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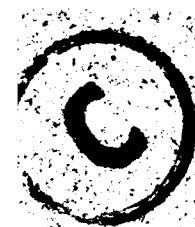
REPORT ON VACCINATION

THE PRESIDENCY AND PROVINCES

MADRAS

FOR THE YEAR

1877-78



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REPORT ON VACCINATION

THROUGHOUT

THE PRESIDENCY AND PROVINCES

OF

MADRAS.

FOR THE YEAR

1877-78.

PUBLISHED BY AUTHORITY

MADRAS.

PRINTED BY R. HILL, AT THE GOVERNMENT PRESS.

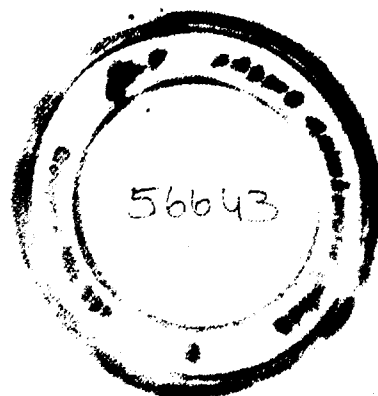
THROUGHOUT

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PRINTED BY R. HILL, AT THE GOVERNMENT PRESS

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குடிநாட்டினர்  
 செப்பனீர்ப்பதற்காக எடுத்த  
 கொள்ளப்பட்ட நாள் 1994  
 செப்பனீர்ப் முடிந்த நாள் 1994  
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 உத்தரவிடப்பட்ட  
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OFFICE OF SANITARY COMMISSIONER,  
MADRAS, 18th September 1878.

No. 53.

From

SERGEON-MAJOR W. R. CORNISH, F.R.C.S.,  
Sanitary Commissioner for Madras,

To

C. G. MASTER, Esq.,  
Acting Chief Secretary to Government.

SIR,

I HAVE the honor to submit, herewith, for the information of His Grace the Governor in Council, the Report on Vaccination for the official year 1877-78.

2. I much regret the delay in the submission of this document. It reached me originally on the 13th June, but in accordance with the instructions of Government in G.O., No. 1,116, of 26th June 1878, I was obliged to return it to Dr. Laing for the inclusion of the vaccination statistics of several Municipalities, which were then missing. Dr. Laing being absent on inspection duty in the Northern Division some further delay occurred in the correction and re-submission of the report, which reached me at Ootacamund on the 1st instant.

Arrangements have been made for the more prompt collection of Municipal returns, and I trust that in future there will be no loss of time in the submission of these papers.

3. Dr. Shortt, late Inspector of Vaccination, retired on the 15th February 1878, and was succeeded by Surgeon J. A. Laing. The report is based on Dr. Shortt's notes, he having been in charge of the office for ten and a half months of the year. For the short period of the year Dr. Laing was in office, he at my request undertook the revision and correction of the rules for the guidance of Deputy Inspectors and Vaccinators, and the revised code has subsequently been published.

4. The regular staff of Deputy Inspectors and Vaccinators was as follows:—

|                      |     |     |     |     |     |            |
|----------------------|-----|-----|-----|-----|-----|------------|
| 31 Deputy Inspectors | ... | ... | ... | ... | ... | 1st Class. |
| 7 do.                | ... | ... | ... | ... | ... | 2nd "      |
| 162 Vaccinators      | ... | ... | ... | ... | ... | 1st "      |
| 281 do.              | ... | ... | ... | ... | ... | 2nd "      |
| 92 Probationers,     |     |     |     |     |     |            |

and besides the sanctioned establishments of the several Local Fund Circles and Municipalities, extra hands were in several places temporarily employed, either on account of the prevalence of small-pox or to work in centres of famine relief.

5. The work accomplished by the vaccine staff during the year was unusually large, the total number of operations being 787,730, or a gross increase of 304,538 beyond the results of the previous year. The figures in the margin show how great was the increase of work in 1877-78 over any previous year as regards primary vaccination. The rise in numbers is too sudden to be permanent, and there can be no doubt that the increased work in 1877-78 was almost entirely due to the circumstances of the famine bringing vast numbers of persons together in towns and centres of relief, and thus enabling the vaccinators to have access to those requiring vaccination. In famine relief centres moreover the great prevalence of small-pox rendered it necessary that stringent precautions should be adopted in regard to the protection of inmates of camps, and in this way a great amount of the extra vaccination of the year was accomplished.

