

MADRAS RECORD OFFICE.

Government of Madras.

Lubie DEPARTMENT.

G.O. No.	924	Press ~~Mis.~~
Dated	29-7-	1867.

Not to be folded or roughly handled

21-10-36

Read the following papers :—

No. 287. From the Acting Sanitary Commissioner for Madras, to the Acting Chief Secretary to Government, Fort Saint George; dated Madras, 16th July 1867, No. 244.

I have the honor to forward five copies of a “Memorandum on Native Latrines” by Dr. W. Arnold Smith, which has this day been forwarded to the Military Secretary to Government.

Enclosures five.
Five copies of a “Memorandum on Native Latrines.”

2. As the Memorandum in question contains suggestions regarding latrines for the Civil and Jail population, besides Native Regiments and Regimental Hospitals, I have thought it proper to forward it to your Department also for such orders as may seem necessary thereon.

No. 287A. From the Acting Sanitary Commissioner for Madras, to the Acting Chief Secretary to Government, Fort Saint George; dated Madras, 22nd July 1867, No. 250.

With reference to your Memorandum, No. 209, dated 19th July 1867, I have the honor to forward 25 copies of the “Memorandum on Native Latrines” by Assistant Surgeon W. Arnold Smith, M.D., as therein requested.

Enclosures 25.

No. 288. ORDER THEREON, 29th July 1867, No. 924.

Resolved that copies of the “Memorandum on Native Latrines,” by Dr. W. Arnold Smith, be furnished to the two Inspectors General, Medical Department, the Inspector General of Police, the Inspector General of Jails, the Municipal Commissioners of Madras, and to the Presidents of the several Municipal Commissions in the Districts.

(True Extract).

R. S. ELLIS,
Acting Chief Secretary.

To the Inspector General, British Medical Department, with the Report.

„ Do. Indian do. do.
„ Inspector General of Police, with the Report.
„ Inspector General of Jails, do. (six copies).
„ Municipal Commissioners, Madras, with the Report.
„ President of the Municipal Commissions in

Exd. J. Tulloch.

No. 196A.

OFFICE OF SANITARY COMMISSIONER,
MADRAS, 24th June, 1867.

From

The Honorable R. S. ELLIS, C. B.,
Sanitary Commissioner for Madras

To

Major-General H. MARSHALL,
*Secretary to Government, Military Department,
Fort St. George.*

SIR,

I have the honour to forward, for submission to Government, the accompanying Memorandum on the subject of Native Latrines drawn up at my request, by my Secretary, Dr. W. Arnold Smith.

2. The suggestions contained therein have received my entire approval.

I have the honour to be,

Sir,

Your most obedient servant,

R. S. ELLIS,
Sanitary Commissioner for Madras.

for Madras

MEMORANDUM
ON NATIVE LATRINES,

BY

ASSISTANT SURGEON W. ARNOLD SMITH, M.D.

Officiating Secretary Sanitary Commissioner.

The best form of Latrines for Natives has been for some time past a subject of solicitude and consideration, chiefly on account of the difficulty of combining simplicity and efficiency of construction in a design adapted to the peculiar habits and prejudices of the class by whom these buildings are intended to be used.

It cannot be said that even now the problem has been satisfactorily solved, excepting perhaps in the form of Latrine which has now been adopted for Jails.

2. It is now generally admitted by all who have given any attention to the subject, that the trough system is the one which, in principle and practice, has been found to answer *best* for Natives. A Latrine on this principle consists simply of two trenches twelve inches in width and depth, running the whole length of a shed, with an earth store between them for the ready application of this deodorizing material. A sloping pavement on each side of the trough and cisterns outside the Latrine, at which the Natives fill their lotahs, complete the design.

Nothing can be simpler than such a Latrine both in construction and use, so much so, that Government in their Order No. 3467, dated 31st October 1866, in the Public Works Department, have adopted this form of Latrine as a standard for Jails.

3. In the standard plan proposed for Native Jails, it is estimated that, allowing each man two feet and a half of space, it will accommodate one hundred and sixty individuals at one time.

This form of Latrine has for some time past been used in some of our largest Jails, and nothing could answer better in every respect. In the Bangalore Central Jail the Latrine constructed on these principles has been constantly inspected, and notwithstanding its being daily used by a large jail population, it is clean and free from all offence.

4. Practically and theoretically then, it must be admitted that it would be extremely difficult to devise a better form of Latrine which combines all the peculiar requirements of such a building, namely, constant surveillance, economy of space, and easy conservancy.

5. From what has been said, it might be presumed that a Latrine which has been found to answer so successfully in one place might at once be adopted and found equally successful for all other classes of the Native population; but here we must draw a line, for no greater mistake could possibly be made.

6. In a Jail the circumstances under which the prisoners live are peculiar. In a prison the inhabitants are marched, closely guarded, to the Latrine at a certain hour of the day, and their operations within the building closely watched. The prisoner is made to use the latrine in the manner intended; he covers his deposits with a sufficient quantity of earth, and he performs his ablutions in the place appointed for the purpose. All this he does, it may be said, by word of command. For the purposes of conservancy a large number of Sweepers is obtainable from the Jail population. The result is, that the latrine is perfectly clean and free from all smell.

7. A latrine, constructed on the above principles, has also been for some months past under trial in the lines of the 2nd Regiment Native Infantry at Vepery, and although it is premature to pronounce an opinion as to its eventual success, still an almost daily inspection of the building, while in use, has practically taught us many points of detail, which will have to be provided for in future designs, and must put us on our guard against many sins of commission and omission which might not be considered deserving of attention by those unaccustomed to the peculiarities of native habits.

