

(1) பக்கங்களின் எண்ணிக்கை

60

(2) புதுக்கித் திருப்பிய நாள்

14-5-93

(3) ஆதாரக் குறிப்பவர் சுருக்கொப்பம்

2523

தமிழ்நாடு ஆவணக் காப்பகம்.

தமிழ்நாடு அரசு

15 துறை

அரசாணை எண்.	2523	அச்சகம்
மு. கோப்புத் தாள் எண்.		பலவகை
நாள் :	24-11-1884	199

ச. பாண்டி

மா கண்டிப்படி கையாளவே கூடாது.

9 7/8

23RD MAY 1884, No. 1268, JUDICIAL.

GOVERNMENT OF MADRAS.
JUDICIAL DEPARTMENT.

READ—the following papers:—

From Deputy Surgeon-General M. C. FURNELL, M.D., F.R.C.S., Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Madras, 11th December 1883, No. 1543.

I have the honor to forward herewith copy of a letter * I have addressed to the Inspector-General of Jails.

* No. 1547 of 10th December 1883.

2. The sickness and mortality at the Trichinopoly jail has been very great, and for some time has caused considerable anxiety. It has all along been my conviction that it must arise from something faulty in the diet; it will be seen, from the copious extracts I have given, that the temporary absence of the Superintendent has cast such light on the matter that I feel it incumbent on me to bring it to the notice of Government.

ENCLOSURES.

From Deputy Surgeon-General M. C. FURNELL, M.D., F.R.C.S., Sanitary Commissioner for Madras, to the Inspector-General of Jails, dated Madras, 10th December 1883, No. 1547.

I have the honor to acknowledge receipt of your letter, No. 4999, of 17th October 1883, and, with reference thereto, to remark that I have, owing to circumstances which came to my knowledge during my late inspection of Trichinopoly jail, gone over the entire correspondence and papers connected with the subject, viz.:—

No.	Month and Date.	From.	To.
5621	18th Nov. 1881..	The Inspector-General of Jails ..	The Superintendent, Central Jail, Trichinopoly.
88	29th ..	Civil Surgeon, Trichinopoly.	Do. do.
197	24th Jan. 1882..	" Superintendent " Central Jail, Trichinopoly.	The Inspector-General of Jails.
4229	20th Sept. " ..	" Inspector-General of Jails ..	" Superintendent, Central Jail, Trichinopoly.
968	16th Oct. " ..	" Sanitary Commissioner for Madras.	" Inspector-General of Jails.
1083	6th Aug. 1883..	" Acting Superintendent, Central Jail, Trichinopoly.	" Do. do.
3691	8th " " ..	" Inspector-General of Jails ..	" Acting Superintendent, Central Jail, Trichinopoly.
1216	3rd Sept. " ..	" Superintendent, Central Jail, Trichinopoly.	" Inspector-General of Jails.
1415	6th Oct. " ..	Do. do. ..	" Do. do.
4999	17th " " ..	" Inspector-General of Jails ..	" Sanitary Commissioner for Madras.
5642	15th Nov. " ..	" Do. do. ..	" Do. do.
5933	28th " " ..	" Do. do. ..	" Do. do.
		Madras Jail Code.	

And the conclusions I have arrived at are that—

- 1st.—The diarrhoea and dysentery were due to diet.
- 2nd.—That the wells have deteriorated and fresh water-supply should be obtained.
- 3rd.—That the Superintendent of the Trichinopoly jail should be a medical officer.

1st.—That the diarrhoea and dysentery were due to diet.—The correspondence read in its totality I think abundantly proves this. In your letter, No. 5021, dated 18th November 1881, (No. 5622, dated 18th November 1881), you draw that officer's attention to the heavy mortality in his jail, and loss of weight of prisoners compared with other jails, and remark, "that the cause may be either in the dietary or an excessive use of punishment diets, or that the prisoners are overtaken;" "that a loss of weight means generally a loss of health, and that the man is not sufficiently nourished." You further go on to say, "the Superintendent should also see that the prisoners are full weight and that the meals are completely and properly cooked, and that the attention to prevent frauds practised by the contractor, the jail subordinates or the cooks. The discovery of the late frauds at the district jail shows how important it is not to delegate these duties to any subordinate."

The Superintendent answers your letter by No. 197, 24th January 1882; in this he writes:—

"It is difficult to trace the direct cause of the disease, and my belief is that it originated neither from the diet, nor labor, nor punishments, but that it arises from the same sources as all epidemics arise from, and for which no specific reason can ever be given."

"The unusual mortality and loss of weight among the prisoners would naturally lead one to suspect that the cause may be either in the dietary or an excessive use of punishment diets, or that the prisoners are overtaken, but facts, however, prove the contrary as far as this jail is concerned."

"First, in regard to the dietary. The medical officer daily inspects the rations,* and every defect in quality noticed by him is at once remedied. The medical subordinates also inspect the rations, but not the cooked food before distribution to the convicts. The jailer, however, never fails to see to this daily; each cook-house is inspected by him, and he is accompanied on these occasions either by the deputy jailer, who is a Hindu, or by one or two experienced convict overseers, who taste and examine the food. I frequently do this myself, and I have never received a single complaint either of the insufficiency or bad quality or cooking of the food. I also test the weighments in the ration distribution room, and have never yet found a single deficiency in weight, if any thing, there generally is a little to the good. The weight of the cooked meal is also frequently tested by me and the jailer and deputy jailer. You will thus see that every possible attention is paid to the food of the prisoners, and there is not the slightest reason to attribute the sickness to the dietary."

* The uncooked rations, I presume, is meant, at his morning visit.

(Indd.) M.C.F. inspect the rations, but not the cooked food before distribution to the convicts. The jailer, however, never fails to see to this daily; each cook-house is inspected by him, and he is accompanied on these occasions either by the deputy jailer, who is a Hindu, or by one or two experienced convict overseers, who taste and examine the food. I frequently do this myself, and I have never received a single complaint either of the insufficiency or bad quality or cooking of the food. I also test the weighments in the ration distribution room, and have never yet found a single deficiency in weight, if any thing, there generally is a little to the good. The weight of the cooked meal is also frequently tested by me and the jailer and deputy jailer. You will thus see that every possible attention is paid to the food of the prisoners, and there is not the slightest reason to attribute the sickness to the dietary."

I had numerous complaints at my inspection, (Indd.) M.C.F. inspect the rations, but not the cooked food before distribution to the convicts. The jailer, however, never fails to see to this daily; each cook-house is inspected by him, and he is accompanied on these occasions either by the deputy jailer, who is a Hindu, or by one or two experienced convict overseers, who taste and examine the food. I frequently do this myself, and I have never received a single complaint either of the insufficiency or bad quality or cooking of the food. I also test the weighments in the ration distribution room, and have never yet found a single deficiency in weight, if any thing, there generally is a little to the good. The weight of the cooked meal is also frequently tested by me and the jailer and deputy jailer. You will thus see that every possible attention is paid to the food of the prisoners, and there is not the slightest reason to attribute the sickness to the dietary."

In September 1882, you again address the Superintendent of Central Jail, Trichinopoly, on this subject and to much the same effect, only in this letter you remark, "I also drew your attention, as well as that of the medical officer, to the importance of seeing that the food supplied to the prisoners should be completely and properly cooked, and that your personal attention was necessary to see that the prisoners get the full quantities to which they are entitled. I understand that you have given full and personal attention to this matter, and that all food is inspected daily by the medical officer, and that any defect in quality is noted by that officer and at once remedied."

A copy of this letter was forwarded for information and any suggestion I might wish to offer. In my reply we find—

"From this letter I learn (paragraph 1) that there has been considerable mortality in the Trichinopoly jail since 1st January of this year, principally from diarrhoea and dysentery."

"This points most probably to something wrong in the diet, and, as we know, the ordinary grain diet is carefully looked after—indeed in this very letter it is stated 'you (the Superintendent) have given full and personal attention to this matter, and that all food is inspected daily by the medical officer.'—I should feel inclined to suspect that more subtle portion of it in which impurity is less easily detected, viz., the water; for, as has been remarked by the greatest hygienists, 'diarrhoea or dysentery constantly affecting a community or returning periodically is far more likely to be produced by bad water than by any other cause.'"

Taking it for granted that the statement about the diet being carefully looked after was correct, I was led to suppose the ragi diet did not agree with a rice-eating people. I may here remark en passant I nowhere suggested an entire change to rice as stated by you in letter, No. 4993, of 17th October 1883. However, I ended my letter with an adherence to my original opinion that the diet was in fault, and that "had I charge of the Trichinopoly jail and *corbis blanche* to save life, I should, at once make a radical change in the diet" (letter No. 963, 16th October 1882).

The then Superintendent (Mr. Johnston) goes away on leave some time in 1883 (July I believe) and Dr. Ritchie takes charge. In October I visited Trichinopoly jail and found an improvement. From circumstances which came to my knowledge, I was induced to apply to you for the monthly reports which had been forwarded by Dr. Ritchie, and what do we find—in his very first letter, dated 6th August 1883, No. 1083, he writes:—

"On assuming charge of this jail on 13th July, I found the general sanitary condition of all the jail buildings was very satisfactory, the water-supply, which is well filtered before use, good, and the personal hygiene of the jail population well attended to."

"A few days after taking charge, I found the ragi flour in use in this jail was very coarse and inferior in quality, due to bad grinding. To prove this to my own satisfaction and that of the jail officials, I obtained samples of this from the Vellore and Cuddalore jails, and on comparing these with the flour in use here, the latter was found to be very coarse and inferior in quality, due to defective grinding. I may mention that the flour, owing to its coarseness, could not be properly cooked, and when a portion of the cake or pudding was placed in the mouth, it felt gritty, and when masticated, there was a taste of raw, uncooked ragi left for some time. By seeing that the grind stones were properly picked and more time and labor were expended in grinding the ragi, a great improvement has been effected. There is still room for more improvement, as the quality of the flour now in use does not equal, or is as good as, that in use in the Cuddalore jail. Six pairs of mill-stones have been ordered from the contractor, and I hope, when these are supplied, that I will not have any further fault to find regarding the quality of the ragi flour here. I may mention that, in my opinion, coarse flour of the description formerly in use here, and which could not be properly cooked, is sure to predispose to, or excite diarrhoea, looseness of the bowels, or cause mal-nutrition, particularly in the case of those convicts whose general health is below par."

"I consider cumbu much better suited than cholom as an article of diet, and I have substituted cumbu for cholom in the case of a gang of 128 convicts located in sheds outside this jail on medical grounds. Should the results prove satisfactory (as shown by the weighments at the end of a month), I intend effecting this change in the scale of dietary of all the convicts confined in this jail on ordinary jail diet. I shall give the results and report more fully on this subject next month."

In his report, dated 3rd September 1883, No. 1216, he writes—

"In my last monthly report I informed you that I had substituted cumbu for cholom in the dietary of a large gang of 117 convicts located in camp outside the jail. On the expiration of one month these were weighed with the following result:—Eighty-two convicts gained weight, 11 neither gained nor lost, their weighments taken in July and August being the same, and 24 lost weight; but I may mention that the loss in half the number of the latter convicts did not exceed 2 lb., which is quite trivial. There was not a single case of dysentery or diarrhoea occurred among this gang since the above change in their dietary was made. No doubt these convicts, although sickly, were placed in better hygienic conditions, being located in camp, than the remaining jail population in barracks. Still, I think, the results are satisfactory, and I therefore wish to substitute cumbu for cholom for all prisoners on ordinary jail diet from 1st September, and I hope you will be good enough to approve of the same."

"I am glad to report that the ragi flour now turned out in this jail is equal to, if not superior to, that in use in other jails. It is now properly sifted, and the outer silicious coat of the grain carefully removed thereby. I may mention that no attempt was previously made to effect this; in fact, the grain was too coarsely ground for this to be properly carried out."

