GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue, dated 18th September 1883, No. 2819:—

Read—the following letter from H. W. BLISS, Esq., Commissioner of Salt Revenue, to the Secretary to the Board of Revenue, dated Ootacamund, 1st September 1883, No. 10750:—

Adverting to G.O., July 21, 1883, No. 894, Revenue, communicated in the Board's Proceedings marginally noted, I have the honor to submit the following remarks for orders.

No. 2241, dated August 4th, 1883.

2. As the Board and Government are aware, the Vedarniam Factory is of comparatively recent creation, so that the manufacturers possess no proprietary rights in the pans. Section 6 of Act VI of 1871 (Madras), therefore, does not apply to their case, and it is at the discretion of Government to grant excise licenses for working the pans to whom they will. I have no doubt that the chance of making the excise system a success at Vedarniam will be greatly improved, if an arrangement can be made for the issue of one license to a single capitalist, instead of separate licenses to each of the petty manufacturers, who have hitherto worked the pans, and whose proper industrial position is that of laborers, rather than of masters. In my opinion this will offer much the best chance of success. The reasons for this are so obvious to any one acquainted with the subject and the place that it is unnecessary to state them. I therefore recommend that I may be authorized to advertise for applicants for a lease of the pans (under the excise system) for, say, ten years. I have reason to believe that such an advertisement would be responded to by persons willing to put capital into the work, provided that some reasonable arrangement can be come to regarding the upkeep of the canal, which is the crucial difficulty of the whole undertaking. I request orders.

3. In the meantime I will take steps for the preparation of estimates for the repair of the works as soon as the north-east monsoon is over. It would be wasteful to spend money on them now. Government appear to be under the impression that extensive new works are necessary, but this is not the case. There is ample space on the platforms, and nothing more than a few ordinary repairs to them and to the channels are required. Arrangements will, however, have to be made for building quarters for the officers and men, &c., and for fencing the platforms and pans. A scheme will also have to be prepared for the necessary establishments.

4. I have not recently received any report as to the state of the canal. I have called for one. As, however, transport is in progress and not less than a lakh of maunds of salt are expected to be this year brought in from Vedarniam to Negapatam, and as no complaints have reached me of operations being impeded by want of water in the canal, I have no present reason to anticipate the need of any extraordinary expenditure or of assistance from the Department of Public Works.

5. As regards the incidence of the cost of the upkeep of the canal, I would request to be allowed to postpone reporting until in possession of the views of the Collector. I may, however, at once point out that unless a very material contribution to this object is made from other sources than salt, it will be hopeless to manufacture and sell salt under the excise system at Vedarniam at a profit. The Salt Commission (*vide* page 135

of their report) give the cost of the canal up to 1873-74 at Rs. 1,27,000. Since then Rs. 26,951 appear to have been expended on New Works. The total capital cost, therefore, of the canal exceeds Rs. 1,50,000, the interest on which sum would be over Rs. 7,500 per annum. The annual cost of maintenance will probably average at least Rs. 3,500. The total charge, therefore, on this account alone, supposing the average sales to rise as high as two lakhs of maunds, would exceed ten-and-a-half pies per maund. It seems to me that such a charge would be crushing.

6. Paragraph 5 of the Government Order appears to me to open up a much wider question than that of the maintenance of the Negapatam Salt Factory and the introduction of the excise system there. Government imply that it is my duty to maintain a standard of purity in the salt made at excise factories. My impression, however, has hitherto been that this was a matter in which I was in no wise concerned, and that it was the duty of the Magistracy rather than of this department to prevent the sale for use as human food of impure substances. I have already stated this view in my letter, No. 1728, dated 9th February 1883, which is printed with G.O., 19th April 1883, No. 472, Revenue. On perusal of that letter Government did not express their dissent from, or disapproval of, my opinion, which is in entire accord with their own, that competition must be looked to to improve quality.

G.O., 5th March 1878, No. 349, Revenue, paragraph 28.

7. The substitution of the excise for the monopoly system of salt manufacture involves, beyond the possibility of a doubt, a considerable pecuniary loss to Government. In return for this, it obtains the sole, but great, advantage that it is no longer responsible for either the quantity or the quality of the supply. I submit that to impose on the Commissioner of Salt Revenue any responsibility for the purity of the salt made at excise factories would be to throw away a great part of this sole advantage. It is hardly necessary to say that the interference of Government officials with the standard of purity of articles liable to excise duty is in complete violation of all the principles which should regulate the relations of Government with trade. Neither in Bombay, nor in Orissa, nor in the Sultanpur and Nub Salt Factories of the Delhi Division of the Northern India Salt Department, do the officers of Government interfere in any way with the quality of the outturn. No reason is apparent why a different course should be followed here.

8. The substitution in this Presidency of the excise system for the theoretically indefensible, but practically successful, monopoly system was not undertaken by the Government of Madras with a sanguine expectation that any decided advantage would be secure; and I think it may be permitted to me to say that the change was entered on more in deference to the views of the Government of India and of the Secretary of State than from a conviction of its probable beneficial results either to the finances or to the consumer. I believe also that I am correct in holding that the opinions of the Government of India and of the Secretary of State have been moulded at least as much by the pressure brought to bear by the English salt manufacturers as by considerations of abstract politico-economical theorems. I venture, therefore, to point out that the interference of Government officers with the quality of excise salt is not only theoretically inadvisable, but is certain to be actively opposed by this English salt manufacturers, whose hope it is that the abandonment of the monopoly system will afford an opening for the competition of their produce with that of the local factories. I regard their hope as fallacious, it is true; for the price at which salt can be made on our coasts is such as to defy competition from the other side of the world. But encouraged by their great and increasing success in Bengal, the English salt manufacturers will probably be slow in arriving at this conviction. Their argument will certainly be—"We have to pay from our own pockets for the supervision and other measures necessary to secure the purity of the article we sell. Why should our competitors be aided in the race at the cost of Government? Is this free trade?" I respectfully consider that there can be only one answer to such a question.

9. Perhaps a more immediately pressing consideration is this—the best hope of the ultimate decrease of the cost price and of the improvement of the quality of the

salt made in this Presidency lies in the employment in the business of adequate appliances—in other words, in the investment in it of capital. Two European firms have already applied for pans, the one (at Porto Novo) with the immediate, and the other (at Karasa) with the ultimate, object of working them under the excise system. Can it for a moment be supposed that these gentlemen will consent to the supervision of their mode of manufacture by the officers of Government—not, it must be remembered, by the Commissioner, or by a Deputy or Assistant Commissioner of Salt Revenue, nor even as a rule by an Inspector, but by the subordinates, to whose hands the practical control of the operations at most salt factories must of necessity often be committed? I have not as yet communicated to these firms the views of Government on this subject, as I gather them from the order under reply; but I doubt not that, when I do, they will withdraw from the offers they have made, and that the best chance that as yet appeared of a real improvement in the manufacture of salt in this country will thus be lost—perhaps never to recur. It seems to me incontestible that, in such cases, enlightened self-interest is the surest stimulus to improvement. The motive will produce results sooner, no doubt, with Europeans than with natives, with men of education and intelligence than with men of neither; but with both it will work, if time is given.

Vide my letters, Nos. 10310, and 10410, dated August 20 and 21, 1883, respectively, and now before the Board.

10. While of opinion, however, that any direct interference by the officers of Government with the methods of private salt manufacture would be most impolitic, I admit that the department should use its influence, naturally very great, with the manufacturers, in the direction of an improvement in the quality of their produce. This it shall. I also think that it is no more than reasonable that the department, which occupies to a certain extent the position of an expert in relation to the quality of salt, should bring to the notice of the Magistracy, who alone have the legal power of effective action, the proffer for sale of salt of quality so inferior as to be unfit for consumption. I could easily arrange for this, if the means of making a sufficient number of analyses were provided, though, for reasons stated below (paragraph 18) I am unable to concur in the proposals of Government as to the analysts who should be employed and as to the method of employing them.

11. I request the favor of definite instructions on these points; and if Government should be of opinion that any further responsibility for the quality of excise salt should attach to the Commissioner of Salt Revenue, I would further respectfully request orders as to the steps I should take in dealing with what may appear to me to be impure salt, as to the legal powers vested in me for the purpose, and as to the extent to which I may be permitted to delegate them to my subordinates. It is obvious that I cannot personally go into the question of the quality of every scraping or heap of excise salt, and that authority in such a matter cannot safely be entrusted to other than well paid and well qualified officers.

12. As respects the introduction of the excise system into Negapatam, it will be understood from the above that I do not think that, under the excise system, I can exercise more than a very general control over the quality of the salt. I have before reported that, even under the monopoly system, additional works are required for its improvement. The licensees are unlikely, if the excise system is introduced, to carry out any such works; most probably they will not do so, but will revert to their old system, from which efforts have already been made to wean them, with some success in spite of their opposition. But of course this is only my opinion. If as Govern ment anticipate, the Vedarniam licensees send into the market an article which is purer and therefore more in favor with the trade, no doubt self-interest will drive the Negapatam licensees into improvements, which they will have no difficulty in making. As to the maintenance of an adequate stock, it is quite impossible to predict the result of the excise system. The Negapatam people may adopt it readily as the Kistnapatam, Tuticorin and other manufacturers have done. If so, the pans will be more industriously worked and stocks will be fairly kept up. The outturn I anticipated cannot be expected, for Government have decided that the factory shall not be extended.

Nor is it necessary that it should be, if a part of the demand is to be met from Vedarniam. But the manufacturers may refuse to take out licenses altogether, as they have done at other places. I do not think they will, but it is possible. In that case, there will be no stocks at Negapatam, and Vedarniam will have the field to itself.

13. At the same time, I am bound to say that, if the decision lay with me, I should certainly introduce the excise system at Negapatam. This seems to me to follow from the decision to maintain Vedarniam and to work it under excise. If not, the chances of Vedarniam manufacture proving a success will be materially diminished. My reason for so thinking is, that the best chance for the Vedarniam manufacturers certainly would be that they should be allowed to transport their salt, as it were in bond, to Negapatam, without payment of duty, and to store and sell it there. Now this cannot possibly be allowed if Negapatam is still worked under the monopoly system, for I have no legal power to levy duty on excise-made salt transported into a monopoly area without payment of duty. If, on the other hand, the Vedarniam manufacturers are not allowed to store and sell their salt at Negapatam, they will be heavily handicapped, for wastage in transit is certain; and while a wastage of (say) two per cent. in unstored and non-duty-paid salt would cost them only about ·425 of a pie per maund, the same wastage in stored and duty-paid salt would cost the purchaser 8·142 pies a maund. Hence, in my opinion, if the Vedarniam manufacturers are to prosper, arrangements must be made whereby they can store and sell their salt at Negapatam. In other words, Negapatam also must be brought under the excise system. I request early orders.

14. I also request orders whether, if Negapatam is to be maintained under the monopoly system, the reservoirs, &c., considered necessary for its efficient working are to be constructed or not.

