10. With reference to paragraph 8 of your letter under acknowledgment, I may observe that the rate of interest charged for money in this district is 12 per cent.

11. In conclusion, and with advertence to the postcript of your letter under acknowledgment, I would state that it is now said a channel was dug about a yard wide from the sea, but without any slopes, the cost Mr. Ricketts conjectures to have been about 100 Rupees. No data are, however, now forthcoming for ascertaining the cost incurred in keeping the same open, nor is such information now capable of being procured.

12. Before closing, I may observe, that your letter reached me on the 17th, was forwarded to Mr. Ricketts on the 18th, with a request for the required information. Mr. Ricketts's reply reached me yesterday, (Sunday,) and hence you will see no time has been lost in endeavouring to meet your requisitions.

(True Copy.)

(Signed) T. CLARKE,
Member, Board of Revenue.

Rev. 1865 Sept.
Salt Gowl for August
No. 1267.

From

J. Clarke Esq.
Collector, Tanjore

To

J. Dorin Esq.
Secy. to Govt.
M. D.

Reported to England
the 11th September No. 10 of 1865
Sept. Revenue

Dated 1st Novr. 1864.
Recd. 13th May 1865.
Rec. 213

Encls. 5. 2 Plans &
3 Specimens
of Salt.

Road No. 1

Road to Tanjore

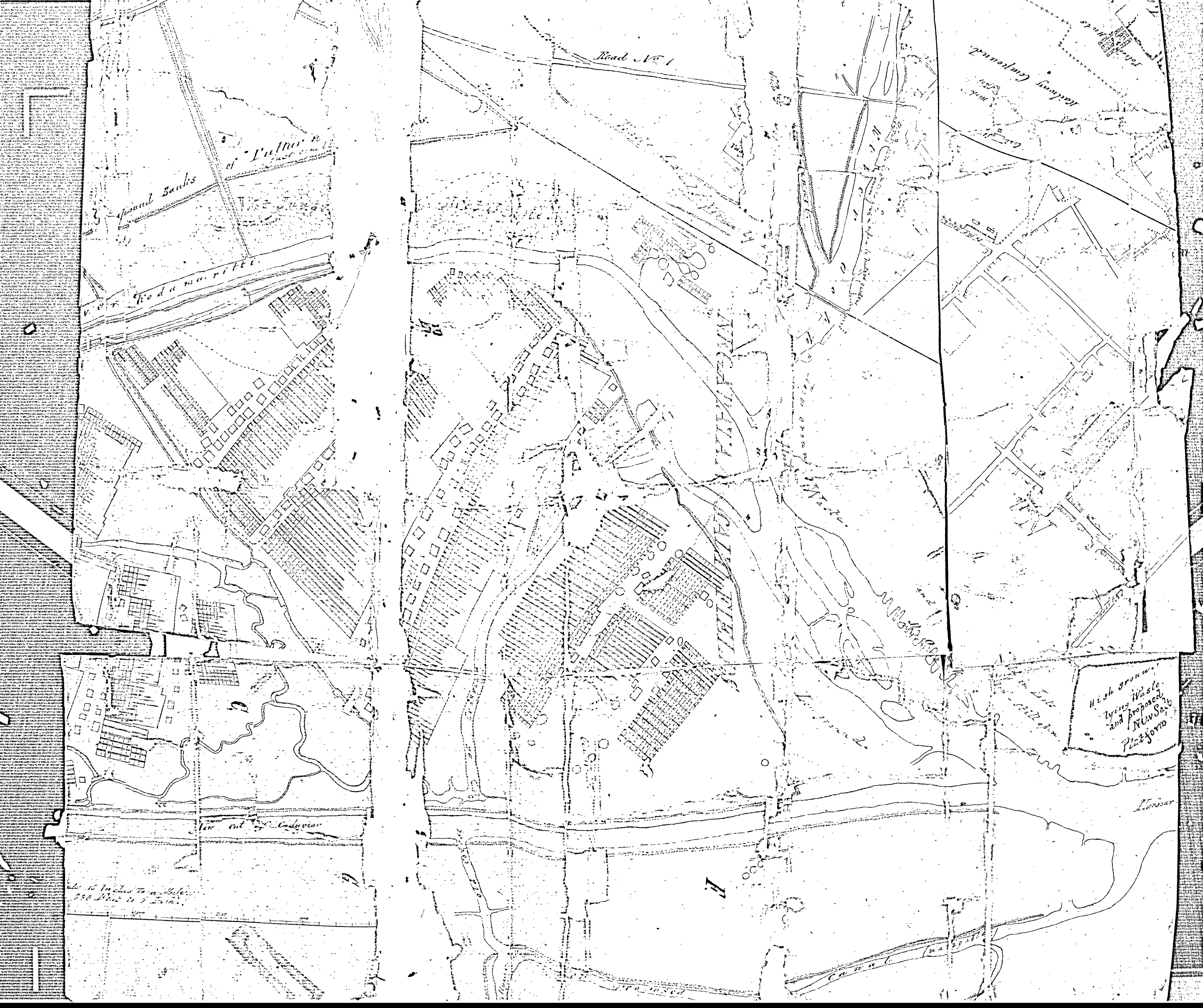
Road to Trichinopoly

Road to Negapatam

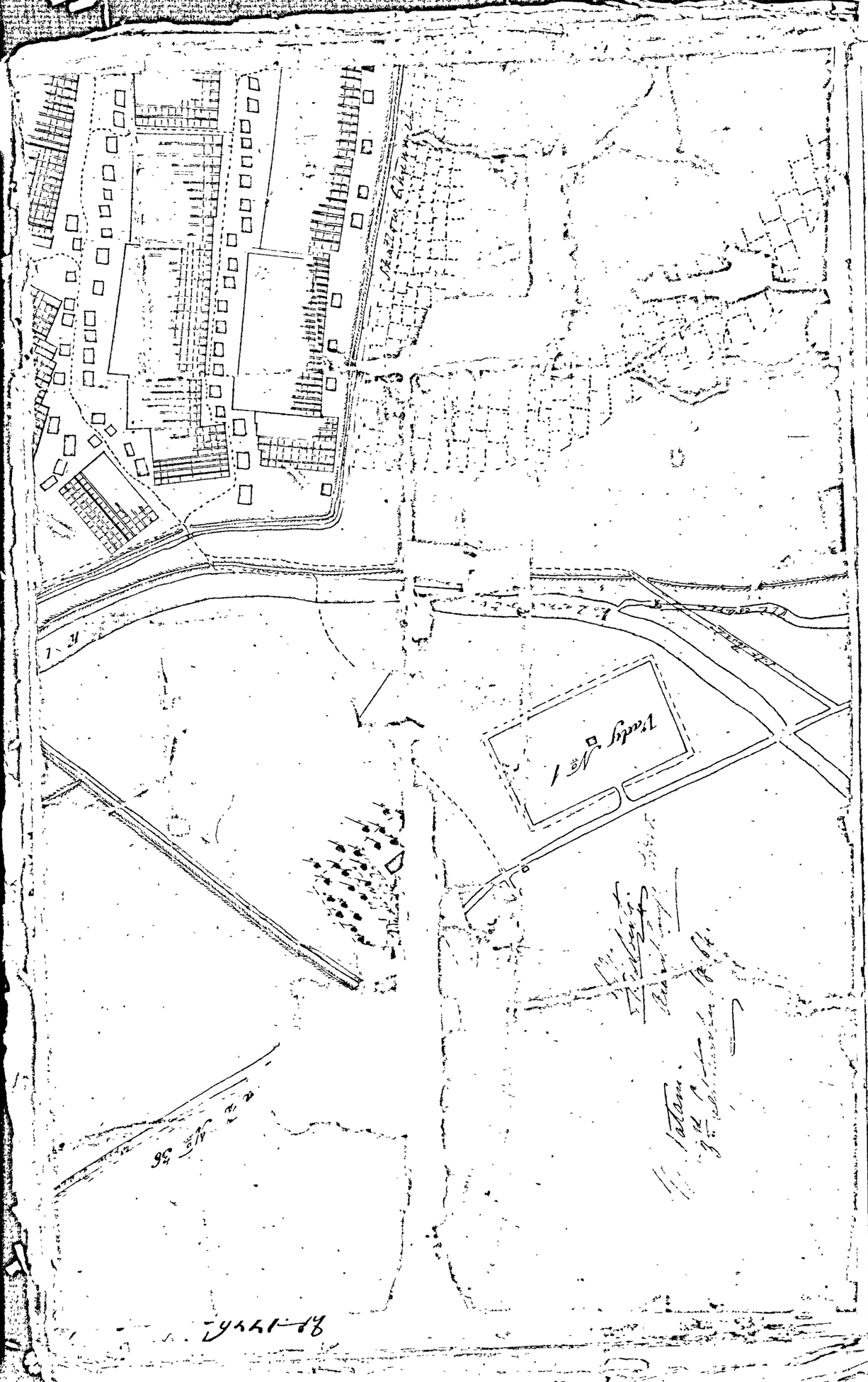
Received 1776 - 10 Augt.