In his report for September, dated 6th October 1883, No. 1415, he writes—

"Cumbu was substituted for cholom on 1st of last month for all convicts on ordinary jail diet. As the jail officials here have had no practical experience in preparing this grain for cooking, with your approval a convict was transferred from the Cuddalore district jail to instruct the cooks here how to prepare and cook it. He arrived here on 27th September and is now engaged in this work. So far the results, obtained from this change in the scale of dietary in this jail, are satisfactory, no cases of jail diarrhoea being admitted during the month."

"I further wish to state that all the Trichinopoly convicts in the Cuddalore jail attributed their illness and bad health here to the coarse unsifted ragi flour which, they stated, could not be properly cooked, the pudding and cake made from this flour tasting raw and gritty. On my arrival here I found their statements on this subject quite true and not exaggerated in the least. In my opinion the coarse ragi flour formerly in use here would cause irritation of the alimentary canal, and thereby excite diarrhoea or dysentery in the case of those convicts who had previously suffered from these diseases before committal to prison or during the famine. Now that the ragi is properly ground, the flour sifted, and each convict gets a ration of 24 oz. of this flour per diem, time will show whether the above opinion regarding the exciting cause of those diseases, which have produced such a high mortality in this jail, is correct or not."

I think the above points pretty conclusively to the fact that the diet was at fault, and that a radical change, such as was introduced by Dr. Ritchie, was needed and should be maintained."

2nd.—That the wells have deteriorated and a fresh water-supply should be obtained. The well water at Trichinopoly to the ordinary tests of smell, taste, sight, is good water. I carefully examined it when I last visited Trichinopoly in October. This is the impression made also upon Dr. Ritchie, "the water-supply, which is well filtered before use, good" (letter No. 1083, 6th August 1883). As you remark in your letter (No. 5642 of 15th November 1883) "it is worthy of remark that the prisoners and jail officials have been drinking the water of these

wells (unfiltered until recently) since the year 1867, and during this period of 16 years it has not been discovered by the many eminent medical and sanitary officers who have inspected the jail that the quality of the water has been deleterious to health." Still it is impossible to ignore the chemical analysis, for it will be seen, if we compare the analysis made in 1882 with that forwarded with your letter of 15th November 1883, No. 5642, (*vide* appendix A), that every objectionable element has increased, especially the albuminoid ammonia.

The explanation offered by you in paragraph 7 about the present site of the jail being most probably some ancient battle-field as evidenced by human bones having been turned up during the process of well-digging, reaches me now for the first time, and may be a sufficient explanation of the circumstance. However, whatever the explanation may be, we are not justified in the face of the analyses given in appendix A in continuing to use the water.

3rd.—That the Superintendent of the Trichinopoly jail should be a medical officer.—In the concluding paragraph of your letter, No. 4990, of 17th October 1883, you say, "the

* Not communicated to this office.

Surgeon-General in his letter to Government" (G.O., No. 1946, dated 24th July 1883,

Judicial department), "does not agree with me in opinion that the duties of the Civil Surgeon at Trichinopoly are exceptionally heavy, or that his visits to the jails need be hurried or short. It therefore remains with the medical authorities to state whether they are satisfied with the present arrangement for the discharge of the medical duties of the jail. It is an important medical question which I must leave to you and the Surgeon-General to decide."

Now if we read your remarks in letters, No. 5621, dated 18th Nov. 1881, and No. 4229, dated 20th September 1882, those of the Sanitary Commissioner for Madras, those of Mr. Johnston, and those of Dr. Ritchie placed in juxtaposition (*vide* appendix B), who lately took charge, it is very evident that although you forcibly drew the Superintendent's attention to the diet used, and the Sanitary Commissioner felt confident the fault lay in the diet, the Superintendent entirely failed to grasp the importance of the matter, and devoted no increased attention to the subject. He seems to have treated our remarks as so much waste paper. I am not exonerating the medical officer, who, I think, should also have given more attention, with the evidence of an essentially-diet disease before him, to the food; but if, as I understand it, all these internal arrangements essentially lie with the Superintendent of the jail—a state of food, as described by Dr. Ritchie in paragraph 4, ought to have been long ago detected and remedied. With such evidence before me I cannot help thinking the Superintendent failed to see the importance of giving that "full and personal attention to the matter" described by you in paragraph 2; indeed, I am inclined to rather as much from his own words, for in letter, No. 197, dated 24th January 1883, he writes, "the medical officer daily inspects the rations." "the medical subordinates also inspect the rations, but not the cooked food before distribution to convicts. The jailer, however, never fails to see to this daily; each cook-house is inspected by him, and he is

* It would be very interesting to know if any of these "experienced convicts" ever suffered from dysentery or diarrhoea.

accompanied on these occasions either by the deputy jailer, who is a Hindu, or by 1 or 2 experienced convict overseers who taste and examine the food. I frequently do this myself," how often is not stated.

Now it seems to me it is just here the mischief arose: the rations seen at the office may have been excellent, but between the office and the prisoners' ingestion the supervision of the food seems to have miscarried principally with the jailer, sub-jailer, and 1 or 2 experienced convicts. The present Superintendent seems to have failed here in one of the most important portion of his duties, and which in your letter, No. 5621, of 18th November 1881, you had particularly pointed out to him. "This duty requires your personal attention to prevent frauds practised by the contractor, the jail subordinates or the cooks." This matter immediately fixed Dr. Ritchie's notice, and would, I imagine, that of any intelligent medical officer, especially if he had any experience of jails.

But it may be argued it is the medical officer's duty to see to these diets. I think it would be as well that point was more explicitly settled; from the correspondence and my own experience of jails, I gather it is the duty of the medical officer to inspect the rations as supplied by the contractor at his morning visit, to see they are of good quality; but that their subsequent manipulation lies with the jail authorities. In the new Jail Code it is stated, paragraph 99, "the officers to see that it is properly prepared." If it is intended he should be more responsible than this, then it becomes very evident that to a medical officer living some 3 miles away, as does the Trichinopoly Civil Surgeon, having other and important duties to perform, such inspection is quite beyond his powers, and the only way to obviate it would be to make a medical officer the Superintendent.

I am, moreover, struck with the amount of duties laid down in the Jail Code for a medical officer, not being Superintendent. They occupy, I notice, no less than 43 paragraphs of the work, whilst the Superintendent's occupy only 23. If his duties are so multifarious, and from the code they embrace I see every matter connected with the health of the prisoners, their treatment in hospital when sick, the regulation of their diet, clothing, work, and punishment so far as they are concerned, in the maintenance of their health, and in general everything connected with the

hygiene of the jail and its inmates; visiting the jail during epidemics "as many times daily as may be necessary for the due and efficient performance of his duties;" "special record of all cases of cholera;" "post mortem of all deaths;" "examination of every prisoner about to be removed from any jail on whatever grounds, &c.;" no less than 12 books to keep written up, and a report on almost every "detail of his duties to be made to the Superintendent." All I can say is it seems to me quite impossible for an officer in charge of a large civil station and hospital, with sanitary and general duties, to do all this jail work in addition. It would simplify things immensely and conduce, I am sure, to the hygienic welfare of this jail if the Superintendent were a medical officer living on the spot. In my inspection report of 13th October 1883, after alluding to the change which I perceived in the general appearance of the prisoners, I thus concluded my remarks: "I find a radical change has been made in the diet by the present Superintendent, Dr. Ritchie, in the way of grinding, mixing and, above all, in the quantity and cooking of the food and with admirable results. I think it highly advisable the superintendence should be continued."

APPENDIX A.

ANALYSES of water in the Trichinopoly Central Jail.

	No. I. South-east angle. Used for drinking purposes by the prisoners and jail officials.	No. II. Hospital compound. Used for drinking purposes by the patients and jail servants.	No. III. Female yard. Used for drinking purposes by the females.
Total solids Grms. per litre.	0.64	0.63	0.40
Volatile solids "	0.30	0.33	0.10
Sodium chloride "	0.14	0.146	0.04
Total hardness Clark's scale ..	12° 25	11° 2	10° 45
Permanent hardness "	5° 25	8° 4	3° 85
Free ammonia Mlgrms. per litre.	0.08	0.058	0.024
Albumenoid ammonia "	0.16	0.12	0.08
Nitric acid .. Mlgrms. per litre (as ammonia).	12.0	11.5	8.6

REMARKS.—No. I. Abundant deposit, chiefly composed of vegetable debris. Large infusoria and rotifers very numerous.

" II. Scanty vegetable and argillaceous deposit. No infusoria observed.

" III. Very scanty sandy deposit. No infusoria observed.

25th March 1882.

	No. I. Central jail, Trichinopoly, sample water.	No. II. Central jail, Trichinopoly, sample water.
Total solids Grms. per litre.	0.83	0.87
Volatile solids "	0.48	0.42
Chlorine "	0.075	0.071
Total hardness Clark's scale ..	14° 7	13° 3
Permanent hardness "	6° 3	5° 6
Free ammonia Mlgrms. per litre.	0.04	0.02
Albumenoid ammonia "	0.06	0.16
Nitric acid .. Mlgrms. per litre (as ammonia).	10.5	9.0
Apparent quality of the water as inferred from the results obtained on examination,	Bad.	Bad.

REMARKS.—No. I. Very scanty deposit of vegetable debris.

" II. Scanty deposit of vegetable debris.

" III. is not so bad as No. I.

9th November 1883.

MADRAS,
10th December 1883.

(Signed) M. C. FURNELL,
Sanitary Commissioner for Madras.

APPENDIX B.

Remarks by Inspector-General of Jails.	Remarks by Sanitary Commissioner for Madras.	Remarks by Mr. Johnston, Superintendent of Jails.	Remarks by Dr. Ritchie, acting Superintendent, during the absence of Mr. Johnston.
"...that the cause may be either in the dietary or an excessive use of punishment diets, or that the prisoners are over-tasked." "...that a loss of weight means generally a loss of health, and that the man is not sufficiently nourished." "The Superintendent should also see that the rations are full weight, and that the meals are completely and properly cooked, and that the prisoners get the full quantity to which they are entitled. This duty requires your personal attention to prevent frauds practised by the contractor, the jail-subordinate, or the cooks. The discovery of the late frauds at the district jail shows how important it is not to delegate these duties to any subordinate." "I understand that you have given full and personal attention to this matter, and that all food is inspected daily by the medical officer, and that any defect in quality is noted by that officer and at once remedied."	"This (the mortality) points most probably to something wrong in the diet, and as we know the ordinary prison diet is carefully looked after — indeed in this very letter it is stated 'you (the Superintendent) have given full and personal attention to this matter, and that all food is inspected daily by the medical officer.' — I should feel inclined to suspect that more subtle portion of it, which impurity is less easily detected, viz., the water; for, as has been remarked by the greatest hygienist of modern times, diarrhoea or dysentery constantly affecting a community is far more likely to be produced by bad water than by any other cause." "...had I charge of the Trichinopoly jail and were I anxious to save life, I should at once make a radical change in the diet."	"It is difficult to trace the direct cause of the disease, and my belief is that it originated neither from the diet, nor labor, nor punishment, but that it arises from the same sources as all epidemics arise from, and for which no specific reason can ever be given." "The unusual mortality and loss of weight among the prisoners would naturally lead one to suspect that the cause may be either in the dietary or an excessive use of punishment diets; but that the prisoners are over-tasked; but facts, however, prove the contrary as far as this jail is concerned." "I also test the weighments in the ration distribution room, and have never yet found a single deficiency in weight; if anything, there generally is a little to the good. The weight of the cooked meal is also frequently tested by me and the jailer and deputy jailer. You will thus see that every possible attention is paid to the food of the prisoners, and there is not the slightest reason to attribute the sickness to the dietary."	"On assuming charge of this jail on 13th July, I found the general sanitary condition of all the jail buildings was very satisfactory, the water-supply which is well filtered before use good, and the personal hygiene of the jail population well attended to." "A few days after taking charge I found the ragi flour in use in this jail was very coarse and inferior in quality, due to bad grinding. To prove this to my own satisfaction and that of the jail officials, I obtained samples of this from the Villor and Cuddalore jails, and on comparing these with the flour in use here, the latter was found to be very coarse and inferior in quality, due to defective grinding. I may mention that the flour owing to its coarseness could not be properly cooked, and when a portion of the cake or pudding was placed in the mouth it felt gritty, and, when masticated, there was a taste of raw, uncooked ragi left for some time." "I may mention that, in my opinion, coarse flour of the description formerly in use here, and which could not be properly cooked, is sure to predispose to or excite diarrhoea, looseness of the bowels, or cause malnutrition, particularly in the case of those convicts whose general health is below par." "In my last monthly report I informed you that I had substituted curma for cholam in the dietary of a large gang of 117 convicts located in camp outside the jail. On the expiration of one month these were weighed with the following result:—82 convicts gained weight, 11 neither gained nor lost, their weighments taken in July and August being the same, and 24 lost weight; but I may mention that the loss in half the number of the latter convicts did not exceed 2 lb., which is quite trivial. There was not a single case of dysentery or diarrhoea occurring among this gang since the above change in their dietary was made." "I further wish to state that all the Trichinopoly convicts in the Cuddalore jail attributed their illness and bad health here to the coarse, unfiltered ragi flour which, they stated, could not be properly cooked, the pudding and cake made from this flour tasting raw and gritty. On my arrival here, I found their statement on this subject quite true and not exaggerated in the least. In my opinion the coarse ragi flour formerly in use here would cause irritation of the alimentary canal and thereby excite diarrhoea or dysentery in the case of those convicts who had previously suffered from these diseases before committal to prison or during the famine."