15. With respect to the last four paragraphs of the Government Order, I will report more fully after making some inquiries. For the present, I desire to state that considerable care is taken in the matter of scraping clean and pure salt, and that I believe that the quality of monopoly salt has on the average improved of late years. The matter is not an easy one to deal with. The power to reject salt in monopoly factories could hardly be used until they had been placed under the supervision of men who could be trusted not to make that power a source of profit to themselves. This was not the case anywhere until last year, nor is it yet so throughout the Presidency. Even where it is, the power cannot always be exercised without the gravest risk of strikes which the department has in most places no adequate means of dealing with, there being no legal provision under which it can eject from his pans a recusant manufacturer who has proprietary rights and who persists in making bad salt. Stocks are gradually creeping up in some of the districts which have hitherto caused me most anxiety, and in which I could not afford to risk strikes—even now cannot do so. I may instance Vizagapatam, my first connection with which, as Commissioner, was that I had to spend large sums of money in sending up about a lakh of maunds of salt by sea to prevent a salt famine, and in which the stocks are, even yet, far below the standard. There are other reasons why the improvement of the purity of the salt is a most difficult task, but they all pale before the conclusive one, want of time to devote to the subject. When I first assumed charge of the department, I gave a good deal of thought to it, and I have since not lost sight of it, though it would be idle to pretend that I might not have done more if I had had time. But I soon discovered that there were far more pressing duties to attend to. The improvement of the quality of the salt by an addition of three or four to the percentage of sodium chloride was, and is, in my eyes of no importance at all, as compared with the illicit manufacture, the peculation and the waste of money on works which I have striven to prevent, not without success, and a substantial addition to the revenue. Every day has but twenty-four hours. I have given as many of them as my strength and health would allow to the service of Government, and I may, therefore, without being suspected of the desire to shirk work, fairly tell them that they must not expect the subject of the improvement of the manufacture to be taken up for the next two or three years at least in as comprehensive and thorough a manner as is to be wished.

Attempts to force matters on too quickly can only lead to a complete break down. The improvement of the quality of the salt cannot be undertaken with a hope of success unless it is undertaken by men who have both the knowledge what to do, and the tact so to deal with the manufacturers as to carry them with them on the path of improvement. The work must be left for these and for other reasons to the superior officers (Inspectors and Assistant Inspectors) of factories; but in my judgment those officers are still, as a body, wanting in the requisite knowledge, while it is certain that their preventive duties and the drilling and disciplining of their men now take up so much of their time that I cannot call on them to do more. The subject shall not, however, be neglected, though I cannot hold out to Government the prospect of what I should consider success until the present pressure of preventive work has somewhat abated.

16. In this connection I must point out that any considerable interference with the existing systems of manufacture will inevitably lead to a demand, which cannot be resisted, for an increase of the Kudivaram. Government are probably aware of this.

17. With respect to the orders of Government that, in the licensing of new pans under the excise system, a condition should be inserted, providing for the bitterns being run off, I request orders as to whether this condition should be inserted in the case of existing pans being newly brought under the excise system, or only in that of additional factories being newly formed under that system. If the latter only, it seems to me that in time the condition will cease to obtain in all the monopoly factories as they are converted into excise, and will have force only in factories which may in future be newly established, such, for instance, as Porto Novo. This can hardly be meant. At the same time, I beg, respectfully, to refer to my remarks in paragraphs 6 to 9 as to the impolicy of interference with methods of manufacture, and to state that, in my opinion, any such condition will tend to keep capitalists from embarking on the work of salt manufacture, which it is highly desirable they should take up. I may add that the system recommended by Government is perfectly well known to the officers of the department and has already been adopted in the Negapatam Factory in particular with the natural result of a considerable diminution of the percentage of magnesium salts.

18. I quite agree with Government that an analyst should be attached to the department, not a Commissioned Medical Officer—though there is plenty even for such an officer to do—but a subordinate, whose pay would probably be the most that the Government of India would sanction. An analyst is much required for other purposes besides the examination of the quality of manufactured salt. Some time ago, therefore, I proposed the addition of just such a one as Government now suggest to the establishment of the Chemical Examiner, but the Board and Government somewhat decisively negatived my proposal, at the same time intimating an apparent wish that the number of analyses should be reduced rather than increased—*vide* G.O., October 2nd, 1882, No. 1096, Public. I regret, however, that I cannot agree with them in thinking that "rough determinations" will suffice. *Latet dolus in generalibus.* Inaccurate analyses might be dangerous. It is a good principle to do things well if you do them at all. Nor can I agree in the desirability of granting manufacturers certificates of the quality of their salt. Such certificates would either be valued or they would not be; I suspect the latter, for the native standard is not the European one nor likely to approximate to it for many a long year to come, unless Government are pleased to legislate so as to render the sale of salt by measure illegal. Of course, if I am right, and certificates would not be valued, it would be useless and a waste of money to issue them. If, on the contrary, they were valued, their issue would in any case be open to all, and more than all, the objections I have before urged on the subject of the interference of Governments with trade, and their issue on locally-conducted analyses, as proposed by Government, would afford an opportunity for corruption to the low-paid analyst, which, it would be most extraordinary, if he did not take advantage of for his own benefit.

19. As regards the proposal to circulate among the manufacturers brief vernacular descriptions of the qualities of good salt and of the methods of manufacture necessary

to secure them, I have the honor to state that, in my opinion, no such measure is necessary. The manufacturers know how to make any description of salt which may be required quite as well as I could hope to teach them. The only reason they do not make better salt (when left entirely to themselves, that is in excise factories) is that they do not find it profitable to do so. That they know how to make good salt will be apparent by an inspection of the better of the two samples sent up to the Board with my letter printed with their Proceedings, No. 982, dated April 7, 1883. The man who made that salt was a Sub-Inspector of no special intelligence nor of particularly good education. So far as I know, the only hint he got as to the method of manufacture was to rake his salt. Many manufacturers could do equally well, if they had the inducement. Their object, however, is not to make good salt, but to make salt manufacture as profitable as possible. In order to do so, it is essential that they should make the kind of salt which is most in favor with their customers, the wholesale dealers, that is, "light" salt. With this object they use the system of shallow irrigations and of frequent scrapings, which has the further admitted advantage that successive crops are gathered with the least possible risk of destruction by the thunder showers which are a feature of the South Indian hot weather, but which are almost unknown in the Concan, at Kharagora and in the North-West Provinces, where better systems can, therefore, safely be adopted with the natural result of an out-turn of greatly superior quality. For the same reason, viz., that it is a matter of importance to get in their scrapings in quick succession, it does not profit them to discharge the bitterns too frequently (even if they could do so without expense and, in some cases, without a complete re-modelling of their pans), for the presence in the brine of an excess of residual salts forces on the crystallization of sodium chloride. Give them a motive for making their salt in hard, heavy crystals, and it will be worth their while to produce hard, heavy crystals, that is, to irrigate deeply, to crystallize slowly and therefore to discharge the bitterns, the presence of which favors rapid crystallization. Such a motive can only be supplied by a measure, rendering the retail sale of salt by weight compulsory, and thereby bringing the practice of this Presidency into conformity with that of other parts of India, where superior kinds of salt are made.

20. In conclusion, I respectfully beg to state that I am not conscious of deserving the censure conveyed by the Order of Government under reply, the wording of which implies that I am not prepared to carry out the views of Government when in opposition to my own views, and that I have neglected the duty for which I was appointed.

Resolution—dated 18th September 1883, No. 2819.

Submitted for the orders of Government.

2. The Board recommend that the Salt Commissioner be authorized to advertize for tenders to lease the Vedarniam pans for a period of years on the excise system, as proposed by that officer. Meanwhile they await his promised report on the incidence of the cost of upkeep of the canal.

3. They consider that the Commissioner shows good ground for being absolved of all direct responsibility in connection with the quality of the salt manufactured under the excise system.

4. The Board are also of opinion that, for the reasons set forth by Mr. Bliss in paragraph 13 of his letter, the Negapatam factory should be worked on the excise system.

5. With respect to the two analysts whom Government propose to attach to the Salt Department, the Board think that the best plan would be to place them under the Chemical Examiner to Government for the purpose of conducting analyses under his immediate supervision. They might also take it in turns to accompany the Salt Commissioner on his tours of inspection, and would thus acquire a practical knowledge of the circumstances under which salt is made and of the system of manufacture, and

might prove of great assistance to the District Officers of the Salt Department in showing them how to conduct simple analyses for themselves.

(A true Copy and Extract.)

(Signed) J. A. DAVIES,
Acting Secretary.

To the Secretary to Government, Revenue Department.
„ the Commissioner of Salt Revenue.

Order—dated 15th October 1883, No. 1287, Revenue.

Separate Revenue, No. 272.
Salt.

The Government do not object to the leasing of the Vedarniam pans as proposed by the Commissioner of Salt Revenue, provided that such lease is confined to the existing pans, and does not involve the right to extend them or to prevent others from doing so. Indeed, in view to securing competition at the site, Government would prefer, if the conformation of the old pans admits of it, that they should be leased in two or more divisions. The Commissioner is requested to have a plan of the site prepared, showing how extensions can be arranged.

2. The report regarding the canal is awaited. Professional opinion as to its state and requirements will of course, as already ordered, be obtained.

3. His Excellency in Council does not desire that any more money shall be spent at present on the Negapatam pans. The question of introducing the excise system there, had better be deferred until after next season's manufacture. As already stated, the Government do not see any objection to the measure. The storage and sale of the Vedarniam excise salt at Negapatam will never, Government believe, be desired by the Vedarniam manufacturers; but if it is, it will necessarily follow, as stated by Mr. Bliss, that Negapatam must be put under excise.

4. The Commissioner and the Board of Revenue have entirely mistaken the intention and wishes of Government as to the action to be taken by the Commissioner in regard to excise salt manufacture; and it is therefore unnecessary to notice Mr. Bliss' arguments against interference by him in the process. Such interference is not possible or desirable; and, if not allowed to regulate the manufacture, he cannot be held responsible for the purity of the salt. The course of action which Government would wish him to follow is correctly described in the first part of paragraph 10 of his letter. They do not think it advisable that the department should prosecute sellers of impure salt; but it might be well to introduce into the Consolidated Salt Law under preparation a provision authorizing the Commissioner to destroy at the factory salt so impure as to be unfit for consumption. Such a power would of course be very rarely, if ever, used; but it might be useful to have it.

5. Here it may be observed that, in his remarks regarding quality of salt, Mr. Bliss attaches the chief importance to the physical properties, size and hardness of crystals, which are obtained by slow crystallization. These, however, Government regard as of minor consequence, compared with chemical purity. Light may be as pure as heavy salt; and if the traders prefer the former, it is no doubt because it better suits the conditions of the trade, especially in the southern districts.

6. Mr. Bliss will make further inquiries and submit proposals for the entertainment of two analysts of the class described. The Government think that they will be likely to do more work for the department if attached to its offices and under the Commissioner's orders, than if placed in the Chemical Examiner's office. If placed at factories, very simple precautions would suffice to secure that they should not know whose salt they were examining, and corruption would therefore be impossible; but as the Commissioner fears it, the Government would attach one to

each Deputy Commissioner. The Government desire that when the arrangements are matured, the system of certificates (to be granted on the results of analysis) may be tried. In speaking in G.O., 21st July 1883, No. 894, of "rough determinations," His Excellency in Council did not mean inaccurate, but incomplete analyses, directed only to discovery of impurities of a particular kind.

7. With regard to the improvement of monopoly salt, the Government, equally with Mr. Bliss, would deprecate hasty and sudden action which would lead to strikes and decrease of stocks; but they believe that by systematic and judicious insistance, the manufacturers may be made to learn that bad salt will not be accepted. As the pans have to be entirely re-made every year, the cost of re-arranging them so as to exclude bittern salts, and to produce pure edible salt, will not be appreciably enhanced; and there will be no need for increase of kudivaram. The Government do not believe in the profound knowledge attributed to the manufacturers in paragraph 19 of Mr. Bliss' letter. They may know how to make large or small crystals; but until Dr. Ratton brought the results of European research within the reach of Madras officers, none of them knew anything of chloride of magnesium, and Government are sure that the manufacturers know nothing now. His Excellency in Council still thinks that vernacular instructions to manufacturers would be of use.