Submitting his Report
on the Salt works of the
Tanjore District.

No. 3



Road No. 1
Ground Banks
Railway Compound
Waste
High ground lying Waste and proposed New Station Platform
New Cut
Canal



Dr. 1776 1st Aug.

Cash Letter from J. Fletcher
Cambridge the 18th Inst. &
Enclosed 53 Bills. &
Exchequer. and Depositum C.
Exp. 5. Expecting an Ex
in Execution of the Engines
Letters.

Engine No. in perfect
Manufacturing Condition
Divided into 4. Divisions
in S. are in distinct 15
Manufacturing Stations
Distributed among the
Workmen. is apprehended
reckoned, Ten 150 Inches in
length.

The quantity of Calcareous
annually consumed.
in the Last 13 Years Amounted
to 533273. Tons Which
is about 23¼ Tons. and the
Cost herein to amount
Nine Score. 221926. Tons
of which the per cent. to
be consumed is 5. Shillings
since having been 20 Tons in
the annual

The quantity of Salt Petre
consumed for Manufacturing
into the Salt Petre since an

average 21 3/4 lbs. per
person of the population,
but altho' this is known
to fall far short of the consumption
in large towns in Europe
& America, still this is sufficient
proof that the Land is capable
of producing the necessaries
of life in abundance for a
large population. Should
the Land be brought into
cultivation, it is probable that
the produce would be sufficient
to support a much greater
population than the whole
population of Europe.

The Land is divided into
small farms, each of which
is cultivated by a family
who live in small villages
or hamlets. The houses are
generally built of stone
and are roofed with thatch
or tiles. The furniture is
simple and consists of a few
chairs, tables, beds and
cooking utensils. The food
is chiefly vegetables and
fruit, with a little meat
and fish. The drink is
water or milk. The people
are industrious and
frugal, and are generally
well off. They are
fond of music and dancing
and have many festivals
and holidays during the
year. They are also
fond of sports such as
hunting, fishing and
shooting. They are
brave and warlike and
have been known to
fight against the
English and other
enemies of their country.

Mr. Clarke endeavours to make out
that the Cultivators
are worthy [illegible] and assumes by
this standard [illegible] as shown by
the [illegible] rating -
The character of the cultivators
is favourable to the introduction
of a system of irrigation which
in the Western villages
is in some degree
regulated - but the conditions are
so complicated that they
can only be understood -

Mr. Clarke suggests that the annual
and a similar payment
out of the Collectors Emp.
be discontinued & applied
to maintain the existing
improvements -

The Settlement that
Mr. Clarke alludes to was
[illegible] Collr. Vizier
Khan added to the Land
assessed on the Canal
irrigated villages
of the Dist. - from 10
District by a percentage
of Canal Revenue
Khan assigned for road
in lieu of 6 - & it is
in the highest degree
improbable that any
such assignment will
be sanctioned by the
Govt. Govt. - Revision
is made at the
general Revenue
attended with 3 of
for the improvement
& maintenance of irrigation
works - including high
roads - & Govt
probably not to full
share of this Expenditure
Khan's charges on
account of Canal

in then in t consid. -

The cross roads of Sanjore are ~~[illegible]~~ very generally cross roads and such must be dependant on local funds except where it forms part of a line essentially necessary for the general traffic of the country - in order to improve these local funds a general measure is now under consid. which ought to have important results in Sanjore.