MADRAS,
10th December 1883.

(Signed) M. C. FURNELL,
Sanitary Commissioner for Madras.

Mis. No. 3327.

The Government await the remarks of the Inspector-General of Jails on the letter read above.

17th December 1883.

(Signed) E. F. WEBSTER,
Chief Secretary.

From Surgeon-General W. R. CORNISH, F.R.C.S., C.I.E., Surgeon-General with the Government of Madras, to the Chief Secretary to Government, dated Madras, 11th January 1884, No. 15.

Referring to G.O., No. 1356, Judicial department, 22nd May 1883, and my letter, No. O-183 of 7th July, paragraph 7, I have now the honor to submit, for the consideration of Government, a few observations with reference to the excessive sickness and mortality lately prevailing in the central jail of Trichinopoly.

2. This report I have purposely delayed, pending the experiment of placing a medical officer in executive charge, and until I had an opportunity of making another inspection of the jail.

3. I may premise what I have to record by stating that the central jail of Trichinopoly has always had a high rate of mortality from bowel diseases. During the famine year of 1877 the total mortality was not excessive, considering the condition of the population of the surrounding districts. From the Sanitary Commissioner's annual report of 1880, I see that the mean mortality of the jail for the 7 years ending 1877 was 40.2 per mille of the daily strength, the death-rate for 1878 was 42.5 per mille, for 1879 32.7 per mille, and for 1880 33.6 per mille. In the latter year there was an excessive death-rate (184.8 per mille) in the district jail of Trichinopoly.

4. In the year 1874, as Sanitary Commissioner, I visited Trichinopoly owing to a great increase in the prevalence of scurvy and bowel diseases. On this occasion, I was accompanied by the Inspector-General of Prisons and evidence was laid before us by the medical officer that inferior food-grains had been supplied by the contractor. The medical officer was then of opinion that the causes of the increased sickness and mortality were connected with the food supplies, and in some respects I concurred with the medical officer that there had been irregularities connected with the diet.

5. The special increase of bowel diseases in the Trichinopoly central jail appears to have set in about May 1881, but became more aggravated in September and October of that year. In November epidemic cholera appeared in the jail and found many victims amongst the prisoners. The fatal bowel diseases continued to prevail more or less all through the year 1882. In 1881, the number of deaths were 125 or in the ratio of 121.3 per mille of strength; of these deaths, however, 32 were due to epidemic cholera in November and December. In 1882 the deaths were 145 or in the ratio of 176.7 per mille of the daily strength, and the great bulk of these casualties resulted from bowel or other diseases implying defective nutrition.

6. In 1883 the same type of disease continued to prevail, although large drafts of prisoners had been removed to other jails. Twenty-six deaths occurred from January to December, some deaths also occurred in the drafts sent to Ootacamund, Cuddalore and Coimbatore. The excessive mortality began to abate after April 1883, and from the month of May to December there has been nothing abnormal in the jail mortality.

7. At my inspection of the prisoners in the end of November 1883, I found the men very much improved in physique, as compared with their state in September 1882, and the cases in hospital were few and unimportant. A case of epidemic cholera had been admitted the day previous to my inspection, and more cases of this disease have subsequently occurred. It should be mentioned, however, that cholera had been prevailing in the town and district for some weeks before it appeared in the jail. The prisoners transferred from this jail to Ootacamund, Coimbatore, and Cuddalore, I inspected during my tours, and found they had generally gained in weight and were in good health.

8. In regard to the sanitary condition of the jail, the buildings are kept exceedingly clean. The barracks are well ventilated, and, owing to the reduced strength of the jail, there has been no overcrowding. There is a defect in the construction of the jail inasmuch as the blocks are not provided with night closets leading off from the

wards. When diarrhoea is prevalent in a jail, the present arrangements must tend to the discomfort, and be injurious to the health of the men, by making the air of the wards foul. Such structural arrangements, however, are common to most of the central jails in this Presidency, where these fatal forms of bowel disease have not been excessive.

9. The surface drainage of the jail area is still defective, and masonry channels have not been provided for carrying off storm waters. The deterioration of the water of the wells, within the jail, as shown by chemical analysis, may possibly be due to the absence of properly constructed masonry channels for the rapid removal of storm water falling within the jail area. With these exceptions there is nothing to find fault with in regard to the sanitary condition of the jail.

10. When I inspected the jail in August 1882, I remarked with reference to the unhealthy condition of the prisoners:—

"Of the nature of the disease there is no doubt. It is the old form of jail diarrhoea, dropsy, and dysentery, which 20 years ago caused so large a mortality in Madras prisons. It is undoubtedly due to bad or imperfect nutrition, whether before or subsequent to admission. I am unable to say, but looking to the care exercised in the choice of grain and other articles of food, and in cooking and apportioning the rations, most probably to diseased conditions anterior to admission."

I remarked, further, "I can only suggest a continuance of great care and watchfulness in the food issues, and especially of an ample supply of anti-scorbutic vegetables, picking out men who lose weight for either lighter task or better diet, or both."

11. That the disease was of dietetic origin, I have never had any doubt. It was noticeable that a large number of the men who died had been admitted into jail in the famine period of 1877 and 1878, and in many cases there was a record of their having suffered from privation in the famine period. It was not, therefore, impossible that the privation of that period, and subsequent prison-life, had been factors in the unusual sickness and mortality. This view was also adopted by Surgeon-Major Ritchie after a short experience of the medical and executive charge of the jail.

12. But from Dr. Ritchie's reports, I am inclined now to think that there was something amiss in the jail dietary during Mr. Johnston's superintendence, and that the previous privation of the prisoners during the famine period had simply predisposed these men to suffer in a greater ratio than others.

13. Mr. Johnston gave over charge of the jail to Dr. Ritchie on the 13th of July 1883, and the latter officer then took up the combined duties of superintendent and medical officer for a period of 3 months. In his first report, Dr. Ritchie states:—

"A few days after taking charge I found the ragi flour in use in the jail was very coarse and inferior in quality, due to bad grinding. To prove this to my own satisfaction and that of the jail officials, I obtained samples from the Vellore and Cuddalore jails, and on comparing these with the flour in use here, the latter was found to be very coarse and inferior in quality, due to defective grinding; I may mention that the flour owing to its coarseness could not be properly cooked, and when a portion of a cake or pudding was placed in the mouth it felt gritty, and when masticated there was a taste of raw uncooked ragi left for some time."

14. Dr. Ritchie lost no time in bringing about improvements in the grinding and better cooking of the ragi. He further solicited sanction to use comboo instead of cholam, which was granted. Before the expiry of his temporary appointment he was able to report that the tendency to bowel-complaints had almost entirely disappeared.

15. This will be more plainly observed in the following abstract table which has been compiled from the monthly returns of the Trichinopoly central jail. It will be seen that 2 deaths occurred in July from diarrhoea and 1 in September, and during this time the prisoners generally were improving in health and strength:—

1883.

Month.	ALL DISEASES.		Admission for special diseases.	Total treated.	Total died.	Daily average strength.
	Total number treated.	Total number deaths.				
January	69	8	Diarrhoea 10 Dysentery 4	10	2	747-06
February	51	1	Diarrhoea 4 Dysentery 1	4	1	713-53
March	62	4	Diarrhoea 7 Dysentery 3	7	3	655-29
April	57	6	Diarrhoea 5 Dysentery 2	5	3	606-66
May	67	..	Diarrhoea 3 Dysentery 1	3	..	564-32
June	50	1	Diarrhoea 9 Dysentery 3	9	..	497-60
July	45	2	Diarrhoea 4 Dysentery 2	4	2	446-19
August	44	..	Diarrhoea 4 Dysentery 2	4	..	481-41
September	49	2	Diarrhoea 6 Dysentery 1	6	1	492-53
October	47	..	Diarrhoea 1 Dysentery 2	1	..	516-09
November	36	..	Diarrhoea 2 Dysentery 1	2	..	524-50
December	28	2	Diarrhoea 2 Dysentery 1	2	1	506-45
Total	595	26	Total	73	15	

16. While Dr. Ritchie was in charge of the jail, the diet contractors petitioned the Inspector-General of Jails complaining that they had to supply a much larger quantity of ragi under Dr. Ritchie's management than had been previously demanded of them. This petition was disposed of by the Inspector-General of Jails in his order, No. 4420, dated 14th September 1883, and I think the correspondence is calculated to throw some light on the causes of sickness and mortality.

17. The Inspector-General remarks as follows:—

"According to the set scale every convict shall have 24 oz. of good ragi flour on the days that ragi is issued.

"The Inspector-General will not permit any diminution of this allowance. By their own statements the contractors show that the grain as supplied by them is so full of husk and foreign matter, that 29 oz. of grain will only yield 24 oz. of flour. If, therefore, the contractors are permitted to supply only 24 oz. of grain, it is evident that the convicts will receive but little more than 19 oz. of ragi. In fact the contractors maintain that they ought to be paid for ragi husk at the same rate they are paid for pure ragi, which of course is inadmissible.

"The contractors state that this practice has been followed by them for years. If this be true, it is clear that they have failed in their contracts, and that the prisoners have not received the allowance of food in full."

18. It would seem to be clear that, in regard to this particular grain, the prisoners in past years have not had it properly ground or cooked, and that the quantity of nutritious flour has been eked out by "husk or foreign matter."

It is always my practice in inspecting jails to see and taste the cooked food, and in regard to Trichinopoly jail I must in fairness to the jail officials state that I have observed no deficiencies, still as the visits of an inspecting officer are always anticipated, it may be that ordinary irregularities would not come to his notice. Dr. Ritchie was no doubt very particular in rejecting much of the coarse bran of the ragi which some superintendents would have accepted, but I do not think the contractors would have stated what they did in their petition if care had been taken in the period prior to Dr. Ritchie's arrival to see that the prisoners got their full quantity of ragi flour.

19. The attention of the superintendent had been directed by the Inspector-General of Jails repeatedly to the diet of the prisoners. The Sanitary Commissioner

and myself called attention to it, and we have always been assured by the superintendent that he was alive to the grave importance of the matter, but on a temporary change of superintendents we find Dr. Ritchie after a few days experience declaring the ragi to be "badly ground and cooked," and the contractors complaining that they are called upon to supply larger quantities of grain than they were accustomed to deliver.