| Primary Vaccination. |     |         |
|----------------------|-----|---------|
| 1871-72              | ... | 276,822 |
| 1872-73              | ... | 338,480 |
| 1873-74              | ... | 363,809 |
| 1874-75              | ... | 428,667 |
| 1875-76              | ... | 383,067 |
| 1876-77              | ... | 478,727 |
| 1877-78              | ... | 776,705 |

6. Great as the increase in vaccine operations was, it would have been still more satisfactory if the local authorities in Bellary, Kurnool, Nellore, and South Arcot had taken full advantage of the assemblage of the people on famine relief to extend vaccination. The best results of all were obtained in the town of Madras, where no fewer than 116,335 persons were vaccinated by the regular staff and the temporary establishment entertained for house-to-house visitation. The numbers vaccinated in Chingleput, Coimbatore, Salem, North Arcot, Cuddapah, and Madura were very much above the average.

7. Dr. Shortt, the Inspector of Vaccination, at my request devoted much personal attention to the extension of vaccination in the town and relief camps of Madras, and to the organization of a temporary establishment to assist in the house-to-house visitation sanctioned under G.O., No. 174, of 13th February 1877. In the course of the year besides this work he inspected the vaccine arrangements in North Arcot, Cuddapah, Coimbatore, Chingleput, and Malabar.

8. The lymph employed was on the whole of good quality, as I had abundant means of observing from constant inspection of famine camps; but in some of the children who had been subjected to long privation the vesicles did not appear healthy, and in a few cases the arms ulcerated. This result, commented on by Dr. Shortt in his inspection of the North Coimbatore Circle, was, I believe, due more to the low health of the children than to defects in vaccination. Recent inspection of the work in Bhavani and Erode in healthy and well-nourished children, shows the lymph to be unexceptionable, and the work satisfactory in every respect.

9. The number of children under one year of age vaccinated was 68,110. These results in regard to the actual births in the several districts are unsatisfactory. It is very difficult, however, to persuade the people that vaccination should be done during the infantile period of life, and the intelligent counsel and aid of district officers is much needed to impress upon the people that the proper age for vaccination is that previous to teething. More support is given to vaccinators than formerly by village and district officials, but there is still much room for improvement in some of the districts.

10. Small-pox was unusually prevalent and fatal in 1877, but in the greater part of the Presidency it had declined very much before the end of the year. In the early months of 1878 it continued to be very prevalent and fatal in Godavari, Tanjore, South Arcot and Salem. In regard to the prevalence of this disease, the experience of the various famine camps showed that it could be absolutely controlled by effective vaccination. Measures essential to the safety of the people in famine centres, however, cannot be applied to scattered populations of rural districts, without legal powers compelling the people to have their children vaccinated within the early months of life.

11. The present report, prepared before the issue of G.O., No. 1,116 of 26th June 1878, includes the vaccinations performed in a few military cantonments beyond the Presidency limits. The reasons for the inclusion of such operations in those of the general report were, I imagine, because the Vaccinators are paid by the Madras Government, and their work principally confined to the floating populations of camp-followers, who are subjects of, and mainly belong to, the Presidency. The numbers are separately given, but if Government desire it the returns of these cantonments can be excluded in future reports.

12. In regard to the operations performed by Medical Subordinates and private Vaccinators, the instructions of Government have been attended to in excluding them from the calculations showing the average cost of each operation. In the year under review Medical Subordinates (chiefly those of jails) vaccinated 28,584 cases, or an increase of 12,831 on the previous year.

13. Only one Civil Dispensary in this Presidency makes any return of vaccination, i.e., the institution at Cuddalore, where 584 operations were performed. In my opinion the Medical Officers of the numerous dispensaries established and paid for out of Local Funds, ought to exert themselves in the extension of vaccination. As a rule the smaller dispensaries have but few or no in-patients, and the officers in charge, according to my experience, have abundance of time and oppor-

tunities of vaccinating. By utilising the services of their medical servants, the Local Fund Boards might get more vaccine work done, and the Taluk Vaccinators might devote their energies mainly to outlying villages and hamlets, which are now to a great extent neglected.

14. In regard to the results of the vaccination work the tables, prepared according to the new forms of the Government of India, show a total of 787,146 persons vaccinated, of which number 776,705 were primary vaccinations and 11,025 re-vaccinations. Of the former 648,097 or 82.28 per cent. were returned as "successful," and of the re-vaccination cases 7,210 or 65.39 per cent. succeeded. The proportion of success would have been higher in primary vaccinations, only that during the famine crisis many persons subjected to the operation were lost sight of, and such persons could not be entered as those successfully operated on.