8. The Right Honorable the Governor in Council had no intention whatever of passing any censure on Mr. Bliss, by whose energy and administrative skill such important results in increased consumption of salt, and increased revenue, have been achieved. It was desired, however, in the Order of 21st July last, to call attention to the fact that the time has now come for a systematic attempt to improve the quality of the salt.

(True Extract.)

(Signed) E. F. WEBSTER,
Secretary to Government.

To the Board of Revenue.
,, the Public Works Department.

Exd. W. H. French.

60 Copies.

Govt. of {1883} Madras.

REVENUE.

No 3314 wa/. 20th Nov/83.
Communicated
to the S. E. Sixth Circle.
Sof CB
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Issued

Recd. Encl.

G.O., 15th October 1883, No. 1287.

No. 3314 wa/. 20th Nov/83

OCTOBER.

Vedarniam Salt Pans.

Leasing of the —, as proposed by Mr. Bliss, approved with remarks; and the course of action to be taken to improve the quality of salt in both excise and monopoly manufacture, further enunciated.

with order

S. E. (Sixth Circle)

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5. As regards the incidence of the cost of the upkeep of the canal, I would request to be allowed to postpone reporting until in possession of the views of the Collector. I may, however, at once point out that unless a very material contribution to this object is made from other sources than salt, it will be hopeless to manufacture and sell salt under the excise system at Vedarniam at a profit. The Salt Commission (*vide* page 135

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6. Paragraph 5 of the Government Order appears to me to open up a much wider question than that of the maintenance of the Negapatam Salt Factory and the introduction of the excise system there. Government imply that it is my duty to maintain a standard of purity in the salt made at excise factories. My impression, however, has hitherto been that this was a matter in which I was in no wise concerned, and that it was the duty of the Magistracy rather than of this department to prevent the sale for use as human food of impure substances. I have already stated this view in my letter, No. 1728, dated 9th February 1883, which is printed with G.O., 19th April 1883, No. 472, Revenue. On perusal of that letter Government did not express their dissent from, or disapproval of, my opinion, which is in entire accord with their own, that competition must be looked to to improve quality.

G.O., 5th March 1878, No. 349, Revenue, paragraph 28.

7. The substitution of the excise for the monopoly system of salt manufacture involves, beyond the possibility of a doubt, a considerable pecuniary loss to Government. In return for this, it obtains the sole, but great, advantage that it is no longer responsible for either the quantity or the quality of the supply. I submit that to impose on the Commissioner of Salt Revenue any responsibility for the purity of the salt made at excise factories would be to throw away a great part of this sole advantage. It is hardly necessary to say that the interference of Government officials with the standard of purity of articles liable to excise duty is in compiete violation of all the principles which should regulate the relations of Government with trade. Neither in Bombay, nor in Orissa, nor in the Sultanpur and Nub Salt Factories of the Delhi Division of the Northern India Salt Department, do the officers of Government interfere in any way with the quality of the outturn. No reason is apparent why a different course should be followed here.

8. The substitution in this Presidency of the excise system for the theoretically indefensible, but practically successful, monopoly system was not undertaken by the Government of Madras with a sanguine expectation that any decided advantage would be secure; and I think it may be permitted to me to say that the change was entered on more in deference to the views of the Government of India and of the Secretary of State than from a conviction of its probable beneficial results either to the finances or to the consumer. I believe also that I am correct in holding that the opinions of the Government of India and of the Secretary of State have been moulded at least as much by the pressure brought to bear by the English salt manufacturers as by considerations of abstract politico-economical theorems. I venture, therefore, to point out that the interference of Government officers with the quality of excise salt is not only theoretically inadvisable, but is certain to be actively opposed by this English salt manufacturers, whose hope it is that the abandonment of the monopoly system will afford an opening for the competition of their produce with that of the local factories. I regard their hope as fallacious, it is true; for the price at which salt can be made on our coasts is such as to defy competition from the other side of the world. But encouraged by their great and increasing success in Bengal, the English salt manufacturers will probably be slow in arriving at this conviction. Their argument will certainly be—"We have to pay from our own pockets for the supervision and other measures necessary to secure the purity of the article we sell. Why should our competitors be aided in the race at the cost of Government? Is this free trade?" I respectfully consider that there can be only one answer to such a question.

9. Perhaps a more immediately pressing consideration is this—the best hope of the ultimate decrease of the cost price and of the improvement of the quality of the

salt made in this Presidency lies in the employment in the business of adequate appliances—in other words, in the investment in it of capital. Two European firms have already applied for pans, the one (at Porto Novo) with the immediate, and the other (at Karasa) with the ultimate, object of working them under the excise system. Can it for a moment be supposed that these gentlemen will consent to the supervision of their mode of manufacture by the officers of Government—not, it must be remembered, by the Commissioner, or by a Deputy or Assistant Commissioner of Salt Revenue, nor even as a rule by an Inspector, but by the subordinates, to whose hands the practical control of the operations at most salt factories must of necessity often be committed? I have not as yet communicated to these firms the views of Government on this subject, as I gather them from the order under reply; but I doubt not that, when I do, they will withdraw from the offers they have made, and that the best chance that as yet appeared of a real improvement in the manufacture of salt in this country will thus be lost—perhaps never to recur. It seems to me incontestible that, in such cases, enlightened self-interest is the surest stimulus to improvement. The motive will produce results sooner, no doubt, with Europeans than with natives, with men of education and intelligence than with men of neither; but with both it will work, if time is given.

Vide my letters, Nos. 10310, and 10410, dated August 20 and 21, 1883, respectively, and now before the Board.

10. While of opinion, however, that any direct interference by the officers of Government with the methods of private salt manufacture would be most impolitic, I admit that the department should use its influence, naturally very great, with the manufacturers, in the direction of an improvement in the quality of their produce. This it shall. I also think that it is no more than reasonable that the department, which occupies to a certain extent the position of an expert in relation to the quality of salt, should bring to the notice of the Magistracy, who alone have the legal power of effective action, the proffer for sale of salt of quality so inferior as to be unfit for consumption. I could easily arrange for this, if the means of making a sufficient number of analyses were provided, though, for reasons stated below (paragraph 18) I am unable to concur in the proposals of Government as to the analysts who should be employed and as to the method of employing them.

11. I request the favor of definite instructions on these points; and if Government should be of opinion that any further responsibility for the quality of excise salt should attach to the Commissioner of Salt Revenue, I would further respectfully request orders as to the steps I should take in dealing with what may appear to me to be impure salt, as to the legal powers vested in me for the purpose, and as to the extent to which I may be permitted to delegate them to my subordinates. It is obvious that I cannot personally go into the question of the quality of every scraping or heap of excise salt, and that authority in such a matter cannot safely be entrusted to other than well paid and well qualified officers.

12. As respects the introduction of the excise system into Negapatam, it will be understood from the above that I do not think that, under the excise system, I can exercise more than a very general control over the quality of the salt. I have before reported that, even under the monopoly system, additional works are required for its improvement. The licensees are unlikely, if the excise system is introduced, to carry out any such works; most probably they will not do so, but will revert to their old system, from which efforts have already been made to wean them, with some success in spite of their opposition. But of course this is only my opinion. If, as Govern ment anticipate, the Vedarniam licensees send into the market an article which is purer and therefore more in favor with the trade, no doubt self-interest will drive the Negapatam licensees into improvements, which they will have no difficulty in making. As to the maintenance of an adequate stock, it is quite impossible to predict the result of the excise system. The Negapatam people may adopt it readily as the Kistnapatam, Tuticorin and other manufacturers have done. If so, the pans will be more industriously worked and stocks will be fairly kept up. The outturn I anticipated cannot be expected, for Government have decided that the factory shall not be extended.

Nor is it necessary that it should be, if a part of the demand is to be met from Vedarniam. But the manufacturers may refuse to take out licenses altogether, as they have done at other places. I do not think they will, but it is possible. In that case, there will be no stocks at Negapatam, and Vedarniam will have the field to itself.

13. At the same time, I am bound to say that, if the decision lay with me, I should certainly introduce the excise system at Negapatam. This seems to me to follow from the decision to maintain Vedarniam and to work it under excise. If not, the chances of Vedarniam manufacture proving a success will be materially diminished. My reason for so thinking is, that the best chance for the Vedarniam manufacturers certainly would be that they should be allowed to transport their salt, as it were in bond, to Negapatam, without payment of duty, and to store and sell it there. Now this cannot possibly be allowed if Negapatam is still worked under the monopoly system, for I have no legal power to levy duty on excise-made salt transported into a monopoly area without payment of duty. If, on the other hand, the Vedarniam manufacturers are not allowed to store and sell their salt at Negapatam, they will be heavily handicapped, for wastage in transit is certain; and while a wastage of (say) two per cent. in unstored and non-duty-paid salt would cost them only about ·425 of a pie per maund, the same wastage in stored and duty-paid salt would cost the purchaser 8·142 pies a maund. Hence, in my opinion, if the Vedarniam manufacturers are to prosper, arrangements must be made whereby they can store and sell their salt at Negapatam. In other words, Negapatam also must be brought under the excise system. I request early orders.

14. I also request orders whether, if Negapatam is to be maintained under the monopoly system, the reservoirs, &c., considered necessary for its efficient working are to be constructed or not.

15. With respect to the last four paragraphs of the Government Order, I will report more fully after making some inquiries. For the present, I desire to state that considerable care is taken in the matter of scraping clean and pure salt, and that I believe that the quality of monopoly salt has on the average improved of late years. The matter is not an easy one to deal with. The power to reject salt in monopoly factories could hardly be used until they had been placed under the supervision of men who could be trusted not to make that power a source of profit to themselves. This was not the case anywhere until last year, nor is it yet so throughout the Presidency. Even where it is, the power cannot always be exercised without the gravest risk of strikes which the department has in most places no adequate means of dealing with, there being no legal provision under which it can eject from his pans a recusant manufacturer who has proprietary rights and who persists in making bad salt. Stocks are gradually creeping up in some of the districts which have hitherto caused me most anxiety, and in which I could not afford to risk strikes—even now cannot do so. I may instance Vizagapatam, my first connection with which, as Commissioner, was that I had to spend large sums of money in sending up about a lakh of maunds of salt by sea to prevent a salt famine, and in which the stocks are, even yet, far below the standard. There are other reasons why the improvement of the purity of the salt is a most difficult task, but they all pale before the conclusive one, want of time to devote to the subject. When I first assumed charge of the department, I gave a good deal of thought to it, and I have since not lost sight of it, though it would be idle to pretend that I might not have done more if I had had time. But I soon discovered that there were far more pressing duties to attend to. The improvement of the quality of the salt by an addition of three or four to the percentage of sodium chloride was, and is, in my eyes of no importance at all, as compared with the illicit manufacture, the peculation and the waste of money on works which I have striven to prevent, not without success, and a substantial addition to the revenue. Every day has but twenty-four hours. I have given as many of them as my strength and health would allow to the service of Government, and I may, therefore, without being suspected of the desire to shirk work, fairly tell them that they must not expect the subject of the improvement of the manufacture to be taken up for the next two or three years at least in as comprehensive and thorough a manner as is to be wished.

Attempts to force matters on too quickly can only lead to a complete break down. The improvement of the quality of the salt cannot be undertaken with a hope of success unless it is undertaken by men who have both the knowledge what to do, and the tact so to deal with the manufacturers as to carry them with them on the path of improvement. The work must be left for these and for other reasons to the superior officers (Inspectors and Assistant Inspectors) of factories; but in my judgment those officers are still, as a body, wanting in the requisite knowledge, while it is certain that their preventive duties and the drilling and disciplining of their men now take up so much of their time that I cannot call on them to do more. The subject shall not, however, be neglected, though I cannot hold out to Government the prospect of what I should consider success until the present pressure of preventive work has somewhat abated.