The inference from these facts is inevitable, viz., that the precautions required of all jail superintendents in the matter of feeding prisoners were not duly observed, and, in my opinion, habitual defects in the preparation and short issues of nutrient food would account for the lamentable excess of sickness and mortality which has occurred in 1881 and 1882.

20. It is obvious that the feeding of prisoners is a most important part of the duty of the superintendent of a jail, and that no other officer can properly be entrusted with it. The medical officer can inspect cooked and uncooked rations, and the supplies tendered by the contractor, but it is not his business to see to the preparation, cooking and distribution of the rations. The superintendent's duties under this head are clearly laid down in the jail rules, and so much importance has been given to the subject of jail diet, that it is difficult to understand how any superintendent can go wrong with the standing orders on the subject constantly before him.

21. I have been favored by the Inspector-General of Jails with a perusal of letter, No. 1547, of 10th December 1883, from the Sanitary Commissioner, Madras, and I find that officer to be in substantial agreement with myself, that the principal causes of disease in the Trichinopoly jail have been of a dietetic nature. The diseases in fact were precisely those which we saw on such an extended scale in the famine camps in 1877 and 1878, and which in former years, before the new dietary was introduced, were so prevalent and fatal in Madras jails. These diseases are of very slow development, but when once established by some defect in nutrition, they are practically unamenable to medical treatment. They depend on wasting and degeneration of the tissues of the delicate organs by which food is assimilated and made fit for the sustenance of the human frame, and when this degeneration has reached a certain stage, food ceases to nourish, and medical science is powerless to create or renew the structures by which the elements of food pass into and become a part of the animal frame. Hence the very unsatisfactory results of treatment in jail hospitals of those peculiar forms of bowel disease, dropsy and anæmia, which result from long continued privation and insufficient food.

22. I observe that the Inspector-General of Jails, in paragraph 41 of his report for 1882, alludes to the opinion held by some authorities that these diseases are practically infectious or communicable.

I do not deny that certain old jails may become tainted with the seeds of disease, but the central jail of Trichinopoly is a new building with the floors asphalted throughout, and no evidence has come before me to support the view that the excessive sickness was due to this cause. The female prisoners in Trichinopoly throughout have had fairly good health and have not experienced a high mortality.

23. The superintendent of the jail, in paragraph 44 of the same report, dwells also on the communicable nature of the disease, without adducing any evidence except that of his own belief. Mr. Johnston is under the impression that the disease was introduced from Tanjore jail by men transferred to Trichinopoly. The Tanjore jail is an old and unwholesome building, and experience has shown its unsuitability for the reception of convicts, but there is no proof given that the special diseases alluded to are infectious in Tanjore any more than in Trichinopoly.

24. Under the impression that the disease was of a communicable nature, it is strange that no special sanitary precautions were adopted by the superintendent to arrest its spread. In the hospital case books, I find numerous recorded instances showing that men had been suffering from bowel-complaints for days or weeks before admission into hospital, and it seems obvious with diarrhoea so widely spread, that special precautions should have been taken for having such cases early detected and

placed under treatment. The jail maistry of each ward must have had knowledge whether any of the prisoners were habitual sufferers from diarrhoea, and the frequency of visits to the night closets or day latrines should have been brought to the notice of the superintendent, but if any special precautions of this nature were made, I am unacquainted with them.

If the hospital case book contains a correct record of the facts of the patients' previous history, it is evident that very many cases of bowel-complaint were unreported at a stage in the disease when medical treatment might have been useful.

25. The medical officer of the jail during this severe sickness was Surgeon-Major J. B. Thomas, who had been in medical charge of the jail from 1880. Dr. Thomas evidently believed that there was something wrong in the jail dietary, for he placed a large number of men on rice diet with extra meat, and obtained sanction to a general increase of 2 oz. in the ragi ration, but although I was in frequent communication with him on the subject of the unhealthiness of the jail, it seemed to me that he failed to grasp in its full significance the real nature of the malady he had to deal with. Dr. Thomas' visits to the jail and inspection of prisoners' rations appear to have been generally in accordance with the Jail Code. He should, however, have entered the cases in his own handwriting, and after the cessation of the cholera epidemic he should have resumed the practice of making *post-mortem* examination in the fatal cases and recording the results. With these exceptions his hospital duties appear to have been carefully performed, and I do not think that the sickness and mortality are attributable to any neglect of the prisoners after they came to hospital. The jail regulations are answerable for non-attendance of medical subordinates during the long nights when sick prisoners specially require attention. This defect has subsequently been partially remedied by requiring a medical subordinate to be on duty inside the hospital at night.

26. It would no doubt be a convenient arrangement if the offices of superintendent and medical officer of a jail, so far removed from the town, could be united in one person. But experience at Vellore, where the jail is also a considerable distance from the cantonment, shows that it is not essential to secure adequate care of the health of prisoners. I have seen many jails in this Presidency and other parts of India, and I know of none where more scrupulous attention is given to every sanitary and dietary precaution than in the Vellore central jail by Lieutenant-Colonel W. S. McLeod, who is a non-medical superintendent. In this jail there has never been any unusual sickness and mortality due to faulty nutrition, and even in the famine period many were rescued from great danger by personal superintendence and watchfulness of every detail of jail management. I am satisfied that the prescribed dietary of central jails is sufficient to maintain health, always provided that the prisoners get what the Government intend they should have, and a professional man is not wanted to superintend discipline and the internal economy of a prison.

27. It is quite natural when a large proportion of the cases admitted into hospital end fatally that jail authorities should surmise something wrong in the medical arrangements and treatment of the sick. It would be much more to the point if they could recognise that starvation diseases are practically incurable in their chronic stages, and that not the letter only, but the spirit of the rules relating to diet, require their most careful and increasing attention day by day and year by year.

28. Under the contract system, which so far as I know is peculiar to the jails of Madras, by which a contractor undertakes to find the ingredients of a diet for a fixed sum, there must necessarily be a constant struggle between the contractor on the one hand and the jail officials on the other. The contractor naturally seeks to make as much profit as he can, and perhaps is not always over-scrupulous as to the methods he employs. The jail officials are bound to see that the contract is faithfully executed, and, as a rule, I believe they do; but from the Inspector-General of Jails' proceedings quoted in paragraph 17, I must state my opinion that this duty has not been effectively discharged in the Trichinopoly central jail.

From Colonel T. E. TENNANT, Inspector-General of Jails, to the Chief Secretary to Government, dated Bellary, 15th January 1884, No. 15.

I have the honor to forward, for the information of the Right Honorable the Governor in Council, copy of Surgeon-Major Nanney's report on the health of the prisoners in the central jail at Trichinopoly.

2. The health of the prisoners is slowly improving. It is unfortunate that cholera should have attacked this jail, but I am thankful to report that only 1 case proved fatal out of 5 seizures. The prisoners still remain in camp.

ENCLOSURE.

From Surgeon-Major L. C. NANNEY, in medical charge, Central Jail, Trichinopoly, to the Inspector-General of Jails (through the Superintendent), dated Trichinopoly, 1st January 1884, No. 1.

I have the honor to submit my report for the month of December on the state of the health of the prisoners in the central jail at Trichinopoly, agreeably to your letter, No. 4229, of 20th September 1882.

1. There were 20 admissions during the month and 3 deaths. Two were treated for dysentery, 1 of which died, the *post-mortem* revealing ulceration of the greater portion of the intestinal canal, the lower section of which had become gangrenous. This man passed 2 large round worms at the commencement of the attack.

2. Five cases of cholera occurred, and out of the number only 1 proved fatal. I attribute this to their being treated early, and receiving every care and attention, both day and night, until out of danger; they were seen twice daily by myself and once by my Assistant Surgeon. When the fourth case occurred, I recommended the removal of the whole of the convicts into camp, and before the superintendent was able to carry out my suggestions the fifth one was attacked. Since their transfer, however, no fresh cases have taken place. One man died suddenly in his block, the *post-mortem* showing the cause to be disease of the heart.

3. The greatest care and attention has been bestowed on the prisoners and precautionary and prophylactic measures adopted, which so far have been attended with the most satisfactory results. I may cite the following as some of the suggestions made by me:—

- (a) That a drink of diluted sulphuric acid and water be issued daily during the prevalence of cholera.
- (b) Warm rice-congee with lime pickle be given every morning in lieu of the cold indigestible ragi cake, to which the convicts have been hitherto accustomed.
- (c) Extra clothing provided.
- (d) The water used for drinking purposes previously boiled.
- (e) The wards in which cases occur be at once whitewashed and disinfected by burning sulphur and tar.
- (f) The clothing worn by cholera patients be burnt.
- (g) Convicts when attacked to be at once removed to a shed outside of the jail some distance from it.
- (h) The cholera dejecta to be carefully disinfected and buried deeply in trenches at some distance from the camp.
- (i) The extra allowance of salt recommended in November has been continued.
- (j) The men are not turned out early in the morning, and the work given them has been of a very light description.
- (k) They have been allowed to wear a cumby during the day, as the season has been an unusually cold one for Trichinopoly.

4. No case of cholera has occurred since the 13th December. The convicts are still in camp.

5. For 5 days during the month there were no admissions into hospital, showing the present very healthy and satisfactory condition of the prisoners.

6. I am devoting special attention to the food, its quality, and mode of preparation, which, in my opinion, has much to do with the health of the men, and is a matter on which too much care cannot be bestowed. Any neglect under this heading will render the convicts more susceptible to disease.

7. My senior subordinate, P. A. Manuallaw Pillai, No. 69, has attended most carefully to my instructions.

8. I have to thank the superintendent for so readily carrying out my suggestions and recommendations, and for the help he has given me in all matters connected with the health of the prisoners.

From Deputy Surgeon-General M. C. FURNELL, M.D., F.R.C.S., Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Madras, 4th February 1884, No. 116.

In continuation of my letter, No. 1548, dated the 11th December 1883, I have the honor to forward the accompanying extract from the annual sanitary report of the central jail at Trichinopoly.

ENCLOSURE.

EXTRACT FROM ANNUAL SANITARY REPORT OF THE CENTRAL JAIL, TRICHINOPOLY, FOR 1883.

As inferior and badly-cooked food is the cause assigned by my predecessor for the great mortality and sickness in this jail, I have, since taking charge, directed my special attention to the matters connected with the health of the convicts, more particularly the diet. The mutton has often been, and still is, of an inferior description, and pumpkin was formerly oftener supplied than it ought to have been. The extra care and attention bestowed by me has been attended with most satisfactory results. I have examined the grain daily, and seen that it was properly sifted and cooked. Sickness has gradually disappeared; there are no cases of diarrhoea or dysentery, and the general health of the convicts is exceedingly good. For the first nine months of the year the average daily sick was 11.73, and for the last three months it has been only 2.50.

The average daily sick for December 1882 was 24.12.
The average daily sick for December 1883 was 3.64.

From Colonel T. E. TENNANT, Inspector-General of Jails, to the Chief Secretary to Government, dated Cocanada, 8th March 1884, No. 67.

With reference to G.O., 17th December 1883, No. 3327, Judicial department, I have the honor to forward, for the consideration and orders of His Excellency the Governor in Council, the accompanying explanation submitted by Mr. J. W.

Johnston, the officer in charge of the central and district jails at Trichinopoly, on the reports of the Sanitary Commissioner for Madras, dated 10th December 1883, No. 1547, and of the Surgeon-General with the Government of Madras, dated 11th January 1884, No. 15, regarding the excessive sickness and mortality in the central jail at Trichinopoly.

2. These reports reflect so seriously on the Superintendent's management that I considered it but right to forward both reports to Mr. Johnston to afford him an opportunity for explanation. This has consequently delayed the submission of my report called for in the above order. To facilitate reference, the entire correspondence has been put into print, and I do myself the honor to forward copies of the same for the information of Government.

3. Both the Surgeon-General and the Sanitary Commissioner concur in opinion that the primary cause of the excessive mortality has been due to faulty nutrition. The grounds on which these officers found their opinion are set forth with great care and minuteness in their reports, and if their conclusions be well founded, there seems now no longer room for doubt as to the cause of the heavy mortality.