- Paras. 8. & 16. of Mr. Clarke's report will I think be referred to the D. P. W. for consid. in view to such improvements being effected as may be possible with the available means. It seems probable that that part of the roadway to which Mr. Clarke refers is strictly Local Fund Road. & a measure to improve these local funds is now under consid. which might have marked effect in Sanjore & provide funds sufficient to produce very decided improvement in the cross roads -

The next point to which Mr. Clarke directs attention is the quality of the salt manufactured in the district in the northern part of the District is very bad - In the south it is better - and no good reason exists for this differ... -

Hon'ble Mr. Ellis impresses on his Deputy the absolute necessity of rejecting bad salt in delivering &c. & of compelling on the subordinates attention to this rule - It is not to be endured that at Negapatam the head quarters of the Deputy Coll. in charge of the Dept. & the depot for the sea-borne traffic of the whole south of the Presidency the manufacturers should be allowed by continuation to force on Govt. & the public a very inferior article when good salt can be made there as has been proved by Mr. Clarke's demonstration

The ~~manufact~~ parties engaged in the manufacture

cannot be required to continue
it against their declaration —
but they can be required to make
a good article for the price they
receive for it, & to keep down
expenses in the manufacture &
if they refuse or neglect to do
this — the trial of the manufacture
can be taken, the terms. Witnesses
to be examined & the Jury
to settle with the demand. &
when the boat channel
is completed, & Shrewsbury
has access to the sea, that
Mr. Clarke & the Commissioners of the Railway
will come to a settlement.

Mr. Clarke's observations on the alteration
& arrangements in the Works
from Abbey a distance Mr. Gravatt
recommends the Shrewsbury Canal
Company should be encouraged
to proceed. and in order to effect
the necessary improvements
effectually & economically
the powers granted by the
Existing Statutes 32 & 33 Geo. III
the powers named in page 36.
& 2 above the mark.

Mr. Gravatt approves of the powers

page 22
& 39.

Mr. Gravatt concurs
in the recommendation
to be adopted

on the understanding that the
measure is to be gradually
carried out. He agrees
with Mr. Clarke that the
Regulation Stone being
sufficient for all the
traffic at present — that
of the Station must
become much deeper
for coal & manure &
the most proper time
to attend to it
is on an average
one stone for every
17 miles of canal.

He will take the
necessary steps for carrying
out the reduction of the
stations gradually &
for encouraging the
proving those that are
to be retained as
suggested by Mr. Clarke
& approved by Mr. Gravatt

The last point of consideration
application to Mr. Clarke
direct attention to the
"main channel of floating
"the structure & repair of
"all works belonging
"to the Canal Station of the

and 17 miles by road or
11 miles by the coast. from
Ft of Chandernagore. to Ft
Gungoa division

Three stations belonging
to this division were closed
at the rains of 1803. It
was in contemplation from station
Sedapatty & Ramgutty -
to the intervening space
between Ft is suitable
for salt farms & extended
from which circumstance
the stations were named in
1803. Ft little has yet
been done -

and Kilagur -
The principal station of Ramna:
Ft Clarke superintends
from & extends to two
first stations & to
those Kilagur Tolcan
as the workers of this:
These two stations are
efficient & the necessary
stock secured - & the
works superintended &
frequently seen in
efficient operation.
The Ft assists the
superintendent & the Ft
visitable Chief Engineer
out. The stations at

factories is fatal to the
manufacture of a good
article - the salt
consequently of most
inferior quality. The
quantity lowering
judging from former
is not much below
the calculations of the
existing years -

Sonar 65
& 70.

a Division leading Station
under the orders of the Collr.
on consideration of economy
& more speedy execution
it is equally efficient in all
cases respecting the
superintendence of the
general administration -

The principle of this department
has already been approved by
Govt on every occasion
& they deem it only necessary
upon them that it is open
to the Collr to obtain the execution of the
salt works by contract
& to regulate, conclude
& settle the allowances of these Districts
& the assistants being for Ft
found an increase or annual charge
on the Budget. by limiting
their duties & the disbursements
of the Division -

Ft Clarke then forwards
a report relative to the circumstances
of the several divisions as they
appear in order from North
to South -

Hedjeelee. This division
is distant about 30 miles from
the name Division in South East
& about 9 miles North of Tumlook

Sadasheogh & Tumsheogh with
be united & Established as
proposed -
The Gatherings with be
removed to Sadasheogh
Platform which be constructed
on the Madras plan &c.
as approved by Mr. Clarke
as very suitable & impressive
The Mr. will carefully the Govt. Orders
respecting Machines off the proposed
Station lately approved - so soon
as the necessary timber can
be obtained
The Govt. will see that Regard
of Standing rules transfer Station
to Jamkhandy is fixed & punctual
& that proper Officers are placed
in charge of the Division
The Clerk represented that he should
be required to take his pension -

Chundrapoor & Covilgunt. Journ. 71.
P. 109.