15. The following abstract shows the agency by which the vaccine operations were carried out:—

|                                            | Numbers. |
|--------------------------------------------|----------|
| Vaccine circles, including Madras District | 685,890  |
| Provincial Municipalities                  | 59,283   |
| Dispensaries                               | 584      |
| By Medical Subordinates (chiefly in jails) | 28,584   |
| Military Cantonments beyond Presidency     | 6,790    |
| Private Vaccinators                        | 471      |
| Private Estate Vaccinators                 | 6,113    |
| Railway Apothecaries                       | 10       |
| Total                                      | 787,730  |

16. In the classification adopted in the report the work of the Madras Collectorate has been included under *Circles* and *Districts*, whereas it should properly have been shown under "Municipalities," as the Municipal exchequer pays all costs, beyond that of the Vaccine Depot, maintained at the Presidency town. In future reports the necessary corrections will be made. Practically during the last year the vaccination in the Presidency town partook of a provincial character owing to the flocking in of many thousands of destitute people from other districts.

17. In regard to the expenses of vaccination, the following abstract shows the total cost and sources of payment:—

|                                                       | RS.      | A. | P. |
|-------------------------------------------------------|----------|----|----|
| Imperial                                              | 1,212    | 10 | 0  |
| Provincial                                            | 24,434   | 0  | 8  |
| Local                                                 | 1,05,630 | 13 | 7  |
| Municipal                                             | 17,491   | 3  | 1  |
| Private contribution from Zemindars or Estate owners. | 1,491    | 9  | 11 |
| Total                                                 | 1,50,330 | 5  | 3  |

18. The cost per head, excluding the work of Medical Subordinates and private Vaccinators, was 3 Annas 9 Pies against 4 Annas 10 Pies in 1876-77. The amount varied from 12 Annas 5 Pies in Kurnool District to 1 Anna 6 Pies in South Coimbatore Circle. The collection of the people in relief centres facilitated vaccination work and diminished cost. But there seems no good reason why, year after year, the amount of vaccine work in Kurnool should be so disproportionate to cost, and I would suggest that the attention of the Local Fund Board should be drawn to the scanty numbers vaccinated in the district.

19. In the next few years there will be fewer subjects generally available for vaccination. The mortality of the famine has, as shown by the Census results, fallen heavily on the children under 10 years of age, and birth-rates have been exceedingly low for many months past. Whilst recently inspecting in Coimbatore the Vaccinators complained to me that they had great difficulty in finding unvaccinated children so as to keep up their usual numbers.

REPORT ON VACCINATION.

20. I fear the great increase in numbers vaccinated in 1877-78 does not show any greater willingness on the part of the civil population to submit to vaccination, and that the results of the famine year are not likely to be obtained in any future period under a system of voluntary vaccination.

21. Since the close of the official year Government has sanctioned my proposition for the Inspector of Vaccination taking a share in the general sanitary inspection of the Presidency, by which arrangement, during the present year, a much wider area of country will be brought under review.

I have the honor to be,

Sir,

Your most obedient servant,

W. R. CORNISH, F.R.C.S.,

*Sanitary Commissioner for Madras.*

ANNUAL REPORT OF VACCINATION

FOR

1877-78.

I HAVE the honor, in submitting the Annual Report of Vaccination of the Madras Presidency for the year 1877-78, to state that during the year under review one Second-class Deputy Inspector was added to the establishment for employ in the South Arcot District and posted to the Virudachalam Circle, as the district was divided into two circles. The advisability of employing a separate Deputy Inspector in the Tellicherry Circle of the Malabar District was suggested to the President, Local Fund Board, during Dr. Shortt's tour of inspection in November last in that district, as the district is large and divided into two circles, and the greater part sickly.