16. In this connection I must point out that any considerable interference with the existing systems of manufacture will inevitably lead to a demand, which cannot be resisted, for an increase of the Kudivaram. Government are probably aware of this.

17. With respect to the orders of Government that, in the licensing of new pans under the excise system, a condition should be inserted, providing for the bitterns being run off, I request orders as to whether this condition should be inserted in the case of existing pans being newly brought under the excise system, or only in that of additional factories being newly formed under that system. If the latter only, it seems to me that in time the condition will cease to obtain in all the monopoly factories as they are converted into excise, and will have force only in factories which may in future be newly established, such, for instance, as Porto Novo. This can hardly be meant. At the same time, I beg, respectfully, to refer to my remarks in paragraphs 6 to 9 as to the impolicy of interference with methods of manufacture, and to state that, in my opinion, any such condition will tend to keep capitalists from embarking on the work of salt manufacture, which it is highly desirable they should take up. I may add that the system recommended by Government is perfectly well known to the officers of the department and has already been adopted in the Negapatam Factory in particular with the natural result of a considerable diminution of the percentage of magnesium salts.

18. I quite agree with Government that an analyst should be attached to the department, not a Commissioned Medical Officer—though there is plenty even for such an officer to do—but a subordinate, whose pay would probably be the most that the Government of India would sanction. An analyst is much required for other purposes besides the examination of the quality of manufactured salt. Some time ago, therefore, I proposed the addition of just such a one as Government now suggest to the establishment of the Chemical Examiner, but the Board and Government somewhat decisively negatived my proposal, at the same time intimating an apparent wish that the number of analyses should be reduced rather than increased—*vide* G.O., October 2nd, 1882, No. 1096, Public. I regret, however, that I cannot agree with them in thinking that "rough determinations" will suffice. *Latet dolus in generalibus.* Inaccurate analyses might be dangerous. It is a good principle to do things well if you do them at all. Nor can I agree in the desirability of granting manufacturers certificates of the quality of their salt. Such certificates would either be valued or they would not be; I suspect the latter, for the native standard is not the European one nor likely to approximate to it for many a long year to come, unless Government are pleased to legislate so as to render the sale of salt by measure illegal. Of course, if I am right, and certificates would not be valued, it would be useless and a waste of money to issue them. If, on the contrary, they were valued, their issue would in any case be open to all, and more than all, the objections I have before urged on the subject of the interference of Governments with trade, and their issue on locally-conducted analyses, as proposed by Government, would afford an opportunity for corruption to the low-paid analyst, which, it would be most extraordinary, if he did not take advantage of for his own benefit.

19. As regards the proposal to circulate among the manufacturers brief vernacular descriptions of the qualities of good salt and of the methods of manufacture necessary

to secure them, I have the honor to state that, in my opinion, no such measure is necessary. The manufacturers know how to make any description of salt which may be required quite as well as I could hope to teach them. The only reason they do not make better salt (when left entirely to themselves, that is in excise factories) is that they do not find it profitable to do so. That they know how to make good salt will be apparent by an inspection of the better of the two samples sent up to the Board with my letter printed with their Proceedings, No. 982, dated April 7, 1883. The man who made that salt was a Sub-Inspector of no special intelligence nor of particularly good education. So far as I know, the only hint he got as to the method of manufacture was to rake his salt. Many manufacturers could do equally well, if they had the inducement. Their object, however, is not to make good salt, but to make salt manufacture as profitable as possible. In order to do so, it is essential that they should make the kind of salt which is most in favor with their customers, the wholesale dealers, that is, "light" salt. With this object they use the system of shallow irrigations and of frequent scrapings, which has the further admitted advantage that successive crops are gathered with the least possible risk of destruction by the thunder showers which are a feature of the South Indian hot weather, but which are almost unknown in the Concan, at Kharagora and in the North-West Provinces, where better systems can, therefore, safely be adopted with the natural result of an out-turn of greatly superior quality. For the same reason, viz., that it is a matter of importance to get in their scrapings in quick succession, it does not profit them to discharge the bitterns too frequently (even if they could do so without expense and, in some cases, without a complete re-modelling of their pans), for the presence in the brine of an excess of residual salts forces on the crystallization of sodium chloride. Give them a motive for making their salt in hard, heavy crystals, and it will be worth their while to produce hard, heavy crystals, that is, to irrigate deeply, to crystallize slowly and therefore to discharge the bitterns, the presence of which favors rapid crystallization. Such a motive can only be supplied by a measure, rendering the retail sale of salt by weight compulsory, and thereby bringing the practice of this Presidency into conformity with that of other parts of India, where superior kinds of salt are made.

20. In conclusion, I respectfully beg to state that I am not conscious of deserving the censure conveyed by the Order of Government under reply, the wording of which implies that I am not prepared to carry out the views of Government when in opposition to my own views, and that I have neglected the duty for which I was appointed.

Resolution—dated 18th September 1883, No. 2819.

Submitted for the orders of Government.

2. The Board recommend that the Salt Commissioner be authorized to advertize for tenders to lease the Vedarniam pans for a period of years on the excise system, as proposed by that officer. Meanwhile they await his promised report on the incidence of the cost of upkeep of the canal.

3. They consider that the Commissioner shows good ground for being absolved of all direct responsibility in connection with the quality of the salt manufactured under the excise system.

4. The Board are also of opinion that, for the reasons set forth by Mr. Bliss in paragraph 13 of his letter, the Negapatam factory should be worked on the excise system.

5. With respect to the two analysts whom Government propose to attach to the Salt Department, the Board think that the best plan would be to place them under the Chemical Examiner to Government for the purpose of conducting analyses under his immediate supervision. They might also take it in turns to accompany the Salt Commissioner on his tours of inspection, and would thus acquire a practical knowledge of the circumstances under which salt is made and of the system of manufacture, and

might prove of great assistance to the District Officers of the Salt Department in showing them how to conduct simple analyses for themselves.

(A true Copy and Extract.)

(Signed) J. A. DAVIES,
Acting Secretary.

To the Secretary to Government, Revenue Department.
" the Commissioner of Salt Revenue.

ORDER—dated 15th October 1883, No. 1287, Revenue.

Separate Revenue, No. 272.
Salt.

The Government do not object to the leasing of the Vedarniam pans as proposed by the Commissioner of Salt Revenue, provided that such lease is confined to the existing pans, and does not involve the right to extend them or to prevent others from doing so. Indeed, in view to securing competition at the site, Government would prefer, if the conformation of the old pans admits of it, that they should be leased in two or more divisions. The Commissioner is requested to have a plan of the site prepared, showing how extensions can be arranged.

2. The report regarding the canal is awaited. Professional opinion as to its state and requirements will of course, as already ordered, be obtained.

3. His Excellency in Council does not desire that any more money shall be spent at present on the Negapatam pans. The question of introducing the excise system there, had better be deferred until after next season's manufacture. As already stated, the Government do not see any objection to the measure. The storage and sale of the Vedarniam excise salt at Negapatam will never, Government believe, be desired by the Vedarniam manufacturers; but if it is, it will necessarily follow, as stated by Mr. Bliss, that Negapatam must be put under excise.

4. The Commissioner and the Board of Revenue have entirely mistaken the intention and wishes of Government as to the action to be taken by the Commissioner in regard to excise salt manufacture; and it is therefore unnecessary to notice Mr. Bliss' arguments against interference by him in the process. Such interference is not possible or desirable; and, if not allowed to regulate the manufacture, he cannot be held responsible for the purity of the salt. The course of action which Government would wish him to follow is correctly described in the first part of paragraph 10 of his letter. They do not think it advisable that the department should prosecute sellers of impure salt; but it might be well to introduce into the Consolidated Salt Law under preparation a provision authorizing the Commissioner to destroy at the factory salt so impure as to be unfit for consumption. Such a power would of course be very rarely, if ever, used; but it might be useful to have it.

5. Here it may be observed that, in his remarks regarding quality of salt, Mr. Bliss attaches the chief importance to the physical properties, size and hardness of crystals, which are obtained by slow crystallization. These, however, Government regard as of minor consequence, compared with chemical purity. Light may be as pure as heavy salt; and if the traders prefer the former, it is no doubt because it better suits the conditions of the trade, especially in the southern districts.

6. Mr. Bliss will make further inquiries and submit proposals for the entertainment of two analysts of the class described. The Government think that they will be likely to do more work for the department if attached to its offices and under the Commissioner's orders, than if placed in the Chemical Examiner's office. If placed at factories, very simple precautions would suffice to secure that they should not know whose salt they were examining, and corruption would therefore be impossible; but as the Commissioner fears it, the Government would attach one to

each Deputy Commissioner. The Government desire that when the arrangements are matured, the system of certificates (to be granted on the results of analysis) may be tried. In speaking in G.O., 21st July 1883, No. 894, of "rough determinations," His Excellency in Council did not mean inaccurate, but incomplete analyses, directed only to discovery of impurities of a particular kind.

7. With regard to the improvement of monopoly salt, the Government, equally with Mr. Bliss, would deprecate hasty and sudden action which would lead to strikes and decrease of stocks; but they believe that by systematic and judicious insistance, the manufacturers may be made to learn that bad salt will not be accepted. As the pans have to be entirely re-made every year, the cost of re-arranging them so as to exclude bittern salts, and to produce pure edible salt, will not be appreciably enhanced; and there will be no need for increase of kudivaram. The Government do not believe in the profound knowledge attributed to the manufacturers in paragraph 19 of Mr. Bliss' letter. They may know how to make large or small crystals; but until Dr. Ratton brought the results of European research within the reach of Madras officers, none of them knew anything of chloride of magnesium, and Government are sure that the manufacturers know nothing now. His Excellency in Council still thinks that vernacular instructions to manufacturers would be of use.

8. The Right Honorable the Governor in Council had no intention whatever of passing any censure on Mr. Bliss, by whose energy and administrative skill such important results in increased consumption of salt, and increased revenue, have been achieved. It was desired, however, in the Order of 21st July last, to call attention to the fact that the time has now come for a systematic attempt to improve the quality of the salt.

(True Extract.)

(Signed) E. F. WEBSTER,
Secretary to Government.

To the Board of Revenue.
„ the Public Works Department.

Exd. W. H. French.

60 Copies.

Govt. of {1883} Madras.

REVENUE.

N: 3314 Way. 20th Nov 83

Communicated to the S.E. Sixth Circle.

Issued

Recd. Encl.

G.O., 15th October 1883, No. 1287.

Sd/ CB

N: 3314 Way. 20th Nov 83

OCTOBER.

Vedarniam Salt Pans.

Leasing of the —, as proposed by Mr. Bliss, approved with remarks; and the course of action to be taken to improve the quality of salt in both excise and monopoly manufacture, further enunciated.

S.E. Sixth Circle

Written der

GOVERNMENT OF MARAS.

REVENUE DEPARTMENT.

READ—the following Proceedings of the Board of Revenue, dated 18th September 1883, No. 2819:—

Read—the following letter from H. W. BLISS, Esq., Commissioner of Salt Revenue, to the Secretary to the Board of Revenue, dated Ootacamund, 1st September 1883, No. 10750:—

Adverting to G.O., July 21, 1883, No. 894, Revenue, communicated in the Board's Proceedings marginally noted, I have the honor to submit the following remarks or orders.