8. The native of the tropics is peculiarly conservative in his ideas, and obstinately adheres to the customs which his forefathers have handed down to him. In designing, therefore, a building for his use, one has to be extremely careful to diverge as little as possible from his usages.

9. In the case now to be noticed, the Sepoy, accustomed as he is to the restraints of discipline, was found at first peculiarly perverse in accustoming himself to changing his place *d'aisance* from the open plain to the confinement of a covered-in latrine.

10. It has been found that unless a Sentry is posted over the building, the Sepoy will persist at first in using different parts of the building in a diametrically opposite manner to that proposed for them by the designer, whether from ignorance or other motives it is difficult to say.

11. Fortunately the Regimental Authorities (2nd Regiment N. I.) took an interest in the matter as conducive to the health and well-being of their men and by indoctrinating the Native Officers and through them the men, the Latrine at the Lines at Vepery is used willingly by the men and has proved successful.

12. But the knowledge that has been acquired from constantly watching its practical working, has suggested ideas as to whether it is not possible to design a building better adapted for the use of our Native Army, and while doing so to suggest suitable plans of latrines which are so urgently required for the other classes of our native population, if we are ever to attain to that stage of civilization which shall make it an offence punishable by law when a native is found indulging the calls of nature in the public streets and high roads of our cantonments, regardless of decency and the convenience of his brother-citizens.

13. In providing suitable Latrines for the Native Army and all those classes who are amenable to some sort of discipline, we have an immense advantage, as compared with the difficulties which surround the design of one adapted for the wants of the civil population. We have seen how admirably by means of Jail discipline, the conservancy of the standard form of latrine is kept up, while on the other hand we have observed how precisely the same form of design has been misused by another class when left to their own devices.

The whole secret of the matter lies perhaps not so much in the construction of the building as in the amount of supervision which it is necessary to exercise.

14. It is apparent that we cannot apply the same amount of surveillance to our Military latrines that we do in Jails, but as the successful working of the design, whatever form it may take, entirely depends upon this, it is absolutely necessary that the construction of the building for the Native Army, together with its system of conservancy, must be modified so as to obtain a maximum of supervision without rendering the requirements of the system irksome to those who have to resort to the Latrine, and the responsibility of its proper conservancy must be fixed upon one individual.

15. As to the construction of the latrine, we shall start with the axiom that the trough principle is the correct one as opposed to any system which requires pans for the reception of the excreta and seats for the men to sit on; but for the particular class with whom we are now dealing, we shall enumerate certain reasons which have led us to believe that it is absolutely necessary to modify this principle.

16. The first objection to the trough system, as applied to the Native Army, is its entire want of decency and privacy, which it requires but very few words to point out. In Jails it is positively necessary, as a matter of discipline, that there should be unlimited amount of supervision which any attempt at privacy would immediately interfere with; but under ordinary conditions the idea of one hundred and sixty men squatting across a trench, each man limited to a space two feet and half, and consequently either touching, or at any rate within a few inches of his neighbour, is very objectionable, and must present to our minds a most revolting spectacle when looked at either from a moral or any other point of view.

17. This is not an exaggerated idea, as a large number of Sepoys require to resort to these places about the same time, and it is not too much to assert that no respectable native would tolerate for a moment a daily exposure to such conditions as the use of the latrine would entail. Nor is it right to expect, even if it was desirable, that the classes who compose our Native Army should become habituated by necessity to anything so repugnant to decency.

18. It has been proposed to overcome this difficulty by placing small screens at intervals across the trenches, but it is to be feared that the conservancy operation of clearing out the trenches would be interfered with, to a certain extent, unless the partitions were made moveable which complicates the system and exposes the building to damages and losses.

19. The second question to be considered in the pure trough system, as applied to the Native Army is connected with the important one of conservancy and supervision.

In a dry earth latrine one of the most important points to be observed is the immediate application of a sufficient quantity of earth to the deposit. In European

latrines a self-acting earth apparatus is being used experimentally to dispense with this manual labour, as it was found that the soldier could not be induced, either from carelessness of habit or other motive to perform this operation himself. In Jails we have observed that from the surveillance that is exercised over the prisoners they are obliged to cover their own deposits, and any omissions on their part to do this is immediately detected, and if necessary punished.

20. In the new latrine at Vepery, although the Sepoys were reasonable and were not opposed to the use of the latrine, it has been found difficult to accustom the men to the simple operation themselves of using the dry earth provided. The remedy is simple. The performance of this duty and the entire responsibility that it is both efficiently and constantly done must rest entirely with the Sweepers.

21. In order then that every facility may be afforded to them of performing their duties properly, their presence is constantly required within the building, otherwise they cannot be expected to know when or where their services are required.

22. In the building, as at present designed on the trough system, their constant presence within it would justly be objected to as a source of annoyance to those using the latrine.

23. In the latrine at Vepery, it has been observed that the Sweepers sit outside the building, and on the approach of the Inspecting Officer, make a rush inside to perform details of conservancy operations which at the time they were neglecting, and would probably continue to do unless constantly watched.

24. It is to obviate these little discrepancies of latrine economy, which have been observed in practice, that it is now proposed to describe a plan of latrine, which for the sake of distinction shall be called the "modified trough system."

25. The best form of latrine and one in which the conservancy operations are most readily and efficiently performed, is that which was proposed by Dr. Hathaway and which has been adopted in all our modern European Barracks for carrying out his own, or more commonly known as the Dry or Punjaub system of conservancy. It consists, as is well known, of a room with a row of seats on one side, beneath which the pans are placed which are removed through a series of arches into a Sweeper's passage where all the conservancy operations are carried on. The Sweepers or "constant watchers" as they are called, are stationed here, and from personal experience it may be asserted that no form of building is better adapted for the proper carrying out of the needful conservancy arrangements of the dry or dry earth system.*

26. Taking the general principles of this form of latrine as a guide, it is proposed to build a latrine for Natives on the accompanying plan, No. II.