2. There was one resignation among the staff of Deputy Inspectors, viz., that of the Deputy Inspector of Chittur Circle.

3. In the beginning of 1877 the appointments of Deputy Inspectors to the Tinnevely District were resuscitated by the appointment of two Second-class Deputy Inspectors. In the middle of the year, at the request of the President, Local Fund Board, a First-class Deputy Inspector was substituted to the Tinnevely Circle in lieu of a Second-class Deputy Inspector, in accordance with the new Vaccination Rules. In the Dindigul Circle of the Madura District, at the request of the President, a Second-class Deputy Inspector was substituted in lieu of the First-class Deputy Inspector. The Second-class Deputy Inspectors of the South Canara District, Chicacole Circle of the Ganjam District, and the Southern Circle of the Coimbatore District were promoted to the first-class grade during the year at the request of the Local Fund Boards of these districts, and the appointments of First-class Deputy Inspector to Jeypore Hill Tracts was also resuscitated by this office. The temporary Vaccinators in connection with the recently created Health Department in the town of Madras continued at work till the end of August 1877, and the work was then carried out by the town vaccine staff. The Vaccinators had to undergo much difficulties in hunting for and procuring lymph subjects to furnish arm vaccine lymph to meet the numerous demands that had arisen in connection with the work, and a large number of operations were carried out in the several relief-camps and poor-houses in the suburbs of the town owing to the large number of the suffering poor who congregated at these centres from the great distress caused by the famine. But at the Perambore Relief Camp the relief officers showed little or no interest in vaccination nor in urging the camp inmates to undergo the operation; consequently very little was done in this particular camp. The total of operations performed in the town of Madras is 116,335, showing a vast increase of 64,840 cases when compared with that of the previous year, and the town work stands first in the Presidency, but this is owing to the accidental circumstance caused by the famine. A First-class Vaccinator was specially employed in the Red Hills Famine Relief Camp from April to 1st November 1877, when his services were dispensed with as they were no longer required. He shows a total of 4,827 operations having been performed in the camp from April to October 1877. This Vaccinator was paid out of the famine funds the whole time he was so employed.

4. The establishment during the year under notice consisted of 38 Deputy Inspectors (of whom 31 are of the first and 7 only of the second-class), 162 First-class Vaccinators, 281 Second-class Vaccinators, and 92 Probationers. The increase

in the number of Vaccinators is due to the employment of additional men by several of the Local Fund Boards under the new Vaccination Rules. Of five Vaccinators four were prosecuted by the several Local Fund Boards, and have been convicted of falsifying returns during the year. Two of the four were prosecuted in the Trichinopoly District and convicted and punished; one with fine and the other with simple imprisonment; the third was prosecuted in the Cuddapah Circle, viz., a Second-class Vaccinator, who was convicted and punished with a fine of Rupees 50 for a similar crime; and the fourth, a First-class Vaccinator, was punished in the Penukonda Circle with a fine of Rupees 5 for rendering false accounts, and subsequently suspended for six months by the President, Local Fund Boards; the fifth (a Second-class Vaccinator) belonged to the Madras Collectorate, falsified his returns and deserted: the necessary steps have been taken to prosecute him, and the Presidency Magistrate has issued a warrant for his apprehension. One First-class Vaccinatrix was dismissed from the service for unsatisfactory work.

5. The casualties, &c., &c., among the staff of Vaccinators as reported by the Deputy Inspectors comprise 30 transfers, 26 resignations, 33 dismissals, 9 desertions, and 7 deaths. Of the transfers 8 occurred in Vizagapatam, 6 in South Arcot, 3 in Coimbatore District, 2 in each of the Madras Collectorate, Tanjore, Madura, Bellary, Nellore, and 1 in each of the following: Trichinopoly, North Arcot, and Salem. Of the resignations there were 6 in Coimbatore, 4 in Cuddapah, 3 in Nellore, 2 in each of the Madras Collectorate, North Arcot, Vizagapatam, and one in each of the following districts: South Arcot, Trichinopoly, Madura, Salem, Kurnool, Kistna, and Jeypore Hill Tracts. Of the dismissals 12 occurred in Salem, 5 in Coimbatore, 3 in Vizagapatam, 2 in each of South Arcot, Trichinopoly, and one in each of the following: Madras Collectorate, Tanjore, Tinnevely, North Arcot, Cuddapah, Bellary, Jeypore Hill Tracts, Ganjam, and Hill Tracts of Ganjam. Of the desertions there were 6 in Coimbatore, and one in each of the Madras Collectorate, Cuddapah, and Vizagapatam. Of the deaths 2 occurred in Jeypore Hill Tracts, 2 in Cuddapah, and one in each of the following districts: Malabar, Bellary, and Kistna.