4. Dr. Cornish, when inspecting the jail in August 1882, remarked with reference to the nature of the disease: "it is the old form of jail diarrhoea, dropsy, and dysentery which 20 years ago caused so large a mortality in the Madras prisons. It is undoubtedly due to bad or imperfect nutrition, whether before or subsequent to admission I am unable to say; but, looking to the care exercised to the choice of grain and other articles of food, and in cooking and apportioning the rations, most probably to diseased conditions anterior to admission." Dr. Cornish further added: "I can only suggest a continuance of great care and watchfulness in the food issues, and especially of an ample supply of anti-scorbutic vegetables, picking out men who lose weight for either lighter task or better diet, or both. The food I saw (cholum day) was perfectly good and well cooked, and of proper quantity." These remarks were distinct warnings to all the jail officers, especially to the medical officer, who is responsible for the health and well-being of prisoners under his charge.

11. In 1881 there were 125 deaths, giving a mortality of 121.3 per mille, and in 1882 there were 145 deaths, giving a death-rate of 176.7 per mille to daily average strength. If this mortality was due to defects in the diet, and the sanctioned diet scales have been found by long experience to be sufficient, it follows that the food must have been seriously tampered with. Small peculations can be made by the cooks, who may rob a little mutton, ghee, or a small quantity of grain, but the prisoners could not have starved to death, unless wholesale embezzlement had been carried on; and if such were the case, I have no hesitation in affirming that the jailer and deputy jailer, the block warders, and the medical subordinate must have been aware of the frauds, and probably shared the plunder, and these officials should be called to account. If they cannot, or will not, render satisfactory explanation, their services should be dispensed with.

12. With regard to Mr. Johnston, after making every allowance for the shortcomings of others, I cannot admit that the heavy mortality which has occurred in this jail was beyond reach of remedy by an energetic and vigilant Superintendent. It must, however, rest with Government to decide whether a Medical Superintendent should not be selected for the charge of this jail.

13. Appended is a summary of the death-rate amongst the prisoners in the Trichinopoly central jail from 1873 to 1883:—

	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.
Daily average strength.	933.80	951.78	955.48	1004.27	1097.85	1149.30	1222.50	1100.40	1030.43	830.27	552.14
Number of deaths.	58	39	52	27	60	50	40	53	175	145	31
Deaths per 1,000 from all causes.	55.9	40.9	54.4	23.9	54.6	43.5	32.7	44.4	121.3	176.7	55.1

ENCLOSURE

From J. W. JOHNSTON, Esq., Superintendent, Central Jail, Trichinopoly, to the Inspector-General of Jails, dated 21st February 1884, No. 166.

I have the honor to acknowledge the receipt of the reports of the Sanitary Commissioner of Madras, dated 10th December 1883, No. 1547, to the Inspector-General of Jails, and of the Surgeon-General with the Government of Madras, dated 11th January 1884, No. 15, to Government, regarding the sickness and mortality in this jail.

2. These reports contain animadversions on my administration of the jail, based entirely on Dr. Ritchie's reports to you, while I was away on 3 months' privilege leave, from July to October 1883, and I may mention that previous to and up to the time of his arrival here no fault was found either with me or anything I did or omitted to do.

3. Dr. Ritchie's reports contain the following assertions:—

I.—That the ragi flour was very coarse and inferior, due to bad grinding.

II.—That, in order to show this, samples were obtained from the Cuddalore jail which showed the flour in use here to be inferior owing to defective grinding; that so bad was it, that it could not be properly cooked, and on being tasted felt raw and gritty.

III.—That no attempt had previously been made to have this flour properly sifted; that, in fact, the grain was too coarsely ground for this to be carried out.

IV.—That the Trichinopoly convicts transferred to the Cuddalore jail attributed their illness and bad health at Trichinopoly to the coarse unsifted ragi flour which could not be properly cooked, and that Dr. Ritchie found these statements quite true and not exaggerated in the least.

V.—That, in his opinion, such improperly cooked ragi would be sure to predispose or excite diarrhoea or cause malnutrition.

4. Now, with regard to the first, I beg to state that, ever since I have been in this jail, the ragi has been ground strictly in accordance with existing rules and practice, and in the same way as natives use it themselves. I saw it daily, and did not consider it coarse. Dr. Thomas, the medical officer, and an officer of many years' jail experience both in this and in the Tinnevely jails, never pronounced it coarse; the several able inspecting officers, who, from time to time, visited this jail,

never found fault with it or pronounced it to be in any way coarse or inferior in quality; the women who grind it, and the prisoners who eat it, never complained of its being coarse or tasting raw and gritty in their mouths; in fact, such an objection was never suggested before Dr. Ritchie's arrival.

5. As regards the second, I have to observe that I cannot, of course, speak in regard to the samples actually received from Vellore and Cuddalore jails; but in order to satisfy myself on this point, I went, with your permission, to Cuddalore, and with the permission of the Superintendent of that jail, inspected the ground ragi actually in use, and found it was ground in exactly the same manner as was customary in this jail; and was, moreover, told that the rule there was never to give ragi meals continuously, as by experience it was found to excite diarrhoea, unless alternated with cumboo.

6. That the ragi could not be properly cooked, I distinctly and emphatically deny. I personally paid unremitting attention to the cooking; * Paragraph 4 of my letter, No. 1784, dated 5th October 1882, and paragraph 3 of my letter, No. 746, dated 30th May 1883. † Twenty puddings.

each pot, and that no crust was left in the pots. I also made special arrangements for teaching the cooks to cook properly. I repeatedly tasted the cooked food and never found it raw or gritty. The inspecting officers, during their visits, also tasted it, and recorded nothing against it. The hospital assistants ‡ have been in the habit of

daily tasting it, and they saw nothing wrong with it, and the prisoners even never complained of it; in fact, this objection also, like that of the coarse ragi flour, was never suggested before Dr. Ritchie's arrival.

7. As regards the third, I have already explained that the process of sifting through muslin was never in use either in this or in the Cuddalore jail, nor do the natives themselves ever do anything of the kind.

8. I come now to the fourth, and with regard to this, I have to observe that, when I went to Cuddalore, I made special inquiries of the hospital assistant there who has been in charge of the Trichinopoly sick convicts, whether he had ascertained from them to what they attributed the cause of their illness in this jail. He informed me that he did inquire about it as he wanted the information for his case book, and that some attributed the sickness to the water, some to the heat, and some to the ragi and cholera, both of which are heating; but that none ever attributed it either to the cooking or coarse flour, and yet Dr. Ritchie states that "all" the prisoners attributed their illness to the unsifted ragi flour.

9. Fifth, as regards the ragi at Trichinopoly predisposing or exciting diarrhoea or looseness of bowels, all I can say is that the Trichinopoly prisoners, who have recovered their health in the Cuddalore jail, continued to eat this unsifted ragi flour and appear to do very well on it, so long as it is alternated with cumboo.

10. Again, if Dr. Ritchie considered that all the defects lay in the grinding and sifting of the ragi, why did he change the diet to cumboo? A change, be it observed, that I had advocated a year before, and which was opposed by the medical officer; and if any improvement had taken place during his tenure of office, it was most likely due to the Cuddalore alternate diet of cumboo and ragi.

You may remark, however, that the Surgeon-General allows that an improvement began in the month of April, three months before Dr. Ritchie came.

11. On the strength of these assertions, the value of which you now see, the Sanitary Commissioner has now turned round and made animadversions which amount to grave charges against my superintendence; in fact, lays the blame of the whole mortality of this jail to my supposed neglect of duty, and the Surgeon-General concludes that there must be something amiss in the dietary owing to my having failed in my duties. What grounds there are for these assertions, and of what value they are, I leave you to judge.

12. Dr. Ritchie's* experience of civil employ has only extended over a few months, while Dr. Thomas has many years' experience in matters of jail duties, and whose opinion, I should certainly say, was at least of as great value as Dr. Ritchie's.

13. As regards the short issue of grain referred to in paragraph 17 of Dr. Cornish's report, you are aware that he is mistaken in the matter, as in paragraph 7 of my letter to you, No. 1514, dated 27th October 1883, I explained distinctly that the prisoners have been receiving the allowance of flour "in full" since June 1881, and that the contractors objected to the increased quantity of refuse returned to them after Dr. Ritchie's arrival, caused by sifting the flour through muslin.

14. In a matter so difficult as the discovery of the secret cause of the disease, where so many professional opinions are at variance, I, indeed, cannot venture to assign any reason. The Surgeon-General remarks, this jail has been frequently unhealthy before; this was the case immediately after I joined in December 1880, as sickness first appeared in February 1881; possibly, it may be in part owing to the jail dietary, or some unknown cause owing to the site of the jail; all that I can say is that, whatever suggestions were given to me by the medical officer of the jail, by the Inspector-General, Surgeon-General or Sanitary Commissioner, I have invariably endeavoured to do my best to carry them out; that, when the Sanitary Commissioner recommends a radical change in the diet, but does not state what the change is to be, I am unable to take any action, unless the medical officer or some one else can inform me of the details of this radical change.

From Colonel T. E. TENNANT, Inspector-General of Jails, to the Chief Secretary to Government, dated Ootacamund, 14th April 1884, No. 104.

In continuation of my letter, No. 37, of the 8th of March last, and with reference to your official memorandum, No. 814, dated the 5th of April 1884, I have the honor to state that, after attentively considering the report submitted by the Sanitary Commissioner and that by Surgeon-General Cornish, I am unable to agree with the opinions expressed by these officers as to the cause of the very high mortality from dysentery and diarrhoea in the Trichinopoly central jail. It is difficult, and indeed almost impossible, to pronounce absolutely on the real cause or causes of this mortality, but after making a full and complete inquiry into all the circumstances connected with this most difficult subject, and from close personal observation and inspection, I have come to the conclusion that this excessive mortality cannot be ascribed to the dietary or to defects in the management of the jail by the Superintendent; and I believe it will be found that the opinions above referred to rest on no firm basis of facts.

2. I must, however, state my opinion that had the medical officer "grasped in its full significance the real nature of the malady," and had the sick been more cared for, this large mortality, in all probability, would not have occurred. As will be seen from the correspondence before Government, I was very far from being satisfied at what I saw and heard in the hospital during my inspections, and I several times earnestly spoke to Surgeon-Major Thomas, who always assured me that every attention was paid by him to the sick in hospital, and it was not until some time after that I discovered to what extent he had delegated his duties to his subordinates. I am also of opinion that the Superintendent, Mr. Johnston, failed in his duty in not insisting on the jail rules being observed by the officer in medical charge, and it was, moreover, Mr. Johnston's duty to have informed me of any infringement of the rules.

3. The Surgeon-General in his letter states that "Dr. Thomas' visits to the jail and inspection of prisoners' rations appear to have been generally in accordance with the Jail Code." I cannot endorse this opinion. I found that the jail was not visited by the medical officer on Sundays, although severe sickness was prevailing, and the sick and dying required as much attention on Sundays as on other days. The Jail Rule 101.

rules direct that, in case of epidemics and when severe sickness prevails, the medical officer shall visit the jail as many times daily as it may be necessary for the due and efficient performance of his duties. This was not done; but on the 2nd of December there is an entry in the medical officer's journal of his having paid a second visit to the jail on that day in company with Surgeon-General Cunningham, the Sanitary Commissioner for the Government of India. There is no entry to be found of the medical officer having visited the sick in hospital more than once in any one day, and I can find nothing in the journal to show that the medical officer had visited the prisoners confined in cells.

Jail Rule 114. With regard to the examination of the food, if by "food" is meant "cooked food," I cannot find any entry, or record, or remark in the journal of his having inspected or examined the cooked food or the hospital diets. In my opinion these were grave omissions, especially at a time when every effort was needed to arrest this deplorable mortality.