This consists of a tiled shed with as much ventilation about it as is consistent with decency. Instead of having two trenches extending continuously the whole length of the building, it is proposed to have a series of short troughs about two feet in length and one in breadth and depth opening through a series of small arches into a smaller trough, which extends the whole length of the Sweeper's passage. The Sweeper's passage should either occupy the rear of the building as in Dr. Hathaway's plan, where one bank of trenches is only required, or the centre of the building as in the plan under review, where we have a double bank of trenches.

* A few slight alterations are necessary for the latter mode of conservancy.

27. Each trough is divided from its neighbour by a 4-feet screen wall, giving a space of 3 feet by $2\frac{1}{2}$ to each person, which is quite large enough for any ordinary man and sufficiently small to prevent his using the basement of the platform, which it has been observed the native is so particularly fond of doing, whenever an opportunity is afforded him.

28. An earth store runs down the centre of the Sweeper's passage and ablution platforms down each side of the building.

29. At the end of the building is a room for storing dry earth, and at the other is one for the disposal of the contents of the trenches and the manufacture of poudrette.

30. Cisterns are provided outside the building at each entrance for the Sepoys to fill their lotahs from. For this purpose, a well must be sunk close to the Privy.

31. In the latter room a pug mill is erected on a raised basement for the convenience of passing the poudrette directly from the mill into the cart.

32. A chimney is provided in connection with the mill for carrying off the gases which are evolved during the process of amalgamating the earth with the excreta.

33. A latrine containing space for twenty-four persons at one time may be considered large enough for the wing of a Regiment.

Its conservancy establishment should consist of one cart with driver, one head sweeper and two assistants.

34. The Head Sweeper should be entirely responsible for the proper conservancy of the whole building, and his pay should be larger in consequence of his increased responsibilities, and here it may be remarked that if an efficient and permanent set of Sweepers is to be secured, the pay must be larger than is at present given, namely, Rupees 5-8 per man.

35. The work of a Sweeper of a large public Latrine is heavy, and the attendance must be constant. Under these circumstances, the pay of the ordinary sweeper should be 7 Rupees and that of the head Sweeper, 8 Rupees.

36. The principles of the conservancy of this form of Latrine are precisely the same as those of the pure trough system.

1st. A layer of earth an inch in depth must be deposited morning and evening in the trenches.

2nd. As the trenches are used, the Sweeper on duty in the central passage at once covers them with earth from the central store.

3rd. As the trench becomes filled with excreta and earth, their contents must be removed to the pug mill at the end and converted into poudrette, which may at once be deposited on the cart.

4th. No water must be allowed inside the latrine for conservancy purposes.

5th. The sweepers should see that those using the Latrine do not perform their ablutions over the trenches, but over the sloped pavements appointed for that purpose.

6th. It should be the duty of the Head Sweeper to continually visit all parts of the latrine, not only to see that his Assistants are doing their duty, but that

the general conservancy of the building is well attended to, and with him alone should the responsibility rest of everything connected with the cleanliness of the place.

37. It is believed that a latrine of this sort for the Native Army would be found to combine all that is required in such a building, namely, sufficient privacy without interfering with ventilation or affording means for the mis-use of its component parts, and easy and efficient conservancy at a minimum amount of labour.

38. Having thus considered what is believed to be a suitable form of latrine for public purposes, the next desideratum in connection with the Latrines for Sepoys' families. Native Army is the provision of a small latrine for the wives and families of those sepoys who, from caste or other prejudices, cannot be induced to resort to a public latrine,

39. As this must be situated in the court yard of their compound, it must necessarily be small. It is proposed that the pattern (vide Plan V) should be adopted. It is precisely on the same principle as that described above, excepting that instead of allowing the excreta to fall on the floor of the trench, they should be received into an elongated pan which should be removable through a small wicket opening into the streets of the lines as the cart comes round of a morning; its contents could be emptied upon it, earth being used to cover the deposits during the interval.

40. At the present time no latrines are provided for the Quarter Guard rooms of Latrines for Native Guard Native Regiments, and the Regimental authorities are often Rooms. driven to make some temporary arrangements of this nature, which, from their imperfect construction, become themselves nuisances.* When these do not exist the Guard are put to great inconvenience, and much unnecessary labour is imposed upon them by having to march prisoners a considerable distance to "the rear," whenever any one in confinement requires to obey the calls of nature.

41. As a matter of discipline and proper conservancy, it is absolutely necessary that Quarter Guard rooms should be supplied with latrines, and it is proposed that a place of this nature, containing three seats, should be provided, (vide plan IV). It would not be necessary that a Sweeper should be constantly in attendance, as the contents of the trenches could be removed morning and evening; but in this particular instance the Non-commissioned Officer in charge of the Guard should be made responsible that the deposits are properly covered with earth from the store situated within the latrine.

42. The arrangements now in existence meet the requirements on this point; Latrine for Solitary Cells. but the latrine should be thoroughly ventilated.

43. The same form of latrine as that described in para. 26 should be adopted for all Native Hospitals, excepting that a double row of trenches Latrine for Native Hospitals. would not be necessary. Six short trenches with a Sweeper's passage in rear, as in the accompanying Plan IV, would suffice for all that is required of a Regimental Hospital. Its size might be increased or decreased as the particular case required by the multiplication or otherwise of the trenches.