The Deputy Inspectors as a body worked well during the year, and gave satisfaction in the performance of their duties. Only Rupees 20 have been exacted from them as fines for inattention to orders and gross remissness in their work, and Rupees 14-12-0 were recovered by this office from the Vaccinators for neglect of duty and misconduct.

|                                                                                    | Rs.   | A. | P. |
|------------------------------------------------------------------------------------|-------|----|----|
| Recovered as fines from Deputy Inspectors and Vaccinators.                         | 121   | 3  | 9  |
| from those who resigned                                                            | 74    | 8  | 4  |
| on account of sickness, absence, suspension, and leave with forfeiture of pay, &c. | 1,755 | 4  | 9  |
| undrawn pay for desertion                                                          | 84    | 8  | 0  |
| non-completion of the staff                                                        | 2,196 | 11 | 11 |
| Total                                                                              | 4,182 | 4  | 9  |

The present staff comprises—

|                   | Dy. Inspectors. | Vaccinators. |
|-------------------|-----------------|--------------|
| East Indians      | 3               | 8            |
| Hindus            | 27              | 402          |
| Mahomedans        | 6               | 86           |
| Native Christians | 2               | 24           |
| Brahmans          | —               | 15           |
| Total             | 38              | 535          |

The total number vaccinated during the year under notice was 787,730, constituting the following particulars:—

| Department.                         | Total of Operations. | Increase. | Decrease. | Net Increase. |
|-------------------------------------|----------------------|-----------|-----------|---------------|
| Vaccine Districts and Vaccine Depôt | 685,890              | 278,401   | ...       | ...           |
| Military Cantonnments               | 6,790                | 1,550     | ...       | ...           |
| Private Vaccinators                 | 471                  | ...       | 2,577     | ...           |
| Medical Subordinates                | 28,584               | 12,831    | ...       | ...           |
| Municipalities                      | 59,238               | 18,116    | ...       | ...           |
| Zemindaris                          | 5,113                | 2,266     | ...       | ...           |
| Civil Dispensaries                  | 584                  | 497       | ...       | ...           |
| Railway Apothecaries                | 10                   | ...       | 47        | ...           |
| Total                               | 787,730              | 318,661   | 2,624     | 311,037       |

The total work shows a large increase of 304,538 operations when compared with that of the previous year, with an average of 83.20 per cent. of success.

Of the total of operations the largest number has been performed in the collectorate of Madras, 116,335, next comes Coimbatore with 69,043, North Arcot with 60,508, Madura with 59,114, and Salem 52,487. The smallest number was operated on in the Hill Tracts of Jeypore, viz., 3,654 cases.

Dr. Shortt visited during the year the districts of North Arcot, Cuddapah, Madhanapalle, Salem, Coimbatore, Chingleput, and Malabar, and, owing to the great prevalence of small-pox followed by famine, his presence was absolutely necessary in Madras for arranging a systematic plan of work in the town of Madras and the several relief-camps and poor-houses, &c., to arrest the spread of small-pox, which had become virulent. Dr. Shortt states that the department responded nobly to the sudden and emergent calls made on it for the services of Vaccinators as well as for large supplies of vaccine lymph, and ultimately succeeded in controlling the disease and in arresting its virulency and progress in Madras. The Vaccinators of the Madras Collectorate are to be placed under the direct control of the President, Municipal Commission, Madras, from the commencement of the official year 1878-79.

Small-pox was prevalent chiefly in Madras, Chingleput, North Arcot, South Arcot, Trichinopoly, Cuddapah, Kurnool, Salem, Coimbatore, Nellore, Bellary, Malabar, South Canara, Kistna, and Godavari Districts, and Temporary Vaccinators had to be employed in the following: Chingleput, Trichinopoly, Vellore Circle, Oosoor Circle, Malabar, South Canara, Nellore, and Ongole Circles.

The total number of children successfully vaccinated under one year of age has been 68,110 during the year. The largest number of operations of this class was performed in the town of Madras, viz., 7,274, and the smallest in the Malabar District, being 48.

The average percentage of success of the primary and re-vaccinations, including the unknown results, has been 83.20 on the whole, showing a falling off of 11.13 when compared with that of the preceding year. The decrease in the percentage of success is attributed to the large number of coolies operated on among the famine relief-camps, works, poor-houses, &c., in the several districts and in the Presidency town; their results were not fully ascertained after vaccination, as the inmates of the camps, &c., were moved out from place to place frequently.

The proportion of successful cases varies as usual in the different districts, ranging from 98.23 in the Vizagapatam Range to 81.76 in the Cuddapah Circle; but in the following the proportion of success was over 95 per cent.: Tanjore, Dindigul, Salem, South Coimbatore Circle, Vizianagram Range, and Hill Tracts of Ganjam.