No. 2241, dated August 4th, 1883.

2. As the Board and Government are aware, the Vedarniam Factory is of comparatively recent creation, so that the manufacturers possess no proprietary rights in the pans. Section 6 of Act VI of 1871 (Madras), therefore, does not apply to their case, and it is at the discretion of Government to grant excise licenses for working the pans to whom they will. I have no doubt that the chance of making the excise system a success at Vedarniam will be greatly improved, if an arrangement can be made for the issue of one license to a single capitalist, instead of separate licenses to each of the petty manufacturers, who have hitherto worked the pans, and whose proper industrial position is that of laborers, rather than of masters. In my opinion this will offer much the best chance of success. The reasons for this are so obvious to any one acquainted with the subject and the place that it is unnecessary to state them. I therefore recommend that I may be authorized to advertise for applicants for a lease of the pans (under the excise system) for, say, ten years. I have reason to believe that such an advertisement would be responded to by persons willing to put capital into the work, provided that some reasonable arrangement can be come to regarding the upkeep of the canal, which is the crucial difficulty of the whole undertaking. I request orders.

3. In the meantime I will take steps for the preparation of estimates for the repair of the works as soon as the north-east monsoon is over. It would be wasteful to spend money on them now. Government appear to be under the impression that extensive new works are necessary, but this is not the case. There is ample space on the platforms, and nothing more than a few ordinary repairs to them and to the channels are required. Arrangements will, however, have to be made for building quarters for the officers and men, &c., and for fencing the platforms and pans. A scheme will also have to be prepared for the necessary establishments.

4. I have not recently received any report as to the state of the canal. I have called for one. As, however, transport is in progress and not less than a lakh of maunds of salt are expected to be this year brought in from Vedarniam to Negapatam, and as no complaints have reached me of operations being impeded by want of water in the canal, I have no present reason to anticipate the need of any extraordinary expenditure or of assistance from the Department of Public Works.

5. As regards the incidence of the cost of the upkeep of the canal, I would request to be allowed to postpone reporting until in possession of the views of the Collector. I may, however, at once point out that unless a very material contribution to this object is made from other sources than salt, it will be hopeless to manufacture and sell salt under the excise system at Vedarniam at a profit. The Salt Commission (*vide* page 135

of their report) give the cost of he canal up to 1873-74 at Rs. 1,27,000. Since then Rs. 26,951 appear to have bee expended on New Works. The total capital cost, therefore, of the canal exceeds Rs. 1,50,000, the interest on which sum would be over Rs. 7,500 per annum. Thannual cost of maintenance will probably average at least Rs. 3,500. The total char, therefore, on this account alone, supposing the average sales to rise as high as twokhs of maunds, would exceed ten-and-a-half pies per maund. It seems to me that suca charge would be crushing.

6. Paragraph 5 of the Gorrnment Order appears to me to open up a much wider question than that of the maintnance of the Negapatam Salt Factory and the introduction of the excise system there Government imply that it is my duty to maintain a standard of purity in the saltnade at excise factories. My impression, however, has hitherto been that this w a matter in which I was in no wise concerned, and that it was the duty of the Mgistracy rather than of this department to prevent the sale for use as human food of ipure substances. I have already stated this view in my letter, No. 1728, dated 9th February 1883, which is printed with G.O., 19th April 1883, No. 472, Revenue. On perusal of that letter Goverment did not express their dissent from, or disapproval of, my opinion, which is in ente accord with their own, that competition must be looked to to improve quality.

G.O., 5th March 1878, No. 34 Revenue, paragraph 28.

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salt made in this Presidency lies in the employment the business of adequate appliances—in other words, in the investment in it of ital. Two European firms have already pplied for pans, the one (at Porto Novo) ith the immediate, and the other (at Kara) with the ultimate, object of working th n under the excise system. Can it for a moment be supposed that these gentlemen wi consent to the supervision of their mode of manufacture by the officers of Governmet—not, it must be remembered, by the Commissioner, or by a Deputy or Assis nt Commissioner of Salt Revenue, nor even as a rule by an Inspector, but by the subordinates, to whose hands the practical control of the operations at most salt factories must of necessity often be committed? I have not as yet communicated to these firs the views of Government on this subject, as I gather them from the order under reply but I doubt not that, when I do, they will withdraw from the offers they have made, nd that the best chance that as yet appeared of a real improvement in the manufactre of salt in this country will thus be lost—perhaps never to recur. It seems to me incontestible that, in such cases, enlightened self-interest is the surest stimulus to improvement. The motive will produce results sooner, no doubt, with Europeans than ith natives, with men of education and intelligence than with men of neither; but with both it will work, if time is given.

Vide my letters, Nos. 10310, and 10410, dated August 20 and 21, 1883, respectively, and now before the Board.

10. While of opinion, however, that any direct interference by the officers of Government with the methods of private salt manufacture would be most impolitic, I admit that the department should use its influence, naturlly very great, with the manufacturers, in the direction of an improvement in th quality of their produce. This it shall. I also think that it is no more than reasonable that the department, which occupies to a certain extent the position of an expert in relation to the quality of salt, should bring to the notice of the Magistracy, who alone have the legal power of effective action, the proffer for sale of salt of quality s inferior as to be unfit for consumption. I could easily arrange for this, if the means of making a sufficient number of analyses were provided, though, for reasons stated below (paragraph 18) I am unable to concur in the proposals of Government as to the analysts who should be employed and as to the method of employing them.

11. I request the favor of definite instructions on these points; and if Government should be of opinion that any further responsibility for thequality of excise salt should attach to the Commissioner of Salt Revenue, I would further respectfully request orders as to the steps I should take in dealing with what may appear to me to be impure salt, as to the legal powers vested in me for the purpose, and as to the extent to which I may be permitted to delegate them to my subordinates. It is obvious that I cannot personally go into the question of the quality of every scraping or heap of excise salt, and that authority in such a matter cannot safely be entrusted to other than well paid and well qualified officers.

12. As respects the introduction of the excise systen into Negapatam, it will be understood from the above that I do not think that, unler the excise system, I can exercise more than a very general control over the quality of the salt. I have before reported that, even under the monopoly system, additional works are required for its improvement. The licensees are unlikely, if the excise system is introduced, to carry out any such works; most probably they will not do so, but will revert to their old system, from which efforts have already been made to wean them, with some success in spite of their opposition. But of course this is only my opinion. If, as Government anticipate, the Vedarniam licensees send into the market an article which is purer and therefore more in favor with the trade, no doubt self-interest will drive the Negapatam licensees into improvements, which they will have no difficulty in making. As to the maintenance of an adequate stock, it is quite impossible to predict the result of the excise system. The Negapatam people may adopt it readily as the Kistnapatam, Tuticorin and other manufacturers have done. If so, the pans will be more industriously worked and stocks will be fairly kept up. The outturn I anticipated cannot be expected, for Government have decided that the factory shall not be extended.

Nor is it necessary that it shld be, if a part of the demand is to be met from Vedarniam. But the manufacturers ma refuse to take out licenses altogether, as they have done at other places. I do nc think they will, but it is possible. In that case, there will be no stocks at Negaptam, and Vedarniam will have the field to itself.

13. At the same tie, I am bound to say that, if the decision lay with me, I should certainly introdce the excise system at Negapatam. This seems to me to follow from the decision) maintain Vedarniam and to work it under excise. If not, the chances of Vedarniammanufacture proving a success will be materially diminished. My reason for so thinkig is, that the best chance for the Vedarniam manufacturers certainly would be that ey should be allowed to transport their salt, as it were in bond, to Negapatam, witout payment of duty, and to store and sell it there. Now this cannot possibly be lowed if Negapatam is still worked under the monopoly system, for I have no leal power to levy duty on excise-made salt transported into a monopoly area withoupayment of duty. If, on the other hand, the Vedarniam manufacturers are not alwed to store and sell their salt at Negapatam, they will be heavily handicapped, forwastage in transit is certain ; and while a wastage of (say) two per cent. in unstored ad non-duty-paid salt would cost them only about ·425 of a pie per maund, the same waage in stored and duty-paid salt would cost the purchaser 8·142 pies a maund. Hnce, in my opinion, if the Vedarniam manufacturers are to prosper, arrangements mst be made whereby they can store and sell their salt at Negapatam. In other vrds, Negapatam also must be brought under the excise system. I request early rders.

14. I also request olers whether, if Negapatam is to be maintained under the monopoly system, the resvoirs, &c., considered necessary for its efficient working are to be constructed or not.

15. With respect to he last four paragraphs of the Government Order, I will report more fully after maing some inquiries. For the present, I desire to state that considerable care is takenin the matter of scraping clean and pure salt, and that I believe that the quality ofmonopoly salt has on the average improved of late years. The matter is not an easyone to deal with. The power to reject salt in monopoly factories could hardly be sed until they had been placed under the supervision of men who could be trustednot to make that power a source of profit to themselves. This was not the case anwhere until last year, nor is it yet so throughout the Presidency. Even where i is, the power cannot always be exercised without the gravest risk of strikes whic the department has in most places no adequate means of dealing with, there being n legal provision under which it can eject from his pans a recusant manufacturer who as proprietary rights and who persists in making bad salt. Stocks are gradually creepig up in some of the districts which have hitherto caused me most anxiety, and in whch I could not afford to risk strikes—even now cannot do so. I may instance Vizagapaam, my first connection with which, as Commissioner, was that I had to spend large suns of money in sending up about a lakh of maunds of salt by sea to prevent a salt famne, and in which the stocks are, even yet, far below the standard. There are other rasons why the improvement of the purity of the salt is a most difficult task, but thy all pale before the conclusive one, want of time to devote to the subject. Whn I first assumed charge of the department, I gave a good deal of thought to it, and I have since not lost sight of it, though it would be idle to pretend that I might not have done more if I had had time. But I soon discovered that there were fa more pressing duties to attend to. The improvement of the quality of the salt by an addition of three or four to the percentage of sodium chloride was, and is, in my eyes of no importance at all, as compared with the illicit manufacture, the peculation and the waste of money on works which I have striven to prevent, not without success, and a substantial addition to the revenue. Every day has but twenty-four hours. I have given as many of them as my strength and health would allow to the service of Government, and I may, therefore, without being suspected of the desire to shirk work, fairly tell them that they must not expect the subject of the improvement of the manufacture to be taken up for the next two or three years at least in as comprehensive and thorough a manner as is to be wished.

Attempts to force matters on too quickly can only lead to a complete break down. The improvement of the quality of the salt cannot be undertaken with a hope of success unless it is undertaken by men who have both the knowledge what to do, and the tact so to deal with the manufacturers as to carry them with them on the path of improvement. The work must be left for these and for other reasons to the superior officers (Inspectors and Assistant Inspectors) of factories ; but in my judgment those officers are still, as a body, wanting in the requisite knowledge, while it is certain that their preventive duties and the drilling and disciplining of their men now take up so much of their time that I cannot call on them to do more. The subject shall not, however, be neglected, though I cannot hold out to Government the prospect of what I should consider success until the present pressure of preventive work has somewhat abated.

16. In this connection I must point out that any considerable interference with the existing systems of manufacture will inevitably lead to a demand, which cannot be resisted, for an increase of the Kudivaram. Government are probably aware of this.