44. Considering the peculiar requirements of hospital latrines, pans should always be used. These should be placed on a layer of earth within the trenches, the earth being

* Vide temporary Latrine attached to Guard room of 2nd Regiment, Vepery, consisting of an old sentry box.

intended to absorb any urine, &c. which does not fall into the pan. The pans should be almost the same in breadth and depth as the trenches, care being taken that they do not project above the basement of the building.

45. Having now fully discussed the form of latrine best adapted to the wants of a Native Regiment, we come to the consideration of the most Latrines for the Civil Popu- suitable form for the civil population, domestic servants, &c. lation.

46. A small latrine for males and females should be erected in every compound on the same principle as that above described for the use of Hos- Latrine for Domestic Ser- vants. pits. Two or three sittings would be all that is necessary.* In these latrines pans may or may not be used, but the occupiers of houses should be made responsible for their conservancy by the Municipal authorities, and owners should be compelled to build them.

47. The public latrines adopted for the Civil population generally, consists of a Public latrines for the Civil walled enclosure over which the natives squat indiscrimi- Population. nately, and when the conservancy is not properly attended to, the ground is generally so covered with deposits as to prevent the possibility of any one entering the building. So complete has this nuisance become and so frightful the condition of some of the public latrines, that recently the Magistrates refused to punish offenders who used public places, roads, lanes, open places of waste ground, instead of the public latrines. The working of these latrines with their conservancy establishments has been so forcibly described by Major Hearn, the Commissioner of Police, that no excuse is required for giving his letter at length in the Appendix to this Memorandum.

48. Some form of latrine is urgently required for the civil class which may obviate the disgraceful condition of these places as described in the above letter, and it is perhaps a matter for consideration whether for the more respectable inhabitants of our large native towns some better form of latrine, built on the principles above indicated, might not, to a certain extent, be made self-supporting, by the payment of a small fee to the Sweepers in charge of the building.

49. The difficulty remains of providing public latrines for the poorest classes who cannot afford to pay any fee for the use of latrines. The attempt to deodorize with dry earth the excreta, solid and fluid, is very expensive, both for supplying the dry earth and for removing it when mixed with the excreta. It seems doubtful whether anything that can be called a successful system of public latrine conservancy can be realized until there is a complete system of town drainage and an adequate water supply for flushing the drains.

50. Considerable improvement may however be made in the present open latrines; these should be traversed by a series of trenches a foot in width and depth, with a slope to one end of the yard, to admit of the urine draining away from the latrine into a reservoir outside, partially filled with earth where the urine would be at once deodorized. These troughs should, before use, have dry earth spread in them so as in a measure to absorb the excreta. There should only be sufficient space between the trenches to admit of two persons passing, and this space should be sloped towards

* A latrine built on the principles here laid down has been in use by the whole establishment attached to the Sanitary Commissioner's Office, and its conservancy has been at all times faultless.



the troughs, as shewn in the margin, to prevent natives squatting in any other fashion than across the trenches. The flooring of the latrine should be of asphalte throughout.

51. It would be a better arrangement if outside every public latrine a well was sunk surrounded by a chabootra and also enclosed with a wall or hedge. The native would then be able to perform his ablutions without offence to the general community.

52. It is strongly recommended that trees should be thickly planted round each of these places of public resort, and a portion of the sewage of the latrine might be advantageously used in their cultivation.

53. It must be admitted that a great practical difficulty arises when we come to consider the disposal of the fluid portion of the excreta in latrines used by the masses of our civil population until some general system of drainage is carried out in our large towns. At present the fluid excreta soaks into the floor of the latrine and the earth thus saturated becomes a permanent nuisance, but immediately we come to suggest a perfect system of dry conservancy, *i. e.* entire daily removal of all the excreta, both solid and fluid, a large increase of conservancy carts, attendants, &c. is immediately required, which, it is to be feared, the Municipal funds will not admit of, and which consequently renders any such scheme an impracticable one.

54. Under these circumstances, and until something is done for the general drainage of our large towns, our sanitary efforts must be directed rather towards improvement than to perfection. When a covered drain is available, the urine should be led into it and the drain flushed twice a day by water carts; where no drain is available, the urine should be led into large pits and then should have their surface covered each day with a certain quantity of earth for the purpose of deodorization. When the pit is filled, the contents should be sold as manure or used by the Municipality for their plantations of trees. The benefit accruing from the utilization of the poudrette in the manner here adverted to, cannot be too clearly pointed out, for not only does vegetable life absorb and assimilate a large portion of the very material which now saturates the soil of our large towns and vitiates their water supply, but the very element which is now so obnoxious and productive of disease in itself, becomes at once valuable for the purposes indicated.

W. ARNOLD SMITH, M. D.

Offg. Secy. Sanitary Commissioner, Madras.

APPENDIX.

MUNICIPAL COMMISSIONERS' OFFICE,
MADRAS, 12th February 1867.

To

THE COMMISSIONER OF POLICE,
Madras.

SIR,—We have the honour to bring to your notice that the Monegar Choultry road and the esplanade on either side of it are in a filthy condition, owing to parties resorting thither for the purposes of nature, and that the practice is increasing not only in that locality, but almost in every part of the town and suburbs.

2. As Cholera is very prevalent, the greatest attention to conservancy is required, and we earnestly solicit the co-operation of your establishment in enforcing cleanliness. The accommodation afforded by the public latrines is not anything like availed of by the classes for whom they were intended, and nothing but severe measures will induce them to resort to the same.

We have, &c.,

(Signed) C. DENISON,

„ B. CARDOZO,

„ S. JESUDASEN,

*Municipal Commissioners
for the Town of Madras.*

No. 754 of 1866-67.