The first of these 2 Divisions
is situated about 3 miles
South of Tongueter on the
South bank of the Kandalur
River & the very border of the

Sadasheogh & Tumsheogh with
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P. 109.

The first of these 2 Divisions
is situated about 3 miles
South of Tongueter on the
South bank of the Kandalur
River & the very borders of the

See Appendix & Report.

Trunk Settlement of Carnatic
Kovilgunt is 14 miles
South of Chundrapoor -
9 miles South of Karical
& 4 miles North of Negapatam
= patam - It is notorious
for Smuggling
The system of management
here & the quality of the
produce attest the total
disregard - & Mr.
Clarke most strongly
advocates on grounds
of necessity & economick
policy that Kovilgunt
shd be closed altogether
& that the Chundrapoor
Station shd be transferred
to the North bank of
the Kandalur River in
an admirable site for
the works or Mr. the Head
Govt. formerly carried
on the manufacture -
The arrangement will
result in a net saving
of Rp. 792 yearly in the
cost of Establishment
Mr. Clarke enters a strong
plea for the removal of
influence him in making
this recommendation -
which may be passed over -
and the Govt. reserved -

adopt it. and direct the
Lt. of Engrs. to take the necessary
steps for carrying it out.
The works will be laid out
& the necessary artillery
erected on the plan recommended
by Lt. Clarke. the road from
Tanjore to Trichinopoly
should also be put in
good order. & every facility
provided & encouragement
given to the carriage of the salt
required for Karical from the
interior. [illegible]
an establishment proposed
by Lt. Clarke for the new works is
approved & will be introduced
as soon as the works are
sufficiently advanced.

Lt. Col. will take the necessary
measures to ensure that the
establishment are vigilant
& zealous in discharge of their
duties. & that
the servants are not diverted
from the duty they are intended
to perform & employed in any
different or abusive manner
such as do not belong
to them.

In forming the new establishment
out of the two sets of servants now
existing the Col. will be careful
to retain efficient & active men.

and to get rid of such
servants as are brought
to notice in paras 97. &
109. of Lt. Clarke's report.

Negapatam and
Vedaranien

Jan 110. 2156.

These two ~~districts~~
are 32 miles apart
but in communication
united by a boat
channel. from Negapatam
the most important
~~district~~ depot for
supplying salt to the
interior trade of Tanjore
and to the Negapatam and
Trichinopoly Railway
now open, is extended
& it junction at
Erode with the Madras
line. the demand
may be expected to
increase to a very
great extent. Erode
being only 160 miles from
Negapatam while it is
263 miles distant from
Madras.

The superintendence of
Negapatam and

in each will, as recommended by Mr Clarke, be £2.10.0. per Tun being the lowest price paid in the District.

Mr Isabell manufactured a small quantity of Kind last year at a less cost in labour. but independent of the fact that this system is opposed to the universal practice of the Judiciary from its immaturity - and involves an amount of risk & responsibility to Govt it is first & indispensable for Govt to assume - the result is stated as by Mr Clarke was obtained entirely by use of the means provided by the Labour & the ordinary system in the manufactures, & in previous year. made no allowance for the profit & Govt they were fairly entitled as the result of their labour.

Mr Clarke found that the Inspection against the use of the spar Cannon Ball still

Allowance for the work of the Yards at Woolwich estimated on the Cables estimated the result of his system 10.9.12.7.6 result given 10.9.12.7.6 the work of the Yards at Woolwich & Chatham, that by Mr Clarke's system to be the Standard to the

Gives in considerable power notwithstanding that it is a very valuable inspection article - Govt do not think that it would be safe to depend on it as a common test & the market - but recommend that all that can be obtained should be collected.