17. With respect to the orders of Government that, in the licensing of new pans under the excise system, a condition should be inserted, providing for the bitterns being run off, I request orders as to whether this condition should be inserted in the case of existing pans being newly brought under the excise system, or only in that of additional factories being newly formed under that system. If the latter only, it seems to me that in time the condition will cease to obtain in all the monopoly factories as they are converted into excise, and will have force only in factories which may in future be newly established, such, for instance, as Porto Novo. This can hardly be meant. At the same time, I beg, respectfully, to refer to my remarks in paragraphs 6 to 9 as to the impolicy of interference with methods of manufacture, and to state that, in my opinion, any such condition will tend to keep capitalists from embarking on the work of salt manufacture, which it is highly desirable they should take up. I may add that the system recommended by Government is perfectly well known to the officers of the department and has already been adopted in the Negapatam Factory in particular with the natural result of a considerable diminution of the percentage of magnesium salts.

18. I quite agree with Government that an analyst should be attached to the department, not a Commissioned Medical Officer—though there is plenty even for such an officer to do—but a subordinate, whose pay would probably be the most that the Government of India would sanction. An analyst is much required for other purposes besides the examination of the quality of manufactured salt. Some time ago, therefore, I proposed the addition of just such a one as Government now suggest to the establishment of the Chemical Examiner, but the Board and Government somewhat decisively negatived my proposal, at the same time intimating an apparent wish that the number of analyses should be reduced rather than increased—*vide* G.O., October 2nd, 1882, No. 1096, Public. I regret, however, that I cannot agree with them in thinking that "rough determinations" will suffice. *Latet dolus in generalibus.* Inaccurate analyses might be dangerous. It is a good principle to do things well if you do them at all. Nor can I agree in the desirability of granting manufacturers certificates of the quality of their salt. Such certificates would either be valued or they would not be ; I suspect the latter, for the native standard is not the European one nor likely to approximate to it for many a long year to come, unless Government are pleased to legislate so as to render the sale of salt by measure illegal. Of course, if I am right, and certificates would not be valued, it would be useless and a waste of money to issue them. If, on the contrary, they were valued, their issue would in any case be open to all, and more than all, the objections I have before urged on the subject of the interference of Governments with trade, and their issue on locally-conducted analyses, as proposed by Government, would afford an opportunity for corruption to the low-paid analyst, which, it would be most extraordinary, if he did not take advantage of for his own benefit.

19. As regards the proposal to circulate among the manufacturers brief vernacular descriptions of the qualities of good salt and of the methods of manufacture necessary

to secure them, I have the honor to state that, in my opinion, no such measure is necessary. The manufacturers know how to make any description of salt which may be required quite as well as I could hope to teach them. The only reason they do not make better salt (when left entirely to themselves, that is in excise factories) is that they do not find it profitable to do so. That they know how to make good salt will be apparent by an inspection of the better of the two samples sent up to the Board with my letter printed with their Proceedings, No. 982, dated April 7, 1883. The man who made that salt was a Sub-Inspector of no special intelligence nor of particularly good education. So far as I know, the only hint he got as to the method of manufacture was to rake his salt. Many manufacturers could do equally well, if they had the inducement. Their object, however, is not to make good salt, but to make salt manufacture as profitable as possible. In order to do so, it is essential that they should make the kind of salt which is most in favor with their customers, the wholesale dealers, that is, "light" salt. With this object they use the system of shallow irrigations and of frequent scrapings, which has the further admitted advantage that successive crops are gathered with the least possible risk of destruction by the thunder showers which are a feature of the South Indian hot weather, but which are almost unknown in the Concan, at Kharagora and in the North-West Provinces, where better systems can, therefore, safely be adopted with the natural result of an out-turn of greatly superior quality. For the same reason, viz., that it is a matter of importance to get in their scrapings in quick succession, it does not profit them to discharge the bitterns too frequently (even if they could do so without expense and, in some cases, without a complete re-modelling of their pans), for the presence in the brine of an excess of residual salts forces on the crystallization of sodium chloride. Give them a motive for making their salt in hard, heavy crystals, and it will be worth their while to produce hard, heavy crystals, that is, to irrigate deeply, to crystallize slowly and therefore to discharge the bitterns, the presence of which favors rapid crystallization. Such a motive can only be supplied by a measure, rendering the retail sale of salt by weight compulsory, and thereby bringing the practice of this Presidency into conformity with that of other parts of India, where superior kinds of salt are made.

20. In conclusion, I respectfully beg to state that I am not conscious of deserving the censure conveyed by the Order of Government under reply, the wording of which implies that I am not prepared to carry out the views of Government when in opposition to my own views, and that I have neglected the duty for which I was appointed.

Resolution—dated 18th September 1883, No. 2819.

Submitted for the orders of Government.

2. The Board recommend that the Salt Commissioner be authorized to advertize for tenders to lease the Vedarniam pans for a period of years on the excise system, as proposed by that officer. Meanwhile they await his promised report on the incidence of the cost of upkeep of the canal.

3. They consider that the Commissioner shows good ground for being absolved of all direct responsibility in connection with the quality of the salt manufactured under the excise system.

4. The Board are also of opinion that, for the reasons set forth by Mr. Bliss in paragraph 13 of his letter, the Negapatam factory should be worked on the excise system.

5. With respect to the two analysts whom Government propose to attach to the Salt Department, the Board think that the best plan would be to place them under the Chemical Examiner to Government for the purpose of conducting analyses under his immediate supervision. They might also take it in turns to accompany the Salt Commissioner on his tours of inspection, and would thus acquire a practical knowledge of the circumstances under which salt is made and of the system of manufacture, and

might prove of great assistance to the District Officers of the Salt Department in showing them how to conduct simple analyses for themselves.

(A true Copy and Extract.)

(Signed) J. A. DAVIES,
Acting Secretary.

To the Secretary to Government, Revenue Department.
„ the Commissioner of Salt Revenue.

ORDER—dated 15th October 1883, No. 1287, Revenue.

Separate Revenue, No. 272.
Salt.

The Government do not object to the leasing of the Vedarniam pans as proposed by the Commissioner of Salt Revenue, provided that such lease is confined to the existing pans, and does not involve the right to extend them or to prevent others from doing so. Indeed, in view to securing competition at the site, Government would prefer, if the conformation of the old pans admits of it, that they should be leased in two or more divisions. The Commissioner is requested to have a plan of the site prepared, showing how extensions can be arranged.

2. The report regarding the canal is awaited. Professional opinion as to its state and requirements will of course, as already ordered, be obtained.

3. His Excellency in Council does not desire that any more money shall be spent at present on the Negapatam pans. The question of introducing the excise system there, had better be deferred until after next season's manufacture. As already stated, the Government do not see any objection to the measure. The storage and sale of the Vedarniam excise salt at Negapatam will never, Government believe, be desired by the Vedarniam manufacturers; but if it is, it will necessarily follow, as stated by Mr. Bliss, that Negapatam must be put under excise.

4. The Commissioner and the Board of Revenue have entirely mistaken the intention and wishes of Government as to the action to be taken by the Commissioner in regard to excise salt manufacture; and it is therefore unnecessary to notice Mr. Bliss' arguments against interference by him in the process. Such interference is not possible or desirable; and, if not allowed to regulate the manufacture, he cannot be held responsible for the purity of the salt. The course of action which Government would wish him to follow is correctly described in the first part of paragraph 10 of his letter. They do not think it advisable that the department should prosecute sellers of impure salt; but it might be well to introduce into the Consolidated Salt Law under preparation a provision authorizing the Commissioner to destroy at the factory salt so impure as to be unfit for consumption. Such a power would of course be very rarely, if ever, used; but it might be useful to have it.

5. Here it may be observed that, in his remarks regarding quality of salt, Mr. Bliss attaches the chief importance to the physical properties, size and hardness of crystals, which are obtained by slow crystallization. These, however, Government regard as of minor consequence, compared with chemical purity. Light may be as pure as heavy salt; and if the traders prefer the former, it is no doubt because it better suits the conditions of the trade, especially in the southern districts.

6. Mr. Bliss will make further inquiries and submit proposals for the entertainment of two analysts of the class described. The Government think that they will be likely to do more work for the department if attached to its offices and under the Commissioner's orders, than if placed in the Chemical Examiner's office. If placed at factories, very simple precautions would suffice to secure that they should not know whose salt they were examining, and corruption would therefore be impossible; but as the Commissioner fears it, the Government would attach one to

each Deputy Commissioner. The Government desire that when the arrangements are matured, the system of certificates (to be granted on the results of analysis) may be tried. In speaking in G.O., 21st July 1883, No. 894, of "rough determinations," His Excellency in Council did not mean inaccurate, but incomplete analyses, directed only to discovery of impurities of a particular kind.

7. With regard to the improvement of monopoly salt, the Government, equally with Mr. Bliss, would deprecate hasty and sudden action which would lead to strikes and decrease of stocks; but they believe that by systematic and judicious insistance, the manufacturers may be made to learn that bad salt will not be accepted. As the pans have to be entirely re-made every year, the cost of re-arranging them so as to exclude bittern salts, and to produce pure edible salt, will not be appreciably enhanced; and there will be no need for increase of kudivaram. The Government do not believe in the profound knowledge attributed to the manufacturers in paragraph 19 of Mr. Bliss' letter. They may know how to make large or small crystals; but until Dr. Ratton brought the results of European research within the reach of Madras officers, none of them knew anything of chloride of magnesium, and Government are sure that the manufacturers know nothing now. His Excellency in Council still thinks that vernacular instructions to manufacturers would be of use.

8. The Right Honorable the Governor in Council had no intention whatever of passing any censure on Mr. Bliss, by whose energy and administrative skill such important results in increased consumption of salt, and increased revenue, have been achieved. It was desired, however, in the Order of 21st July last, to call attention to the fact that the time has now come for a systematic attempt to improve the quality of the salt.

(True Extract.)

(Signed) E. F. WEBSTER,
Secretary to Government.

To the Board of Revenue.
" the Public Works Department.

Exd. W. H. French.

60 Copies.

Govt. of {1883} Madras.

REVENUE.

No. 3314 Wa. 20th Nov. 83.
Communicated to the Supg. Engr Sixth Circle.
S of CB
RS

Issued

Recd. *Encl.*

G.O., 15th October 1883, No. 1287.

No. 3314 Wa. 20th Nov. 83.

OCTOBER.

Vedarniam Salt Pans.

Leasing of the —, as proposed by Mr. Bliss, approved with remarks; and the course of action to be taken to improve the quality of salt in both excise and monopoly manufacture, further enunciated.

S. E. Sixth Circle.
Letter order

GOVERNMENT OF MADRAS.

REVENUE DEPARTMENT.

Read—the following Proceedings of the Board of Revenue, dated 18th September 1883, No. 2819:—

Read—the following letter from H. W. BLISS, Esq., Commissioner of Salt Revenue, to the Secretary to the Board of Revenue, dated Ootacamund, 1st September 1883, No. 10750:—

Adverting to G.O., July 21, 1883, No. 894, Revenue, communicated in the Board's Proceedings marginally noted, I have the honor to submit the following remarks for orders.

No. 2241, dated August 4th, 1883.

2. As the Board and Government are aware, the Vedarniam Factory is of comparatively recent creation, so that the manufacturers possess no proprietary rights in the pans. Section 6 of Act VI of 1871 (Madras), therefore, does not apply to their case, and it is at the discretion of Government to grant excise licenses for working the pans to whom they will. I have no doubt that the chance of making the excise system a success at Vedarniam will be greatly improved, if an arrangement can be made for the issue of one license to a single capitalist, instead of separate licenses to each of the petty manufacturers, who have hitherto worked the pans, and whose proper industrial position is that of laborers, rather than of masters. In my opinion this will offer much the best chance of success. The reasons for this are so obvious to any one acquainted with the subject and the place that it is unnecessary to state them. I therefore recommend that I may be authorized to advertise for applicants for a lease of the pans (under the excise system) for, say, ten years. I have reason to believe that such an advertisement would be responded to by persons willing to put capital into the work, provided that some reasonable arrangement can be come to regarding the upkeep of the canal, which is the crucial difficulty of the whole undertaking. I request orders.