MADRAS POLICE COMMISSIONER'S OFFICE,
15th February 1867.

From

Major C. S. HEARN,
Commissioner of Police.

To

THE MUNICIPAL COMMISSIONERS,
for the Town of Madras.

GENTLEMEN,—I have the honour to acknowledge the receipt of your letter of the 12th instant, bringing to notice that the Monegar Choultry road and the esplanade on either side of it are in a filthy condition, owing to parties resorting thither for the purposes of nature. I cannot think that persons ease themselves upon the high road. They do so occasionally, no doubt, upon the adjacent plain, but two Policemen are always placed there to prevent the offence and prosecute offenders. I have given stringent orders to these men to be vigilant.

2. From close inquiry and personal inspection I am inclined to believe that the attention of the Commissioners has been attracted by the large number of people who wash their persons in the pools of water adjacent to the Cemetery and Monegar Choultry roads, and who might be supposed to have been easing themselves on the

for Madras.

plain. This is not so. These persons all come from the adjacent latrine where no means of washing themselves are provided, and though the practice of washing their persons in public view is highly offensive and objectionable, it has been found impossible to prevent it, because the Magistrates, for reasons which will subsequently appear, refuse to punish them.

3. Twenty-two persons who were washing themselves on this spot yesterday were put before the Magistrate for indecent exposure, but the Magistrate dismissed every case with the following remark :—"These defendants were brought up charged with washing their posteriors outside the public privy. It has been brought to notice that there is not a drop of water inside any of the privies. There is said to be a well near each privy and chunam tub inside in very bad repair. No water appears to have been supplied, and unless necessary means are afforded to those who resort to public privies, the Magistrate cannot convict parties charged with washing themselves outside, and in and near ditches containing water." The fact of there being no water in these latrines has frequently been brought to the notice of the Municipal Overseer.

4. I personally inspected the latrine near the Cemetery road east of Monegar Choultry road, this morning. On walking along the public road, the stench was so offensive, that I, with difficulty, summoned courage to walk round the wall and look into the latrine. But I did so. I do not know if the Commissioners have ever inspected this latrine, but I will not attempt to depict the horrors which I saw, and which no force of language could adequately describe. I prefer to leave them to be ascertained by the personal observation of the Commissioners. I may mention, however, that the so-called water cisterns were utterly out of repair and were used equally with every other square inch of ground in the enclosure, for purposes of nature. I am told that about 1,000 persons use this latrine daily. It is far too small to accommodate this number, and might easily be enlarged to twice the size. I understand that only one Toty, on $3\frac{1}{2}$ Rupees, is employed to look after the latrine; the services of a temporary cooly, on one Anna per diem, being also occasionally granted in aid. Conservancy is impossible with the limited means provided, and a man on $3\frac{1}{2}$ Rupees only is compelled to supplement his scanty pay by seeking private employment elsewhere, so that the latrine does not enjoy the undivided attention of this solitary individual. The female latrines are said to be indescribably filthy. Here one female Sweeper is employed on $2\frac{1}{2}$ Rupees. It is said that the latrines are seldom, if ever, cleaned more than once a day, and sometimes not at all. A latrine so extensively used should be constantly cleaned, and filth carts should visit it several times a day. A stone trench should be constructed all round the inside walls for the purpose of receiving the excreta. There might be some difficulty even then in preventing people from using the middle area, but at present no attempt is made in this direction, and the people have no choice but to squat everywhere all over the enclosure. I cannot but think that something, however slight, might be done in the way of dry earth to render these latrines less horribly offensive than they are; but it is obvious that if people are compelled to resort to public latrines, a sufficient establishment should at least be provided to prevent the degree of abomination which now exists. The filth cart paid its morning visit to the latrine while I was there. The feeble efforts of the Toty to remove the excreta, unprovided as he was with any proper appliances for the purpose, were most painful and most disgusting to contemplate. I do not hesitate to say that the scene at that latrine this morning was an outrage to human nature. The people were loud in their complaints. I am informed that the Municipal Overseer has never yet inspected this or any other latrine in his Division; but I cannot say if this is the case, as the

negative fact of a man not being seen on any duty does not conclusively prove that he may not have been so employed without attracting observation. I was also informed that the latrine visited by me was rather a favourable specimen of its class, and that the latrines near the Slaughter House were far worse, but this I cannot think possible.

5. As for the prevalence of Cholera, this disease is far more likely to be generated in such a latrine as I visited, than by any amount of nuisance distributed over an open plain, though the latter practice cannot be tolerated on other grounds. I should be glad to know on what data the Commissioners ground their statement that the practice of committing nuisance is *increasing* all over Madras. For special reasons I have given the closest attention to this matter, and though nuisances are undoubtedly committed (2,433 persons were prosecuted for this offence in 1866), yet I cannot see any signs of actual increase. On the contrary, I believe that length of custom and the steady pressure of prosecution, prevail to make persons resort to latrines somewhat more than they did formerly. But it is not surprising that people should prefer the salubrious freedom of a plain to the ghastly foulness of the existing latrines, and as long as these places are so revolting, that human beings must shrink from entering them, so long will the people seek to evade the cruel necessity as often as they possibly can. I therefore call upon the Municipal Commissioners to assist the Police in this matter, and to make it more possible for them to prevent nuisances. The Commissioners may be assured of my warmest co-operation and I am always glad of the information of eye-witnesses as to the prevalence of nuisance in any particular spot, which can then be at once dealt with. But in the instance of the Monegar Choultry road, the remedy seems to be in another direction.