Govt fully approve the proposal - they do not think as a very inspection article for distant carriage it will in time attain a position as the Bunter Pine & Larch now in the yards among the Riga fir & Lumbardy - & the objection to its use is probably in great measure due to the novelty of the supply & the fact of its being a new light [illegible] Evidence of this

to both and accessible lines.
Last. & requiring much careful manipulation before use in working.

The chemical tests of its purity & its careful analysis made of its component ingredients include the idea of its being prepared by impure processes.

The cause of the folly is certainly not one that should be left unnoticed even if its abandonment would not be a great benefit of illicit use of the article & is [illegible] of spontaneous production.

The platforms at Pedrinieu will be re-arranged as suggested by Mr Clarke.

The whole establishment recommended by him for Pagalatam & Pedrinieu Divisions is approved & sanctioned.

Mr Kelly will be requested to make the necessary provision in his final

of.

Paras. 155. & 164.

quoin of the Direct Northern Establishment for in Lands.

Tamblegam Kottai and Tamaran Kottai.

From Kottaplum to Tamblegam Kottai the coast trends abruptly to the westward - and the above two stations forming one out division lie about 30 miles west of Pedrinieu & about 6 miles apart - & some 60 miles East of Adrampatam.

The salt is a fairly good article - but the system of manufacture is very slovenly - & the arrangements of the pans most objectionable.

Mr Clarke is satisfied

Adam pattan -

This station lies on the original line of the Ly. & P. Railway and is the first station from 3rd and in the close vicinity of the last named station -

The soil in most favorable localities and regard fertility from N.E. Quarters and is much wanted by the native cultivators surrounding the village -

There is a considerable local traffic in grain - & the last table last year returned. but the increased traffic at Logansport has checked those at Adam pattan as much to be expected from the fast receiving facilities afforded by the railway.

There is little probability of good coal can always be obtained from Logansport, the Adam pattan take quantities that reasons do not. It is only the shortness of the former that keeps this result.

Recently however an effort has been made to

that nothing but an inferior 3
of the Logansport Ldg. &
to objection to the practice
of closing the Adam pattan
Station in order to procure an official
~~to petitioners~~ demand at
this Station, has induced
the Co. to recommend that
January bottom should be
closed at once - and that
I am likewise well convinced
should have no fair trial
in its own merits & value
it can maintain the position
it should - also be closed

The Co. officers have recommended
& direct that they be carried out -
Platform No 2. at the last
named Station will not be
used when absolutely necessary
and the closest description of
watching on the Adam pattan
will be enacted on Platform No 1.
if after a reasonable trial
it be determined to retain
the station -

to the Circuit of the Change
Keeping Trade & the Seats
communication of this Sort ...
of the Establishment of the
Manufacture in Manchester
Trade, the Town & Adam[illegible]
& Establishment is the Establish
Division of Agriculture with Land
the Boundary increased.

Exigency is the Extraordinary
Station of the Adam[illegible]. Reason
but calls them Division Station
artificially united by Closing the
Town at Adam[illegible] Station
Significant Time in Exchange

Mr Clarke anticipates that this
Establishment may be abolished
in a few years.

The Govt. claim that the
Bill prohibit the Officers
from receiving the Duties
Reasons Mr Hibbs unnecessary
Clause as the Govt. Bill is sufficient
the Commiss. Office & Criminal
& its own merits. It is doubtful
how appear that the Exchange
any Particular Station cannot be
maintained - the fact must be
accepted as such & not to mention
that Station is unnecessary &
Justice objectionable - the Inspection
should always be discontinued. The
Establishment would be dismissed
& the Station finally closed Leaving
the Stock in hand Captain Dobree

Chamberlain & Mr Hibbs
the Town speak highly
the Gentlemen employed
Town time ordinary
favourable & the Business
by Richard -

Mr Clarke takes occasion
to comment on the
Division of Business with
Mr Chamberlain & the Village
Mr Duncan Extinction of
Manufacture is necessary
and the Depot is the right
Letter from the Lords
the Consent of Govt. in
Charge of the Last Depot in
the Question - The Govt. cannot
support Mr Clarke's Motion
but may [illegible] Mr Hibbs
Shareholders
Shd be fully Worshipful
before the Number of
Town Lots is increased

If it is to be found
necessary hereafter to Land
in the individual Rights
& that the proposed
Town Plan in the Public
Lands be sanctioned
& the Villagers in common
Mr Govt. are of opinion
that the Rights of the Town
should [illegible] the Land

the accounts finish the
Station and the Land
expenditure for the Station.