3. In the meantime I will take steps for the preparation of estimates for the repair of the works as soon as the north-east monsoon is over. It would be wasteful to spend money on them now. Government appear to be under the impression that extensive new works are necessary, but this is not the case. There is ample space on the platforms, and nothing more than a few ordinary repairs to them and to the channels are required. Arrangements will, however, have to be made for building quarters for the officers and men, &c., and for fencing the platforms and pans. A scheme will also have to be prepared for the necessary establishments.

4. I have not recently received any report as to the state of the canal. I have called for one. As, however, transport is in progress and not less than a lakh of maunds of salt are expected to be this year brought in from Vedarniam to Negapatam, and as no complaints have reached me of operations being impeded by want of water in the canal, I have no present reason to anticipate the need of any extraordinary expenditure or of assistance from the Department of Public Works.

5. As regards the incidence of the cost of the upkeep of the canal, I would request to be allowed to postpone reporting until in possession of the views of the Collector. I may, however, at once point out that unless a very material contribution to this object is made from other sources than salt, it will be hopeless to manufacture and sell salt under the excise system at Vedarniam at a profit. The Salt Commission (*vide* page 135

of their report) give the cost of the canal up to 1873-74 at Rs. 1,27,000. Since then Rs. 26,951 appear to have been expended on New Works. The total capital cost, therefore, of the canal exceeds Rs. 1,50,000, the interest on which sum would be over Rs. 7,500 per annum. The annual cost of maintenance will probably average at least Rs. 3,500. The total charge, therefore, on this account alone, supposing the average sales to rise as high as two lakhs of maunds, would exceed ten-and-a-half pies per maund. It seems to me that such a charge would be crushing.

6. Paragraph 5 of the Government Order appears to me to open up a much wider question than that of the maintenance of the Negapatam Salt Factory and the introduction of the excise system there. Government imply that it is my duty to maintain a standard of purity in the salt made at excise factories. My impression, however, has hitherto been that this was a matter in which I was in no wise concerned, and that it was the duty of the Magistracy rather than of this department to prevent the sale for use as human food of impure substances. I have already stated this view in my letter, No. 1728, dated 9th February 1883, which is printed with G.O., 19th April 1883, No. 472, Revenue. On perusal of that letter Government did not express their dissent from, or disapproval of, my opinion, which is in entire accord with their own, that competition must be looked to improve quality.

G.O., 5th March 1878, No. 349, Revenue, paragraph 28.

7. The substitution of the excise for the monopoly system of salt manufacture involves, beyond the possibility of a doubt, a considerable pecuniary loss to Government. In return for this, it obtains the sole, but great, advantage that it is no longer responsible for either the quantity or the quality of the supply. I submit that to impose on the Commissioner of Salt Revenue any responsibility for the purity of the salt made at excise factories would be to throw away a great part of this sole advantage. It is hardly necessary to say that the interference of Government officials with the standard of purity of articles liable to excise duty is in complete violation of all the principles which should regulate the relations of Government with trade. Neither in Bombay, nor in Orissa, nor in the Sultanpur and Nub Salt Factories of the Delhi Division of the Northern India Salt Department, do the officers of Government interfere in any way with the quality of the outturn. No reason is apparent why a different course should be followed here.

8. The substitution in this Presidency of the excise system for the theoretically indefensible, but practically successful, monopoly system was not undertaken by the Government of Madras with a sanguine expectation that any decided advantage would be secure; and I think it may be permitted to me to say that the change was entered on more in deference to the views of the Government of India and of the Secretary of State than from a conviction of its probable beneficial results either to the finances or to the consumer. I believe also that I am correct in holding that the opinions of the Government of India and of the Secretary of State have been moulded at least as much by the pressure brought to bear by the English salt manufacturers as by considerations of abstract politico-economical theorems. I venture, therefore, to point out that the interference of Government officers with the quality of excise salt is not only theoretically inadvisable, but is certain to be actively opposed by this English salt manufacturers, whose hope it is that the abandonment of the monopoly system will afford an opening for the competition of their produce with that of the local factories. I regard their hope as fallacious, it is true; for the price at which salt can be made on our coasts is such as to defy competition from the other side of the world. But encouraged by their great and increasing success in Bengal, the English salt manufacturers will probably be slow in arriving at this conviction. Their argument will certainly be—"We have to pay from our own pockets for the supervision and other measures necessary to secure the purity of the article we sell. Why should our competitors be aided in the race at the cost of Government? Is this free trade?" I respectfully consider that there can be only one answer to such a question.

9. Perhaps a more immediately pressing consideration is this—the best hope of the ultimate decrease of the cost price and of the improvement of the quality of the

salt made in this Presidency lies in the employment in the business of adequate appliances—in other words, in the investment in it of capital. Two European firms have already applied for pans, the one (at Porto Novo) with the immediate, and the other (at Karasa) with the ultimate, object of working them under the excise system.

Vide my letters, Nos. 10310, and 10410, dated August 20 and 21, 1883, respectively, and now before the Board.

Can it for a moment be supposed that these gentlemen will consent to the supervision of their mode of manufacture by the officers of Government—not, it must be remembered, by the Commissioner, or by a Deputy or Assistant Commissioner of Salt Revenue, nor even as a rule by an Inspector, but by the subordinates, to whose hands the practical control of the operations at most salt factories must of necessity often be committed? I have not as yet communicated to these firms the views of Government on this subject, as I gather them from the order under reply; but I doubt not that, when I do, they will withdraw from the offers they have made, and that the best chance that as yet appeared of a real improvement in the manufacture of salt in this country will thus be lost—perhaps never to recur. It seems to me incontestible that, in such cases, enlightened self-interest is the surest stimulus to improvement. The motive will produce results sooner, no doubt, with Europeans than with natives, with men of education and intelligence than with men of neither; but with both it will work, if time is given.

10. While of opinion, however, that any direct interference by the officers of Government with the methods of private salt manufacture would be most impolitic, I admit that the department should use its influence, naturally very great, with the manufacturers, in the direction of an improvement in the quality of their produce. This it shall. I also think that it is no more than reasonable that the department, which occupies to a certain extent the position of an expert in relation to the quality of salt, should bring to the notice of the Magistracy, who alone have the legal power of effective action, the proffer for sale of salt of quality so inferior as to be unfit for consumption. I could easily arrange for this, if the means of making a sufficient number of analyses were provided, though, for reasons stated below (paragraph 18) I am unable to concur in the proposals of Government as to the analysts who should be employed and as to the method of employing them.

11. I request the favor of definite instructions on these points; and if Government should be of opinion that any further responsibility for the quality of excise salt should attach to the Commissioner of Salt Revenue, I would further respectfully request orders as to the steps I should take in dealing with what may appear to me to be impure salt, as to the legal powers vested in me for the purpose, and as to the extent to which I may be permitted to delegate them to my subordinates. It is obvious that I cannot personally go into the question of the quality of every scraping or heap of excise salt, and that authority in such a matter cannot safely be entrusted to other than well paid and well qualified officers.

12. As respects the introduction of the excise system into Negapatam, it will be understood from the above that I do not think that, under the excise system, I can exercise more than a very general control over the quality of the salt. I have before reported that, even under the monopoly system, additional works are required for its improvement. The licensees are unlikely, if the excise system is introduced, to carry out any such works; most probably they will not do so, but will revert to their old system, from which efforts have already been made to wean them, with some success in spite of their opposition. But of course this is only my opinion. If, as Government anticipate, the Vedarniam licensees send into the market an article which is purer and therefore more in favor with the trade, no doubt self-interest will drive the Negapatam licensees into improvements, which they will have no difficulty in making. As to the maintenance of an adequate stock, it is quite impossible to predict the result of the excise system. The Negapatam people may adopt it readily as the Kistnapatam, Tuticorin and other manufacturers have done. If so, the pans will be more industriously worked and stocks will be fairly kept up. The outturn I anticipated cannot be expected, for Government have decided that the factory shall not be extended.

Nor is it necessary that it should be, if a part of the demand is to be met from Vedarniam. But the manufacturers may refuse to take out licenses altogether, as they have done at other places. I do not think they will, but it is possible. In that case, there will be no stocks at Negapatam, and Vedarniam will have the field to itself.

13. At the same time, I am bound to say that, if the decision lay with me, I should certainly introduce the excise system at Negapatam. This seems to me to follow from the decision to maintain Vedarniam and to work it under excise. If not, the chances of Vedarniam manufacture proving a success will be materially diminished. My reason for so thinking is, that the best chance for the Vedarniam manufacturers certainly would be that they should be allowed to transport their salt, as it were in bond, to Negapatam, without payment of duty, and to store and sell it there. Now this cannot possibly be allowed if Negapatam is still worked under the monopoly system, for I have no legal power to levy duty on excise-made salt transported into a monopoly area without payment of duty. If, on the other hand, the Vedarniam manufacturers are not allowed to store and sell their salt at Negapatam, they will be heavily handicapped, for wastage in transit is certain; and while a wastage of (say) two per cent. in unstored and non-duty-paid salt would cost them only about ·425 of a pie per maund, the same wastage in stored and duty-paid salt would cost the purchaser 8·142 pies a maund. Hence, in my opinion, if the Vedarniam manufacturers are to prosper, arrangements must be made whereby they can store and sell their salt at Negapatam. In other words, Negapatam also must be brought under the excise system. I request early orders.

14. I also request orders whether, if Negapatam is to be maintained under the monopoly system, the reservoirs, &c., considered necessary for its efficient working are to be constructed or not.

15. With respect to the last four paragraphs of the Government Order, I will report more fully after making some inquiries. For the present, I desire to state that considerable care is taken in the matter of scraping clean and pure salt, and that I believe that the quality of monopoly salt has on the average improved of late years. The matter is not an easy one to deal with. The power to reject salt in monopoly factories could hardly be used until they had been placed under the supervision of men who could be trusted not to make that power a source of profit to themselves. This was not the case anywhere until last year, nor is it yet so throughout the Presidency. Even where it is, the power cannot always be exercised without the gravest risk of strikes which the department has in most places no adequate means of dealing with, there being no legal provision under which it can eject from his pans a recusant manufacturer who has proprietary rights and who persists in making bad salt. Stocks are gradually creeping up in some of the districts which have hitherto caused me most anxiety, and in which I could not afford to risk strikes—even now cannot do so. I may instance Vizagapatam, my first connection with which, as Commissioner, was that I had to spend large sums of money in sending up about a lakh of maunds of salt by sea to prevent a salt famine, and in which the stocks are, even yet, far below the standard. There are other reasons why the improvement of the purity of the salt is a most difficult task, but they all pale before the conclusive one, want of time to devote to the subject. When I first assumed charge of the department, I gave a good deal of thought to it, and I have since not lost sight of it, though it would be idle to pretend that I might not have done more if I had had time. But I soon discovered that there were far more pressing duties to attend to. The improvement of the quality of the salt by an addition of three or four to the percentage of sodium chloride was, and is, in my eyes of no importance at all, as compared with the illicit manufacture, the peculation and the waste of money on works which I have striven to prevent, not without success, and a substantial addition to the revenue. Every day has but twenty-four hours. I have given as many of them as my strength and health would allow to the service of Government, and I may, therefore, without being suspected of the desire to shirk work, fairly tell them that they must not expect the subject of the improvement of the manufacture to be taken up for the next two or three years at least in as comprehensive and thorough a manner as is to be wished.