6. While on this subject, I may state that I believe the nuisance most patent to the public, and of which they chiefly complain, is that a large number of persons sit down to make water in view along the sides of roads and esplanades. But the Magistrates will not punish for this act unless accompanied by indecent exposure, on the ground that no public urinaries have been provided, so that here again I must ask the assistance of the Municipal Commissioners before the matter can be satisfactorily dealt with.

I have, &c.

(Signed) C. S. HEARN,

Commissioner of Police.

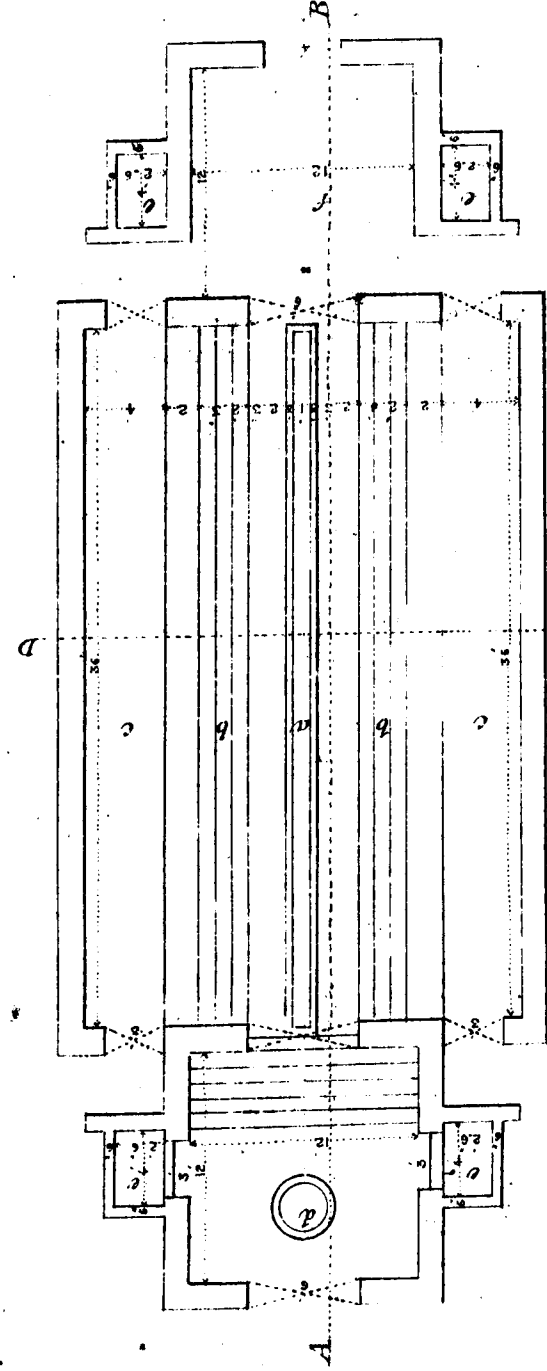
for Madras.

The Designs appended are not intended to be adopted as working plans, but simply to illustrate the principles of construction.

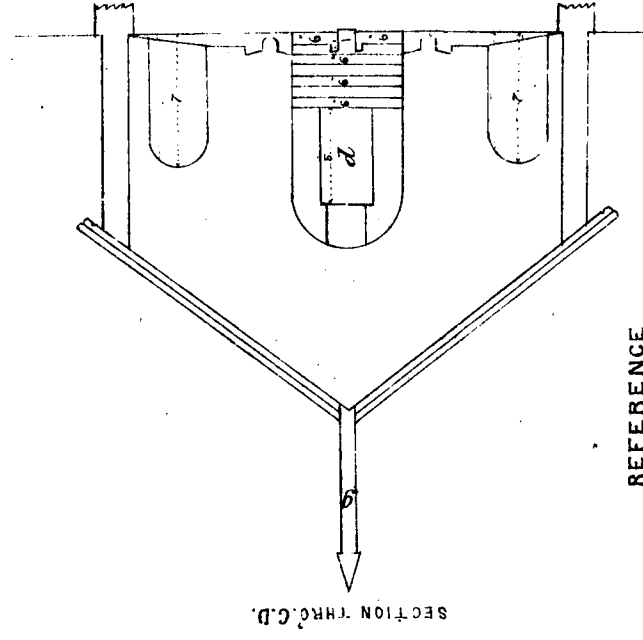
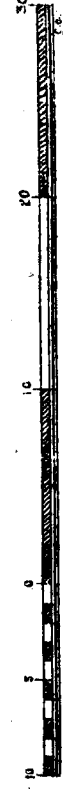
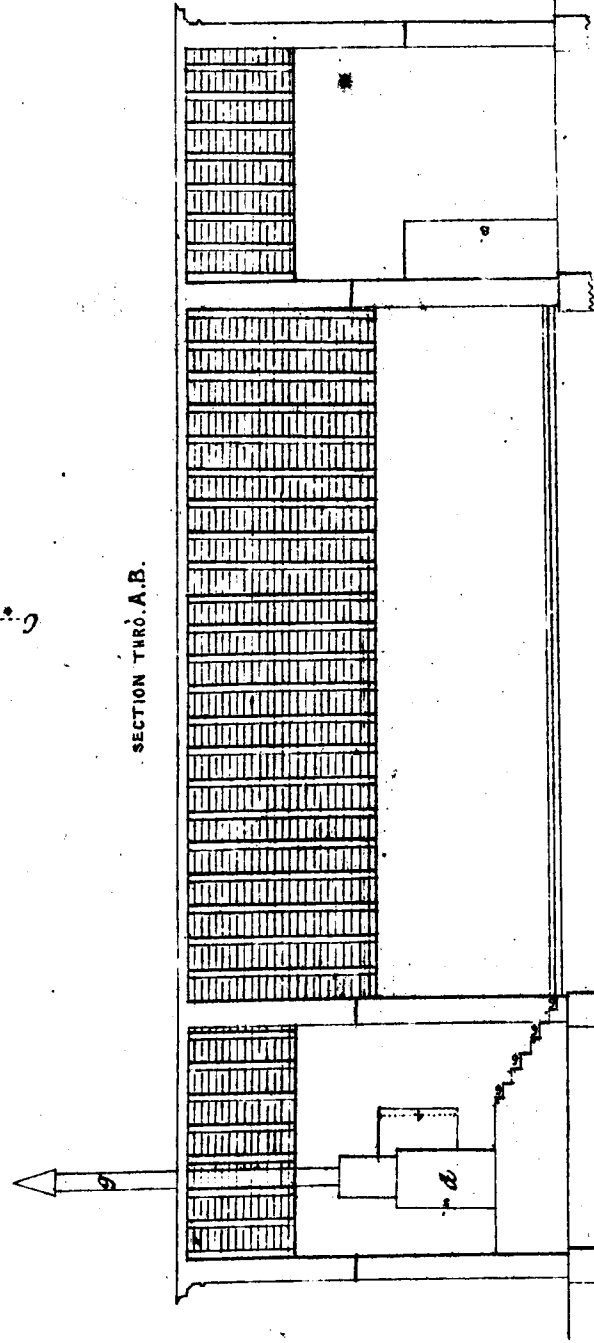
for Madras.