4. With regard to the hospital diets, I must point out that the diet of the patients in hospital is entirely under the control of the medical officer, and he is wholly responsible for the quantity, quality, apportionment, and the cooking of these diets. If, as I maintain, the visits of the medical officer were short and hurried, it was impossible for him to have given individual attention to the sick (between 30 and 40 patients in hospital), and to have personally examined the patients' food and the hospital diets. If these duties were left to subordinates, no wonder then, under such circumstances, the number of deaths—113 to 187 admissions in hospital from dysentery and diarrhoea—was deplorably high. If the medical officer found the duties too heavy, I think he should have applied for assistance, or at least have surrendered any non-official work like the care of the railway sick.

5. The Surgeon-General attaches much importance to an order of mine passed on a petition submitted by the jail contractor claiming compensation for the loss sustained on account of the large amount of raggi meal rejected by Dr. Ritchie. The facts are as follows:—

The ordinary diet scale framed several years ago by Dr. Cornish and published in the Medical Code and in the Jail Rules laid down that the ration should consist of "24 oz. of cleaned and husked grain," and, until recently, the ration always consisted of 24 oz. of grain only. In the year 1877, Surgeon-Major Hastings, the officer in medical charge of the Cannanore jail, represented the necessity for washing the raggi and sifting the flour, and on my consulting with Surgeon-General Cornish, then Sanitary Commissioner, he wrote as follows:—

"In regard to sifting of raggi flour, it appears not to be the general practice. I believe that the larger particles of husk are passed undigested, and that their weight does not add to the nutritive value of the grain allowance, though in some cases these particles, like the bran in brown bread, may tend to prevent costiveness and keep the bowels regular.

"But occasionally medical officers make complaints that raggi diet gives diarrhoea and irritation of the bowels. In such cases, the raggi flour might be sifted of the coarser particles of its bran before use. Probably a similar practice might be followed in times of threatened epidemics, but, under ordinary circumstances of jail life, there would seem to be no occasion for separating the bran from the flour, this apparently not being the general custom of the people in their own homes.

"I do not think that the wastage for sifting is a matter of any importance in the nutritive value of the ration."

6. It is clear that at that time the Surgeon-General did not attach much importance to the sifting of the raggi, and it seems somewhat remarkable that the non-sifting of the raggi should now be brought forward as one of the principal causes of the mortality. Subsequently, and after visiting the jails in other parts of India, where I found the flour of the cholam and cumbu carefully sifted, I ordered the practice to be observed in the Madras jails, and laid down certain rules (*vide* appendix E, p. xlix, Jail Code) directing the ration to consist of 24 oz. of sifted flour, instead of 24 oz. of husked grain. When grain is ground, it yields different qualities of meal known as "fine flour"—tailings or middlings—and "coarse bran." This last is altogether innutritious, and should be excluded as being difficult of digestion and apt to set up irritation in the alimentary canal leading to diarrhoea. The rejected portion varies from 3 to 4 per cent. according to the care bestowed on the grinding. Now Dr. Ritchie rejected everything but the "finest flour," and the loss to the contractor amounted to 17 or 18 per cent. Against this excessive waste the contractor remonstrated. At first sight it did appear as if the contractor had given a smaller quantity of meal,

but on Mr. Johnston's return from privilege leave he cleared up the matter, and explained that 24 oz. of sifted meal, by weight, were issued to the convicts.

I consider this explanation satisfactory, and I fear that some mischief has been produced from the hasty conclusions regarding the insufficiency of the diet from this cause.

7. In my former letter I pointed out certain minor defects connected with the food, for which, I think, Mr. Johnston was to blame; but it is absurd to suppose that the excessive sickness and loss of life was the result of unskilful cooking or the petty

speculations by the cooks, &c. If the "inanition" which the medical authorities maintain was caused by "short" as well as "bad" commons in jail, and that the convicts died from starvation, it follows that the food must have been most seriously tampered with, and I have no hesitation in affirming that the jailer and deputy jailer, the block warders, and the medical subordinates must have been aware of the frauds, and probably shared in the plunder, but I do not believe that any such wholesale plunder was carried on. It would be impossible that such a disgraceful state of affairs could go on for months and years without its coming to the notice of the Superintendent and the Medical officer. We have the assurance of these officers (whose attention was so constantly called to the subject) that the diet was most carefully looked after, and I do not see how such statements can be rejected.

8. Since I wrote my letter No. 69 submitting to Government the printed correspondence, I have received the accompanying report from the Superintendent No. 323, dated 7th April 1884.

regarding the water drunk by the convicts. It seems to me that this report from Mr. Johnston throws considerable light on the subject, and that the Government of India are not far wrong in attributing the cause of the sickness to the water. After the receipt of G.O., No. 2267, dated the 28th August 1883, Judicial department, I paid particular attention to the water, and I directed Mr. Johnston to have No. 1 well pumped dry and cleaned out so soon as the hot weather set in. This has now been done with the result as reported in Mr. Johnston's letter. I also enclose a demit-official letter from Mr. Johnston giving further details.

Dated 9th April 1884.

9. It is a significant and remarkable fact that the female prisoners who were fed upon a similarly constituted diet, but who did not drink the same water, were entirely free from the disease; and, again, the prisoners of the district jail who were at work in the vicinity of the central jail, and who had their food cooked and prepared for many months in the central jail kitchens, but who did not drink of the water of No. 1 well, did not suffer from dysentery or diarrhoea. A further point is also worthy of notice: that when the prisoners were encamped near the Golden Rock and drank from a well near the rock, the diarrhoea and dysentery subsided, but on their removal back to the jail, and when they began again to drink the water of No. 1 well inside the jail, the disease re-appeared.

10. I await with anxiety the report of the Chemical Examiner's analysis of the water from the well since it has been cleaned. If the theory of the water is correct, it must go far to exonerate the jail officials from the neglect of duty with which they are now charged by the medical authorities.

11. Apart, however, from these considerations, I am still of opinion that when an opportunity occurs a qualified medical officer should be selected as the Superintendent of the central jail at Trichinopoly.

ENCLOSURES.

From J. W. JOHNSTON, Esq., Superintendent, Central Jail, Trichinopoly, to the Inspector-General of Jails, dated Trichinopoly, 23rd November 1881, No. 1683.

I have the honor to report that up to date there have been 46 cases of cholera, 14 of which have proved fatal. There is an improvement this day, and I think the sickness is abating.

2. The whole of the cholera cases were sent out of jail last evening, and are now in sheds built on the site of the late camp jail. There are not above 3 or 4 bad cases in hospital; all the others are doing well.

3. Fires and fumigations still continue to be carried on. Cholum is discontinued, but the medical officer saw no reason to stop the dholl.

4. I have also arranged to move the whole of the hospital patients (other than cholera) into the contractor's store-shed situated outside the jail and in front of the guard-room. The shed itself, being too small, is being extended and built in the shape of a quadrangle. The whole of the

hospital buildings inside the jail will thus be vacated, and I will avail myself of this opportunity of thoroughly cleaning, fumigating, and white-washing them. If this had only been done sooner, the mortality from diarrhoea would have been less, and what is very remarkable is that since the cholera appeared diarrhoea has disappeared, and not a single diarrhoea patient has had cholera.

From J. W. JOHNSTON, Esq., Superintendent, Central Jail, Trichinopoly, to the Inspector-General of Jails, dated Trichinopoly, 23rd November 1883, No. 1640.

I have the honor to acknowledge the receipt of your letter, No. 5657, dated 15th instant, regarding the water-supply of this jail, and to state, in reply, that previous to the receipt of your letter, and at the recommendation of, and in consultation with, the medical officer, I have discontinued giving the prisoners their drinking water from the No. 1 south-east angle well, and procure the supply now from the well in the female yard. The water is taken in barrels to the filter, and the filtered water is brought to the blocks. Although this well is very deep, the consumption of water from it is very great, and, in order not to drain it too much, I take the water for culinary purposes from the well in the solitary cell yard, which is capable of supplying any amount of water. I have sent samples of water from this well, as well as from the north-east angle well by the European prison, to the Chemical Examiner, Madras, for analysis.

2. With regard to that portion of your letter under reply about removing the dhobies to some other well, I have to state that we have no dhobies in the jail, as the convicts wash their own clothing. Before the new drains were built in July 1882 all the washing was carried on in the cistern of No. 1 south-east angle well, but since that time convicts bathe and wash clothing in their own blocks. With the exception of 16 men of the water party, this cistern of No. 1 well is not used for bathing or washing purposes. The supply of water in this well is inexhaustible, and, as no one knows of its ever having been cleaned out, I tried the other day to empty it, but could not succeed. I may possibly be able to do this in the dry season. As it has not been cleaned for 16 years, it must contain foul matter at the bottom.

3. In your letter to the Sanitary Commissioner, No. 5642, of 15th instant, paragraph 5, you state that each well in this jail "is protected by a parapet with an impermeable platform sloping from its base and provided with a drain." The well is also covered with a wooden grating, and the water is drawn by wooden buckets. You must have had the wells of some other jail in your mind when giving the above description, as the wells in this jail have no platforms round the parapet, nor are they covered with wooden gratings, and the buckets used are all iron and not wooden.

4. With reference to the Government of India remarks in paragraph 11 of their letter reviewing the jail administration reports of this Presidency for 1882, I observe that they consider my theory of the importation of the sickness from the Tanjore jail is not corroborated by the medical history of the Tanjore jail. Whatever that medical history may be, it is nevertheless a recognized fact that diarrhoea and dysentery did prevail to a very great extent in the Tanjore jail in 1881, and that prisoners tainted with the disease came over to this jail.

5. I note that the Government of India consider the probable cause of the sickness may be found in the water-supply, as the chemical analysis of February 1882 shows it to have been of an extremely bad quality, but the analysis now taken of the same water shows that, although its quality is worse now than it was before, yet the health of the prisoners is none the worse for the change.

From J. W. JOHNSTON, Esq., Superintendent, Central Jail, Trichinopoly, to the Inspector-General of Jails, dated Trichinopoly, 7th April 1884, No. 323.

With reference to correspondence noted in the margin, I have the honor to state that I have succeeded in thoroughly cleaning out No. 1 well (south-east angle). I had some difficulty in doing it, as the well was deep, and had also a very good spring of water at the bottom, which rises rapidly, even at this time of year, up to 12 feet, at the rate of a foot an hour. There are no surface springs in the well.

India G.O., No. 2267, dated 28th August 1883 (Judicial Order).
Letter from Inspector-General, to Sanitary Commissioner, No. 5642, dated 15th November 1883, vide page 28 of the printed correspondence.
Letter from Inspector-General, to Superintendent of Jail, No. 5657, dated 15th November 1883.
Letter from Superintendent of Jail, to the Inspector-General, No. 1640, dated 23rd November 1883.
Letter from Inspector-General, to Superintendent of Jail, dated 23rd November 1883, No. 5930.
Letter from Inspector-General, to the Sanitary Commissioner, dated 28th November 1883, No. 5933.
Letter from Superintendent of Jail, to the Inspector-General, No. 52, dated 18th January 1884.

2. As I found it impossible to empty the well by the baling process, I obtained the loan from the South Indian Railway Workshops, through the kindness of one of the engineers, of a 6" hand-pump, which cleared out the water in a very short time.

3. The bottom of the well contained a quantity of silt, consisting chiefly of red and black clay, coir refuse, and dirty black sand, all of which have been cleared out, and the well also deepened by about a foot.

4. The water is now perfectly clear and good, and I am sending some of it to the Chemical Examiner for analysis.

5. The spring or springs, as I stated above, being all at the bottom of the well, and there being no surface springs at its side, the quality of the water ought, therefore, to have been good; but the chemical analysis proves it to be bad. What then must be the cause of its impurity? The springs being too low to be polluted, the only conclusion one can arrive at is that the water must have been polluted from above, and the red clay found at the bottom explains the mystery.