The Commissariat Station
should be kept open as
recommended by Mr. Clarke
and a new building erected
in the Fort when the
Station

Agraphatam

Fam. 183 & 193.

This Division includes portions
of the Division of Chumbai Ds:
was closed in 1865. It covers
northerly stations, 17 miles
west of Kingalum & Gattai down
named - Gattimanoodi is one mile
west of Shunti Pahadoi - and
Agraphatam 12 gives its name -
the division is 9 miles long
& Gattimanoodi.

There is a road from
Gattimanoodi to Pandichery
via Godrichatal - Mr.
Clarke recommended that
this station alone be retained
as platform being closed - K
a cutcherry added to the Station
and that Shunti Pahadoi
and Agraphatam be closed

Fam. 196 & 202.

The Division consisting
of 8 existing stations is
about 12 miles long
of Agraphatam & 21
miles south of Gattimanoodi - this Sub Division is
the Longest District.
The nearest Sub Division
in the adjoining Pondicherry
District is distant 10
miles South.

Mr Clarke recommends
that this division
might be abolished
but the Govt appear to
attach importance to
the present. If the Sub
Division is done away
entirely after a
trial subsequent to
the closing of Agraphatam
the just present can again
be brought under
consideration.

Pleamboli on platform
will be abolished. The

[illegible] will be [illegible]
The Town Pl. for the [illegible]
village of Winfield Kansas
is now situated about three
& one half miles from the west
& town & will be required to take all
children [illegible] & in the
line of the road to the west
& in Winfield High School.

Starting from Kansas Ave
[illegible] in Central Park
crossed & runs to Fairfield
& the Park District & the Cemetery
a point about [illegible] of the Pl.
Line already by [illegible] & natural
& ground lying an annual taxing
& $2.2838 on the present charge

The Pl. entirely concur in the
remarks as to the necessity of [illegible]
increasing the entire Class - and they
deem that steps be taken to [illegible]
with those towns who are
no longer efficient by acquiring
them & take the pupils to their
nearest suitable town. The practice
of transporting the Salt Creek pupils
to Town shows how much more the
inefficient & unsatisfactory ones
to which they belong

Like wise [illegible] of June 1907 in
which must take care
that no train [illegible]
[illegible] & the Dept. have no
absolutely control &
actually furnish [illegible]

We found given the result
of his examination of the
Salt Creek [illegible] & the state
is not in favorable. The
Dept. [illegible] the
[illegible] of [illegible] can
only be fully remedied
by the substitution of
[illegible] & the transaction
of this [illegible] & this will be carried out
gradually as the [illegible]
of the machines will
allow.

The Pl. drew & thank
We Clarke for his very
searching & exhaustive
report. It has certainly
revealed a state of
things of which is very far
from satisfactory - but
it may be hoped that
the revelation will lead
to [illegible] & reform that

the Enable Inspection Vs
the Standard Specimen Enables
him to appreciate exactly
the Work strongly carried out
& test all the Instruments
& can be found -
Exchanges now by
him made in the Officers
immediately in charge of
the Department - and the
Govt. would derive that
Vs. Richards with me his
Each Subdivision Branch
Factory fall by in
the admiralty. May
we confident that he will
receive any Instructions from
the Director - and the arrangements of the Works will
Vs
be
Vs
5. 5 6 3

2 Vs Flasks
14 Rivets
4 Stm. Vs Belts
21 V.V.
6 Asst. Stm. Vs
1 collar of Tongues

2 Vs next. dull Days

70
8

Respited to
the 11th September
Sessions

Income 1865 Dr for
Rec.d of Gaoler for August

No 1770

To
Proc.s the Macclesfield Gov.t
1st August 1865

Rec.d the Gov.t 10th Nov.r 65
for £9757 -
the Gaoler Rec.d 13th Nov.r 65
for £792

Remaining
in Gaolers
hands Settled -

No 3 to 11

3 to