NR 1

PLAN OF NATIVE LATRINE FOR JAILS.



SECTION THRO' A.B.

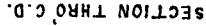
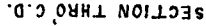


SECTION THRO' C.D.

REFERENCE

- a. Earth Store
- b. Trench for excreta
- c. Sloped pavement for ablution purposes
- d. Pug Mill
- e. Water Cistern
- f. Earth Store/Room
- g. Flue for Pug Mill

II & II

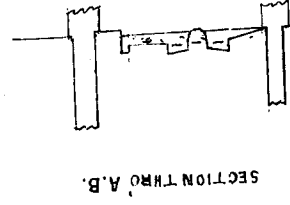


SECTION THRO' A. B.

- SECTION THRO' A. B.



23

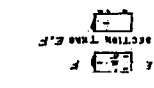


SECTION THIRD C.D.

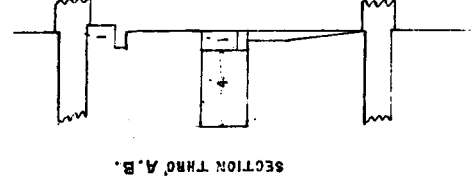
SCALE 4 FEET TO THE INCH

Gov^t Lith. Press. Chepauk. 1867

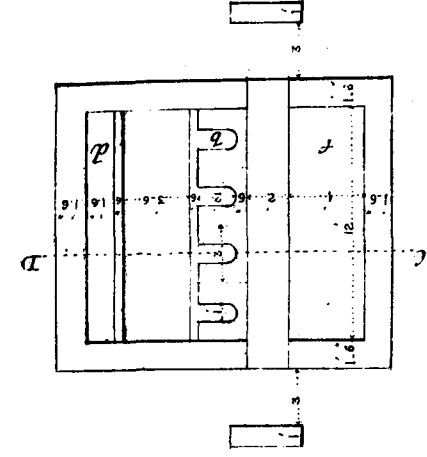
25



- Govt. Ind. Press. Cherpauk, 1867



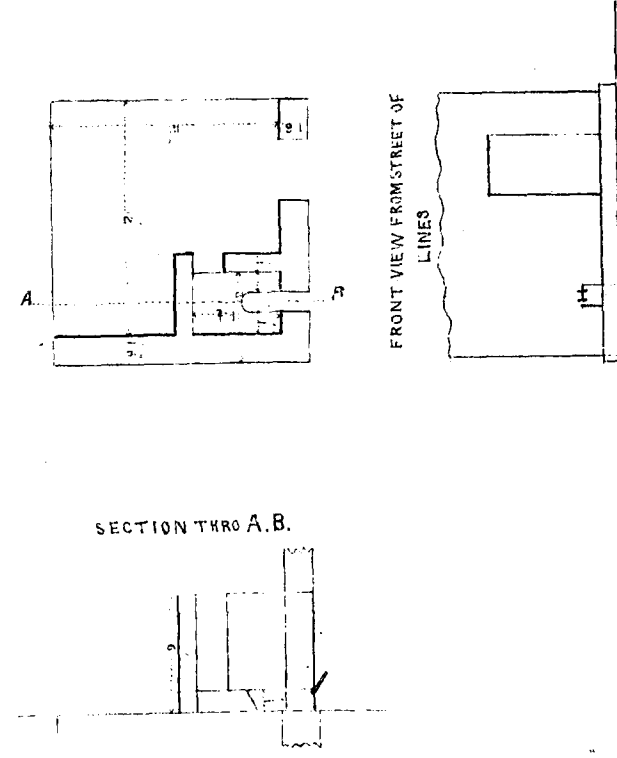
SECTION THREE 'A.B.



LATRINE FOR NATIVE QUARTER GUARDS

SECTION THREE C.D.