6. In order to account for the existence of this red clay at the bottom of the well, I must explain how the area within the jail is drained. Masonry drains carry away all the refuse water of the bathing cisterns through two outlets, one in the southern wall and the other in the north-west angle of the jail. The surplus storm water escapes through three main outlets, one under the southern wall, another in the south-east angle, and the third in the north-west angle of the jail wall. A few yards from these last two outlets lie the two wells Nos. 1 and 2. Whenever there is a heavy fall of rain, these two last outlets get choked, and water accumulates and rises to a height of 2 feet and more, and the well being only a few yards from the outlets, the water comes up to the parapet walls; and formerly, when the walls were only a foot high, sometimes flowed over them and into the wells. On the 21st November 1880, the day of the storm which passed over Trichinopoly, the fall of rain was so heavy, and the accumulation of water at these two outlets so great, that the two wells were completely submerged. It will thus be seen that the drainage of the jail finding its way into these wells accounts for the red clay found in them; as well as for the bad quality of their water.

7. The parapet walls of these and all the other wells in the jail were raised by me soon after I came here in 1881.

8. Having thus accounted for the bad quality of the water in these wells, I revert to the remarks of the Government of India in their review of the administration of the jails in the Presidency during 1882 regarding the water-supply of this jail. They observe "that a more probable cause of the special sickness which prevailed in this jail may perhaps be found in the water-supply, as the chemical analysis showed the water of No. 1 well to be of an extremely bad quality; the water of No. 2 well (hospital yard) being also impure, while the water of No. 3 well (female yard) was fairly wholesome."

9. This corresponds with what I have stated above; and as regards No. 3 well in the female yard, as the drainage flows out of the yard, and not into it, and as the water does not accumulate there as it does near wells 1 and 2, the quality of its water must naturally be good; hence the concluding remark of the Government of India, "that the water was one of the chief sources of danger to the health of the male prisoners," is also so far borne out by the fact that the female prisoners experienced a practical immunity from bowel affections.

10. In conjunction with this there are other facts connected with the water of No. 1 well, which calls for special notice.

(1.) You are aware that the water of this well has for years been the only water used for drinking purposes by the prisoners of the jail *without being filtered*.

(2.) That during the severe epidemic of cholera which prevailed in this jail in November and December 1881 the water was boiled and filtered before it was issued to the prisoners.

(3.) That while it was so used during the prevalence of cholera, dysentery and diarrhoea, which had prevailed before cholera set in, ceased suddenly, and re-appeared after cholera ceased, and the boiling and filtering of water was discontinued.

vide paragraph 4, letter No. 1886, dated 23rd November 1881, from Superintendent, Central Jail, to Inspector-General.

vide paragraph 8 of letter No. 238, dated 25th November 1881, from Inspector-General to Government.

(4.) That the sickness continued all through the year 1882 and began to subside from January 1883, when the new masonry filter was built and the water was again filtered.

No. 1 well filtered and unfiltered.

	Total solids, Grains per litre	Unfiltered.	Filtered.
Unfiltered.			
Total solids,	0.83	0.83	0.87
Volatiles solids,	0.48	0.48	0.42
Chlorine,	0.075	0.075	0.071
Total hardness, Clark's scale,	14.7	14.7	13.3
Permanent hardness, Clark's scale,	6.3	6.3	5.6
Free ammonia, Mgrms. per litre,	0.04	0.04	0.02
Albumenoid ammonia,	0.96	0.96	0.16
Nitric acid,	10.03	10.03	9.0

(5.) That the chemical analysis shows a remarkable difference in the quality of this water before and after filtration.

As all these facts coincide in a singularly remarkable way with the views of the Government of India as to the cause of the special sickness in this jail, I have considered it my duty to lay them before you in connection with my last letter to you on the subject.

ORDER—dated 23rd May 1884, No. 1268, Judicial.

These papers relate to the administration of the central jail at Trichinopoly during, and subsequent to, the period in which the very high death-rate noticed in the review on the jail administration report for 1882 prevailed. His Excellency the Governor in Council has given very careful attention to all the papers submitted dealing with the question, and is of opinion that, while the evidence adduced shows that no one cause alone can be assigned for the occurrence of the lamentably excessive rate of mortality in this jail, yet that there are strong grounds for arriving at the conclusion that the quality of the water drunk by the male jail population during the prevalence of the high death-rate was its chief cause, although the flour used in the jail appears to have been prepared without sufficient care.

2. With regard to the water-supply, it is observed that the Superintendent, Mr. Johnston, wrote in November 1882, when his attention was called to the matter, that the water in question had been in use in the jail for years, and that if it had become impure the masonry filter, then almost complete, would so far set matters to rights. Mr. Johnston had previously reported in October 1882 that he had changed the drinking water, causing the prisoners of each block to use their own well, instead of allowing the water in the well at the south-east angle of the jail (reported of bad quality) to be used by all the male convicts. The sickness in the jail showed a marked diminution early in 1883, and Dr. Ritchie, on assuming charge, in June of that year, found the water-supply, which was well filtered, to be good. The Surgeon-General in January 1884 noted that the defective surface drainage of the interior of the jail might possibly account for the deterioration of the quality of the jail drinking water, and that supposition is borne out by the subsequent letter from the Superintendent, dated the 7th of April. His Excellency the Governor in Council, in reviewing the administration report of the jails for 1882, especially noted the inferior character of the drinking water, and the Government of India subsequently recorded their opinion that the probable cause of the special sickness that prevailed would perhaps be found in the water-supply. It is not explained in any of the papers now submitted why the special precautions taken with regard to the water in November and December 1881, when cholera appeared in an epidemic form in the jail, were discontinued in 1882, although it appears to have been remarked that the special sickness, to which the attention of the jail authorities had continually been drawn, showed a marked improvement during the prevalence of the cholera epidemic. His Excellency the Governor in Council much regrets that none of the jail officials appear to have realised at all fully the importance of their devoting unremitting attention to maintaining the purity of the water-supply.

3. With reference further to the quality of the food, the jail authorities appear never to have been fully awake to the serious nature of the responsibility which rested with them, and His Excellency the Governor in Council, while accepting the explanations offered by Mr. Johnston as so far satisfactory that they clear him of any imputation of having permitted wholesale pecculation to be carried on in the jail, still is compelled to record his regret that the quality of the food did not receive greater consideration at the hands of both the Superintendent and the Medical officer in charge of the jail.

4. After giving the most grave consideration to all the points raised in the papers now before the Government, His Excellency the Governor in Council resolves to direct that Mr. Johnston be transferred from the charge of the Trichinopoly jail to that of Rajahmundry; and trusts that in his new sphere of duties he will show, by a more close attention to the details of jail management, that he fully appreciates the responsibilities attaching to his position. His Excellency the Governor in Council observes that Dr. Thomas, the medical officer in charge of the jail during the period in which the special sickness prevailed, was more to blame than the Superintendent. The Government considers that an intelligent and painstaking medical officer would at an early date have traced the disease that prevailed to its true causes. In the presence, however, of this abnormal mortality, Dr. Thomas took little trouble to ascertain its origin, and even neglected some of the duties specially laid down as incumbent on the

officer in medical charge of a jail. He failed to recommend any definite course to the Superintendent which might have aided him in his attempts to remedy the state of things then existing, and he appears to have omitted to give sufficient attention to the sick in the jail hospital. The Right Honorable the Governor in Council desires that Dr. Thomas be severely reprimanded for his negligence when in medical charge of the jail at Trichinopoly, conduct which has met with his strongest disapprobation.

5. The Government have already directed the Surgeon-General to place an experienced medical subordinate on special duty in the Trichinopoly central jail, and have sanctioned arrangements by which the medical officer will have, at night, more ready access than formerly to the sick wards in the jail hospital (G.Os., No. 2265, dated 18th October 1883, and No. 2907, dated 2nd November 1883). The recent returns from the jail show that the prevalence of the special sickness which caused the lamentable mortality in the past two years has almost, if not entirely, ceased, and the Government will not require the further submission of the special monthly report from the officer in medical charge of the jail. His Excellency the Governor in Council hopes that the serious notice which he has been compelled to take of the conduct of the jail authorities in this instance will result in far more careful management for the future, and he relies on the closest attention being continued to the sanitary condition of the jail. The Inspector-General of Jails will immediately report if it happens that the improved condition of things there does not continue.

(True Extract.)

Chief Secretary

To the Inspector-General of Jails.
" Surgeon-General with the Government of Madras.
" Sanitary Commissioner for Madras.

Exd. A. F. Goodall.

Govt. of 1884 Madras.

JUDICIAL.

Issued

Recd.

Encl.

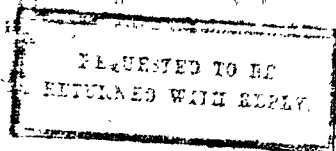
G.O., 23rd May 1884, No. 1268.

MAY.

Trichinopoly Jail.

Passing orders on papers relating to administration of the — during and subsequent to the period in which the very high death-rate, noticed in the review on the Jail Administration report for 1882, prevailed.

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Sp 290
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Mily
Govt. of 1884 Madras.

Sp 292

To P. G. Pub. Dept.
The Mily Dept

Mily. Department
Pottanumund
7 October 1884.

No. 4980. Referred
to the Surgeon General
H. M. Jones, for
favor of remark through
His Excellency the Com-
mander-in-Chief.

By order,

A. Kennedy, Secretary
off. Secy. to Govt.

Proceedings, dated 28th Sept 1884.

No. 2087. M.

Ref - Subject.

Surgeon Major Thomas,
nominations for Regi-
ment.

Surgeon General's Office,
Her M. Forces,
Head Qrs, Pottanumund,
8th October 1884

From,
The Surgeon General,
Her M. Forces,
& The Secretary to Government,
Military Department
Pottanumund.

Sir
I have the honor, in returning the
documents forwarded under your
memo. No. 4980 of the 7th instant,
to state for the information of the
Right Honorable the Governor in
Council, that I am unable to
modify the opinion, I have al-
ready expressed in my letter No.
170 of 11th August 1884, to the effect
that, it is not desirable for Surgeon
Major J. B. Thomas to be transfer-
red from Civil employment to the
medical charge of a regiment of
the Madras Army.

2. Such a charge would
involve

involve the care of several thousand persons, inclusive of a number of European Officers and their families. The Officer holding such might be in sole medical charge of a distant station; and, it would be his duty and responsibility - in addition to functions purely medical - to advise his military superior on all matters connected with the health of the men, their diet, water supply, clothing, &c. &c.

3. It is unnecessary for me to recapitulate the opinions, which have already been so fully expressed by Colonel Tennant, the late Inspector General of jails in his letter to Government No. 67 of 8th March 1884, on the conduct of Surgeon Major Thomas, incurring, as it has done, the serious censure of Government; but, I may be permitted to say that, were epidemic sickness of a kind, similar to that which recently occurred at

at

at Trichinopoly, to break out in a Regiment, the Medical Officer would be expected to be aware of the probable cause of it, and to make such recommendations as would tend to its mitigation.

4. I beg to add with reference to para 2 of the letter of the Surgeon General with the Government of Madras No. 123 of 15th September 1884 that Surgeon Major Thomas is at present the thirtieth Medical Officer on the Executive list of the Indian Medical Dept. in this Presidency, and that there is no immediate prospect of his promotion to the Administrative grade; in order to qualify for which, two months' duty under a Deputy Surgeon General, would, according to recent orders, be sufficient.

Have the honor to be,
Sir,
Your most obed^t Serv^t
C. D. Madden
Surgeon General M. S. S. S.

Orily 1884 Sept

From J. A. Clerk
The Surg. Genl. M. S. S. S.

N: 25/10

5/8 Octr
R/7 Jan

83

Refrs documents
re - Surg. Major Thomas
communication to a Rep.
Remarks that he is
unable to modify his
opinion, to the effect that
it is not desirable for
Surg. Major Thomas
to be transferred from
Civil to military
charge of a Regt.

It is requested that the heading,
No., and date of this communi-
cation may be quoted in any
subsequent correspondence on this
subject.