Attempts to force matters on too quickly can only lead to a complete break down. The improvement of the quality of the salt cannot be undertaken with a hope of success unless it is undertaken by men who have both the knowledge what to do, and the tact so to deal with the manufacturers as to carry them with them on the path of improvement. The work must be left for these and for other reasons to the superior officers (Inspectors and Assistant Inspectors) of factories; but in my judgment those officers are still, as a body, wanting in the requisite knowledge, while it is certain that their preventive duties and the drilling and disciplining of their men now take up so much of their time that I cannot call on them to do more. The subject shall not, however, be neglected, though I cannot hold out to Government the prospect of what I should consider success until the present pressure of preventive work has somewhat abated.

16. In this connection I must point out that any considerable interference with the existing systems of manufacture will inevitably lead to a demand, which cannot be resisted, for an increase of the Kudivaram. Government are probably aware of this.

17. With respect to the orders of Government that, in the licensing of new pans under the excise system, a condition should be inserted, providing for the bitterns being run off, I request orders as to whether this condition should be inserted in the case of existing pans being newly brought under the excise system, or only in that of additional factories being newly formed under that system. If the latter only, it seems to me that in time the condition will cease to obtain in all the monopoly factories as they are converted into excise, and will have force only in factories which may in future be newly established, such, for instance, as Porto Novo. This can hardly be meant. At the same time, I beg, respectfully, to refer to my remarks in paragraphs 6 to 9 as to the impolicy of interference with methods of manufacture, and to state that, in my opinion, any such condition will tend to keep capitalists from embarking on the work of salt manufacture, which it is highly desirable they should take up. I may add that the system recommended by Government is perfectly well known to the officers of the department and has already been adopted in the Negapatam Factory in particular with the natural result of a considerable diminution of the percentage of magnesium salts.

18. I quite agree with Government that an analyst should be attached to the department, not a Commissioned Medical Officer—though there is plenty even for such an officer to do—but a subordinate, whose pay would probably be the most that the Government of India would sanction. An analyst is much required for other purposes besides the examination of the quality of manufactured salt. Some time ago, therefore, I proposed the addition of just such a one as Government now suggest to the establishment of the Chemical Examiner, but the Board and Government somewhat decisively negatived my proposal, at the same time intimating an apparent wish that the number of analyses should be reduced rather than increased—*vide* G.O., October 2nd, 1882, No. 1096, Public. I regret, however, that I cannot agree with them in thinking that "rough determinations" will suffice. *Latet dolus in generalibus.* Inaccurate analyses might be dangerous. It is a good principle to do things well if you do them at all. Nor can I agree in the desirability of granting manufacturers certificates of the quality of their salt. Such certificates would either be valued or they would not be; I suspect the latter, for the native standard is not the European one nor likely to approximate to it for many a long year to come, unless Government are pleased to legislate so as to render the sale of salt by measure illegal. Of course, if I am right, and certificates would not be valued, it would be useless and a waste of money to issue them. If, on the contrary, they were valued, their issue would in any case be open to all, and more than all, the objections I have before urged on the subject of the interference of Governments with trade, and their issue on locally-conducted analyses, as proposed by Government, would afford an opportunity for corruption to the low-paid analyst, which, it would be most extraordinary, if he did not take advantage of for his own benefit.

19. As regards the proposal to circulate among the manufacturers brief vernacular descriptions of the qualities of good salt and of the methods of manufacture necessary

to secure them, I have the honor to state that, in my opinion, no such measure is necessary. The manufacturers know how to make any description of salt which may be required quite as well as I could hope to teach them. The only reason they do not make better salt (when left entirely to themselves, that is in excise factories) is that they do not find it profitable to do so. That they know how to make good salt will be apparent by an inspection of the better of the two samples sent up to the Board with my letter printed with their Proceedings, No. 982, dated April 7, 1883. The man who made that salt was a Sub-Inspector of no special intelligence nor of particularly good education. So far as I know, the only hint he got as to the method of manufacture was to rake his salt. Many manufacturers could do equally well, if they had the inducement. Their object, however, is not to make good salt, but to make salt manufacture as profitable as possible. In order to do so, it is essential that they should make the kind of salt which is most in favor with their customers, the wholesale dealers, that is, "light" salt. With this object they use the system of shallow irrigations and of frequent scrapings, which has the further admitted advantage that successive crops are gathered with the least possible risk of destruction by the thunder showers which are a feature of the South Indian hot weather, but which are almost unknown in the Concan, at Kharagora and in the North-West Provinces, where better systems can, therefore, safely be adopted with the natural result of an out-turn of greatly superior quality. For the same reason, viz., that it is a matter of importance to get in their scrapings in quick succession, it does not profit them to discharge the bitterns too frequently (even if they could do so without expense and, in some cases, without a complete re-modelling of their pans), for the presence in the brine of an excess of residual salts forces on the crystallization of sodium chloride. Give them a motive for making their salt in hard, heavy crystals, and it will be worth their while to produce hard, heavy crystals, that is, to irrigate deeply, to crystallize slowly and therefore to discharge the bitterns, the presence of which favors rapid crystallization. Such a motive can only be supplied by a measure, rendering the retail sale of salt by weight compulsory, and thereby bringing the practice of this Presidency into conformity with that of other parts of India, where superior kinds of salt are made.

20. In conclusion, I respectfully beg to state that I am not conscious of deserving the censure conveyed by the Order of Government under reply, the wording of which implies that I am not prepared to carry out the views of Government when in opposition to my own views, and that I have neglected the duty for which I was appointed.

Resolution—dated 18th September 1883, No. 2819.

Submitted for the orders of Government.

2. The Board recommend that the Salt Commissioner be authorized to advertize for tenders to lease the Vedarniam pans for a period of years on the excise system, as proposed by that officer. Meanwhile they await his promised report on the incidence of the cost of upkeep of the canal.

3. They consider that the Commissioner shows good ground for being absolved of all direct responsibility in connection with the quality of the salt manufactured under the excise system.

4. The Board are also of opinion that, for the reasons set forth by Mr. Bliss in paragraph 13 of his letter, the Negapatam factory should be worked on the excise system.

5. With respect to the two analysts whom Government propose to attach to the Salt Department, the Board think that the best plan would be to place them under the Chemical Examiner to Government for the purpose of conducting analyses under his immediate supervision. They might also take it in turns to accompany the Salt Commissioner on his tours of inspection, and would thus acquire a practical knowledge of the circumstances under which salt is made and of the system of manufacture, and

might prove of great assistance to the District Officers of the Salt Department in showing them how to conduct simple analyses for themselves.

(A true Copy and Extract.)

(Signed) J. A. DAVIES,
Acting Secretary.

To the Secretary to Government, Revenue Department.
„ the Commissioner of Salt Revenue.

ORDER—dated 15th October 1883, No. 1287, Revenue.

Separate Revenue, No. 272.
Salt.

The Government do not object to the leasing of the Vedarniam pans as proposed by the Commissioner of Salt Revenue, provided that such lease is confined to the existing pans, and does not involve the right to extend them or to prevent others from doing so. Indeed, in view to securing competition at the site, Government would prefer, if the conformation of the old pans admits of it, that they should be leased in two or more divisions. The Commissioner is requested to have a plan of the site prepared, showing how extensions can be arranged.

2. The report regarding the canal is awaited. Professional opinion as to its state and requirements will of course, as already ordered, be obtained.

3. His Excellency in Council does not desire that any more money shall be spent at present on the Negapatam pans. The question of introducing the excise system there, had better be deferred until after next season's manufacture. As already stated, the Government do not see any objection to the measure. The storage and sale of the Vedarniam excise salt at Negapatam will never, Government believe, be desired by the Vedarniam manufacturers; but if it is, it will necessarily follow, as stated by Mr. Bliss, that Negapatam must be put under excise.

4. The Commissioner and the Board of Revenue have entirely mistaken the intention and wishes of Government as to the action to be taken by the Commissioner in regard to excise salt manufacture; and it is therefore unnecessary to notice Mr. Bliss' arguments against interference by him in the process. Such interference is not possible or desirable; and, if not allowed to regulate the manufacture, he cannot be held responsible for the purity of the salt. The course of action which Government would wish him to follow is correctly described in the first part of paragraph 10 of his letter. They do not think it advisable that the department should prosecute sellers of impure salt; but it might be well to introduce into the Consolidated Salt Law under preparation a provision authorizing the Commissioner to destroy at the factory salt so impure as to be unfit for consumption. Such a power would of course be very rarely, if ever, used; but it might be useful to have it.

5. Here it may be observed that, in his remarks regarding quality of salt, Mr. Bliss attaches the chief importance to the physical properties, size and hardness of crystals, which are obtained by slow crystallization. These, however, Government regard as of minor consequence, compared with chemical purity. Light may be as pure as heavy salt; and if the traders prefer the former, it is no doubt because it better suits the conditions of the trade, especially in the southern districts.

6. Mr. Bliss will make further inquiries and submit proposals for the entertainment of two analysts of the class described. The Government think that they will be likely to do more work for the department if attached to its offices and under the Commissioner's orders, than if placed in the Chemical Examiner's office. If placed at factories, very simple precautions would suffice to secure that they should not know whose salt they were examining, and corruption would therefore be impossible; but as the Commissioner fears it, the Government would attach one to

each Deputy Commissioner. The Government desire that when the arrangements are matured, the system of certificates (to be granted on the results of analysis) may be tried. In speaking in G.O., 21st July 1883, No. 894, of "rough determinations," His Excellency in Council did not mean inaccurate, but incomplete analyses, directed only to discovery of impurities of a particular kind.

7. With regard to the improvement of monopoly salt, the Government, equally with Mr. Bliss, would deprecate hasty and sudden action which would lead to strikes and decrease of stocks; but they believe that by systematic and judicious insistance, the manufacturers may be made to learn that bad salt will not be accepted. As the pans have to be entirely re-made every year, the cost of re-arranging them so as to exclude bittern salts, and to produce pure edible salt, will not be appreciably enhanced; and there will be no need for increase of kudivaram. The Government do not believe in the profound knowledge attributed to the manufacturers in paragraph 19 of Mr. Bliss' letter. They may know how to make large or small crystals; but until Dr. Ratton brought the results of European research within the reach of Madras officers, none of them knew anything of chloride of magnesium, and Government are sure that the manufacturers know nothing now. His Excellency in Council still thinks that vernacular instructions to manufacturers would be of use.

8. The Right Honorable the Governor in Council had no intention whatever of passing any censure on Mr. Bliss, by whose energy and administrative skill such important results in increased consumption of salt, and increased revenue, have been achieved. It was desired, however, in the Order of 21st July last, to call attention to the fact that the time has now come for a systematic attempt to improve the quality of the salt.

(True Extract.)

for Secretary to Government.

To the Board of Revenue.
„ the Public Works Department.

Exd. W. H. French.

60 Copies.

Re 3314 May 20th Nov/83

Communicated to the Supdg Engr Southn Circle

CJ
12/11

No. 9745

Govt. of {1883} Madras.

REVENUE.

20.11.83

Issued

Recd. 6/11/83 *Encl.*

G.O., 15th October 1883, No. 1287.

5

OCTOBER.

Re 3314 May 20-11-83

Vedarniam Salt Pans.

Leasing of the —, as proposed by Mr. Bliss, approved with remarks; and the course of action to be taken to improve the quality of salt in both excise and monopoly manufacture, further enunciated.

Dy
21/11

Supdg Southern Circle
Supdg Southern Circle

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Entd in Rec Regr

Eje