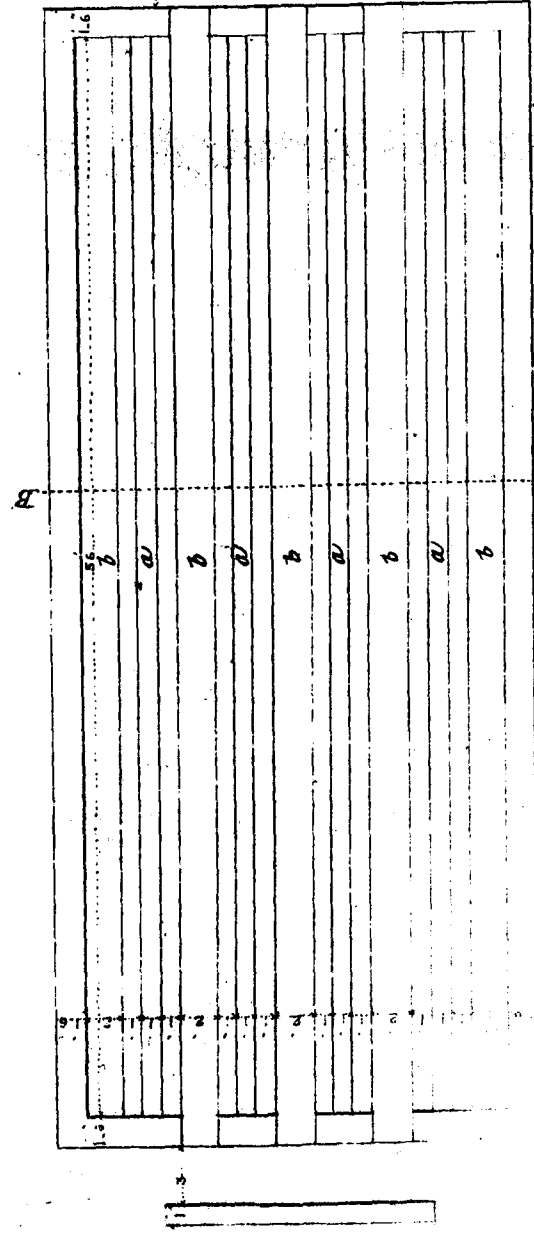
No V
LATRINE FOR THE COURT YARD
OF SEPOYS' HUTS.



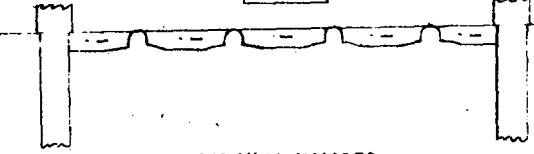
№ VI

PLAN OF PUBLIC LATRINE FOR
CIVIL STATIONS.
AND
DOMESTIC SERVANTS.

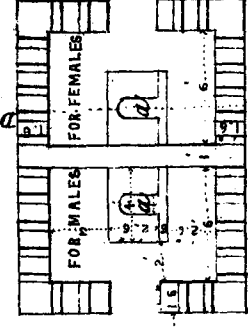
PLAN OF PUBLIC LATRINE FOR CIVIL STATIONS.



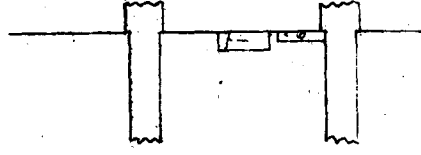
SECTION THRO' A.B.



PLAN OF LATRINE FOR DOMESTIC SERVANTS.



SECTION THRO' C.D.



REFERENCE

- a. Trench or Trough for excreta
- b. Passage

33
OFFICE OF SANITARY COMMISSIONER,
Madras, 16th July 1867.

No. 244.

From, Surgeon A. B. Montgomery, M.D.
Acting Sanitary Commissioner for Madras.

To, The Honorable R. S. Ellis Esq.
Acting Chief Secretary to Government,
Fort Saint George.

SIR,

Enclosures Five.

5 Copies of a Memorandum
on Native Latrines.

I have the honor to forward copies
of a "Memorandum on Native Latrines" by
Mr W. Arnold Smith which has this day
been forwarded to the Military Secretary
to Government. -

2. As the Memorandum in question
contains suggestions regarding Latrines
for the Civil and Jail population besides
Native Regiments and Regimental Hos-
pitals, I have thought it proper to for-
ward it to your Department also for
such orders as may seem necessary thereon. -

I have the honor to be,
Sir,

Your most Obedient Servant

A. B. Montgomery

Acting Sanitary Commissioner
for Madras.

From

THE SANITARY COMMISSIONER,
Madras.

To

THE SECRETARY TO GOVERNMENT,
Military Department,
Fort St. George,

Dated 24th June 1867.

No. 196A.

Submits a "Memorandum on Native
Latrines" drawn up by Assistant Surgeon
W. Arnold Smith, M.D.

GANN & BROTHERS - ADLPHI PRESS.

Handwritten note: "Middle Montgomery" dated 16/7/67

Subd no 1101 15/29 July 1867
924

Recd of Aug 28

Recd of Aug 28

From, Dec. 29 July.

The Acting Sanitary Commissioner
for Mexico.

To,
The Acting Chief Secretary to Government
at San Antonio.

San Antonio, Tex.

Dec. 29 July 1867.

No. 1138

190244

Dec. 1107. Mexico: S.

Respectfully received of a "Memorandum on a Notice of a Public Hearing" by the San Antonio Surgeon General Smith.

29 July 1867 No. 924.

Respectfully received of a

"Memorandum on a Notice of a Public Hearing" by the Surgeon General Smith to the Surgeon General of the Department of the Interior, Mexico, to the Municipal Council of San Antonio, Texas, and to the President of the Board of Sanitary Commissioners in the District of San Antonio.

The Surgeon General of the Department of the Interior, Mexico, to the Municipal Council of San Antonio, Texas, and to the President of the Board of Sanitary Commissioners in the District of San Antonio.

287.28728

W. H. Smith

W. H.