ADJUTANT-GENERAL'S OFFICE,

Ootacamund,

5th November 1884

From

BRIGADIER-GENERAL GODFREY CLERK,

ADJUTANT-GENERAL,

To

THE SECRETARY TO GOVERNMENT,

MILITARY DEPARTMENT.

SIR,

Proceedings of Government N^o 4222
dated 27 August 1884

Proceedings of Government N^o 2087
dated 23 September 1884 in
the Public Department.

Proceedings of Government N^o 1268
dated 23 May 1884 Judicial ex. in. Chief under your memorandum N^o 4920
Department

Letter N^o 257 dated 8 October 1884,
from Surgeon General Sir Macpherson
to Government

I am desired to return herewith the
documents noted in the margin, having reference
to Surgeon Major J. B. Thomas, Indian Medical
Department, referred to His Excellency the Commander
in Chief under your memorandum N^o 4920
dated the 7th October 1884.

In reply I am to say that after taking
into consideration the views held by the Surgeon
General with the Government of Madras on this
case as expressed in his letter N^o 02/125, dated
the 15th September last, His Excellency the Com-
mander in Chief would recommend that the
course suggested by Doctor Cornish be followed

10
and that Surgeon Major Thomas may be
appointed to the Civil Surgery of Bannanore.

3. I am at the same time to ask that
Government may be requested to pass a ruling
on the question referred in my letter No ⁶ Discipline
598
dated the 22nd August last - viz that in future
Medical Officers should not be transferred from
Civil to Military duty except when required
to be dealt with for any breach of discipline.

I have the honor to be
Sir

Your most obedient servant

George F. Bell

Brigadier General

Adjutant General

MILITARY (1884) DEPARTMENT.

CURR.

No.

From

THE ADJUTANT-GENERAL,

To

THE SECRETARY TO GOVERNMENT.

Dated

Received

No.

Transferred

No.

ADJUTANT-GENERAL'S OFFICE,

Ootacamund,

22nd August 1884

From

BRIGADIER-GENERAL GODFREY CLERK,

ADJUTANT-GENERAL.

To

THE SECRETARY TO GOVERNMENT,

MILITARY DEPARTMENT.

SIR,

170 of the 11th Instant.

I am directed to forward herewith, for the consideration of Government, the copy of a letter from the Surgeon-General His Majesty's Forces, having reference to Proceedings of Government, 3048 of the 26th June last, in which it was notified that the services of Surgeon-Major Thomas would be replaced at the disposal of His Excellency the Commander-in-Chief.

By: D^o 5733 & 5734 of 1884.

For: Lt. Genl.

18th Nov 1884.

N^o 3342

Transferred, with the previous papers, to the Public Department, with the intimation that the Govt., in the Military Department, to concur in opinion with H.E. the Commander-in-Chief.

2. Attention is invited to the request in para: 3 of the Adjutant-General's letter.

W. H. H. Herbert Esq. Col.
Offg. Secretary, to Govt.

Returns the within mentioned documents having reference to Surgeon Major J. B. Thomas Indian Medical Dept

2. It would appear by order
of Government, 1268- Judicial.
of the 23rd May last, that Govern-
ment consider Surgeon-Major
Thomas not qualified for
civil employ, because, when
in charge of the Trichinopoly
Jail, he took little trouble
to ascertain the cause of an
abnormally high death rate,
and even neglected some of
the duties specially laid
down as incumbent on the
Officer in medical charge
of a Jail &c &c.
Surgeon-Major Thomas
transfer therefore, from
civil to military employ,
was apparently for no other

of

3.

of discipline, but as a punish-
ment for professional
neglect.

3. With regard to this, I am
to say that His Excellency
concurs in the views of the
Surgeon-General Her Majesty's
Forces, as conveyed in the
3rd paragraph of his letter
under reference, and is of
opinion that the course
therein suggested by Doctor
Daddeu, should be followed
in cases such as that of
Surgeon-Major Thomas.

4. This Officer's rank and
departmental position, as
pointed out by Doctor Daddeu,
are such as to entitle him

for

for recommendation for the
medical charge of a Regiment;
but an officer who has been
found unfit for the medical
charge of a Jail, on account
of professional neglect or
incompetence, can scarcely
be considered qualified
for the charge of a Regiment.

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

Ernest Nash

Brigadier General,
Adjutant General.

8. In the case of 129 521

Ind 5202

No 170.

Surgeon-General's Office, Her
Majesty's Forces.
Head Quarters, Ootacamund,
11 August 1884 -

From

The Surgeon General,
Her Majesty's Forces.

To

The Adjutant General,
Ootacamund.

Sir,

I am calling attention to G.O. No 1268
of 23rd May 1884 - Judicial. I have the
honor to point out for the consideration
of His Excellency the Commander-in-Chief
that the services of Surgeon-Major J. B.
Thomas, late Civil Surgeon of Trichinopoly,
have been transferred from Civil to
Military employment, apparently for no
breach of discipline, but as a punishment

for

for professional neglect in connection with an epidemic of Dysentery in the Jail at Trichinopoly which was lately under his medical superintendence.

2. In connection with this matter, I beg to say that in cases where a Medical Officer in Civil employment has been guilty of a breach of discipline, his transfer to the military service may be necessary, but, where professional neglect has been apparent, I would suggest for His Excellency's consideration that another course might be followed, and that the offender might continue to be employed in the Civil department, but without a charge, either at the General Hospital in Madras, or in such a way as may be thought most advisable.

3. Surgeon-Major Thomas' rank and position

as

as regards seniority in his department is such, that it will be necessary for me in the ordinary course to recommend him for the next regimental vacancy which occurs, but before doing so, I shall be glad to hear His Excellency's views in connection with this question.

I have &c -
Signed/ C. D. Madden.
Surgeon-General, Her Majesty's Forces.

[True Copy].

Major,
Assistant Adjutant General.

No. 4232

Government of Madras.

MILITARY DEPARTMENT,

Obtained, the 29. Aug. 1884

From the Adj^t General n^o of Discipline/598, dated 22 Aug/84

Transferred to the Public
Department, with reference to
O.G. n^o 1408 dated 25 June/84.

The Government in the
Military Department concur
in the opinion expressed by
His Excellency the Com^{dr}
in Chief that a medical
Officer who has proved him-
self unfit for the charge
of a Jail ^{be considered fit to} cannot be trusted
with the Medical charge of
a regiment, and that in
such cases as the present

The

In 54323783

2

Sub Comd^r M

put 3025

In 5200

The Officer concerned, instead
of being relegated to Military
duty, should continue in
Civil employ^{but some position} in other than
~~an~~ independent charges,
pending the further pleasure
of Government

M

29.8.84

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of

2022-2023
Annual Report

Public Department
J

PROCEEDINGS OF THE MADRAS GOVERNMENT.

READ the following

Endorsement of the Military Dept. of 29th
August 1884, N^o 4232, on letter from the
Adjutant General of 22nd August 1884.
Letter from the Surgeon General with the for-
ward of Madras of 15th Sept. 1884, N^o 123.

I have the honor to acknowledge
your memo no. 123 of 10th instant and
enclosures.

2 - In recommending Surgeon Major
Thomas' return to military duty,
instead of his transfer to another Civil
appointment, I had in view the fact,
that nearly the whole of his service
a period of 19 years had been passed in
Civil employ, and that on his own
account, bearing in mind his position
in the service, and prospects of promotion
it

it would be for the good of the Service
that he should obtain experience in
Military employ under the supervision
of an Administrative officer.

3. Govt. are aware that I did not
Concur in the Charges of the Inspector
General of Jails, that Dr. Thomas
had neglected the interests of the
sick in the Pichinopoly Jail. No
evidence of this came to my notice
in my Annual inspections of the Jail
Nor was any adduced by the Inspector
General of Jails. On the contrary,
so far as his executive duties were
concerned, I had no reason to find
any fault with Dr. Thomas in
regard to his Hospital duties. These
charges of neglect against Dr. Thomas
were only brought forward by the Jail
Dept., after the investigation of the
affairs of the Pichinopoly Jail by Dr.
Pitche showed that there had been
lax

lax supervision and carelessness in
the dietary arrangements under Mr.
Johnston's Management. My views
on this subject are summed up in
paras 25 & 27 of my letter No. 15 of
11th January 1884. I have no reason to
modify the opinion then submitted to
Govt., which does not bear out the
statement made by Surgeon General
Madden, that Dr. Thomas' transfer
to the Military Dept. was made
"as a punishment for professional
neglect."

4. If Dr. Thomas had been guilty
of any grave neglect of duty, I
should have felt it my duty to submit
charges against him for investigation
by a Military Tribunal to which
he is amenable, but the only
serious fault I could find with him
was, that he was too prone to
theorize on insufficient evidence
as

As to the Cause of the excessive sickness
& mortality, and that he did not
sufficiently realise what seemed to
me to be the chief cause of the
prevailing sickness. That he was
anxious to do his duty, and that
he acted with real kindness and
humanity in the treatment of the
sick under his charge. I am ready
to testify from my personal knowledge.

5. And it must be remembered that
in a very difficult & complicated
enquiry such as this was, the
best of men may take very different
views, and I need not refer to those
expressed by the Sanitary Commissioners
and myself, and the opinions of the
Inspector General of Jails and of J. W.
in their order disposing of the subject,
to show that there may be some excuse
for Dr. Thomas if he failed to ascertain
and remedy matters which lay outside
his own strictly professional duties.

6. Since Dr. Thomas left the
Trichinopoly Jail in July 1883, he

has

29
has had charge of the Vizagapatam
Jail both as medical officer and
superintendent, and it is only fair to
him to state that with the absolute
control over this body of men, the
results as regards health, have been
quite satisfactory. I have no doubt
whatever that if he had had similar
control in Trichinopoly, the deplorable
results of the last three years
would not have occurred.

7. I am of opinion therefore that
Surgeon Major Thomas, though he
may have failed in correct judgment,
has not been guilty of any conduct
morally or professionally, which
warrants justifying his suspension from
employment in a professional
sphere of duty. Government was
pleased to suggest that he should
be transferred to Calcutta from
Trichinopoly, but it seemed to me
that

that without any idea of punishment
it would be better for his own
interests and the discipline of the
service, that he should take a tour
of military duty, and in this proposition
Govt. Concurred, directing that
Dr. Thomas' services should be
placed at the disposal of the
Military Department.

8. As however the Military Dept.
have misunderstood the nature of
Dr. Thomas' shortcomings, and
wrongly interpreted his removal
as a punishment for professional
neglect, I would suggest that
the best arrangement would be
to transfer Dr. Thomas to the
Civil Surgeoncy of Calcutta
which has not yet been filled up.
I am quite satisfied that Dr.
Thomas has been guilty of no
professional neglect or abuse,
which should deprive him of a
charge, to which his standing

in the service entitles him.

I would request in justice to Dr.
Thomas who is a military officer,
that a copy of this letter be sent
to the Military Department for
information.

Order thereon 23^d September 1884, No. 2087
(mis)

Forwarded with G.O. 23^d May
1884, No. 1268 judicial, to the Military
Department with reference to
enrolment thence dated 29th August
last, No. 4232, with the remark
that upon this testimony to Dr.
Thomas's fitness by his official
superior there will probably be
no objection to nominate him for
a Regiment, so that he may
obtain the experience in
military employment which
Surgeon-General Cornish

Considers

Considers desirable.

/ True Extract /

Chief Secretary.

To
The Military Department
with Copy of G.S. No 1268 dated
& paper returned
to Surgeon General with the file of
Madras.

Public DEPARTMENT.

014.

From The adjt General

d/ 6th Nov/84.

OR ORDERS.

presumed that Dr. Thomas
be transferred as Civil Surgeon
Mannar, as recommended
Cornish, who only objected
2 reasons given by the military
offices for desiring not to
turn over, & not to their
& not to have him.

Then as to the request
ed to in para 2 of the
st. of the military department
"That medical
& hi"

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FOR ORDERS.