The cost of each successful operation for the whole Presidency was 3 Annas and 9 Pies, showing a decrease of 1 Anna and 2 Pies below that of the previous year. In the Hill Tracts of Ganjam the cost was highest, viz., Rupees 1-6-1, in Jeypore Hill Tracts Rupees 0-12-7, and the lowest was in South Coimbatore Circle, 1 Anna and 6 Pies.

## ABSTRACTS OF DEPUTY INSPECTORS' REPORTS.

## BELLARY DISTRICT.

This district comprises three circles, with a Deputy Inspector presiding over in one circle and an Assistant Deputy Inspector in each of the other two circles.

## BELLARY CIRCLE.

In this circle 6,728 operations are reported by the Deputy Inspector with 5,178 successful, 681 unsuccessful, and 869 unknown results, showing a decrease of 1,060 cases below that of the previous year. This decrease is due, the Deputy Inspector says, to the great prevalence of famine, which was attended with much sickness, and many of the vaccinating staff suffered from repeated attacks of fever, which rendered them unfit to perform their work. There were two transfers, one vacancy, and one dismissal among the Vaccinators. Obstruction to the spread of vaccination still exists in the circle, and the people in the taluks of Kudligi, Harpanahalli, Hudgalli, and Raidroog do not appreciate the benefits likely to result from vaccination. The want of material assistance by the Revenue officials to the department is a great drawback to vaccination in the circle, and the Deputy Inspector requests that Tahsildars, Revenue Inspectors, and Village officials, &c., be strictly ordered to render their legal aid to the Vaccinators in promoting vaccination. Small-pox was not reported to have prevailed in a severe form. The Deputy Inspector suggests for the wide spread of vaccination that the operation should be enforced on the people who are unprotected, and a small fine be levied should they refuse to undergo the operation when called upon. The number of children vaccinated under one year of age was 2,595, comprising 1,252 males and 1,343 females. First-class Vaccinator Syed Hussain, No. 90, has obtained the largest number of infants, viz., 596. No batta was spent to mothers for furnishing lymph. Eight vaccination certificates have been granted to candidates; of these 6 had marks of vaccination and 2 of small-pox. A few of the Vaccinators were reprimanded and punished with fines for remissness in their duties. The majority of the Vaccinators are clamorous for better prospects and the extra allowance allowed in G.O., dated 2nd September 1876, No. 1,591. The Deputy Inspector complains that no travelling allowance or the services of a peon are allowed him, whilst such indulgences are conceded to Deputy Inspectors in some other districts. The lymph in use was good, and the cost of each successful case was Annas 8.

## PENUKONDA CIRCLE.

The Deputy Inspector reports 2,450 operations with a percentage of 81.67 of success, and the results in 277 cases were unknown. On comparison with the work performed during the preceding year, there is a decrease of 1,780 operations. The vaccine staff remained for the most part of the year incomplete. One Vaccinator was on sick leave for three months, another under medical treatment for two months, and he was then granted three months' sick leave, and a third was prosecuted before the Deputy Magistrate of Penukonda Division and punished with a fine of Rupees 5 for having submitted false returns of work. Thereupon the Local Fund Board suspended the Vaccinator for six months, and his place was not filled up for some months. A few of the Vaccinators were repeatedly attacked with fever, which was prevalent in the circle. These various causes account for the decrease in the number vaccinated during the year as compared with that of the

previous year. The number of infants vaccinated under one year of age was 762. The Deputy Inspector suggests that compulsory measures be adopted for spreading vaccination in the Ceded Districts. In the absence of any such law much might be done by the Tahsildars and other native officials by subjecting their own children freely to the operation and thus set an example to others. Enlightened people not only object to the extraction of lymph from the arms of their own children, but also often prevent lymph being taken from the children of their servants and friends. Small-pox broke out in the circle, and immediate arrangements were made to check its further spread by vaccinating the unprotected. The Deputy Inspector complains that no travelling batta is conceded to him, and the lack of a peon is much felt in transacting his work. The conduct of the staff has been uniformly good, and the average cost of each case vaccinated is Annas 9 and Pies 5. Thirteen vaccination certificates have been granted to candidates during the year.

## GOOTY CIRCLE.

The Assistant Deputy Inspector reports 5,854 operations during the year with 5,173 successful, 404 unsuccessful, and 277 unknown results. The total shows an increase of 1,980 cases when compared with the number vaccinated during the preceding year. This increase is due, the Deputy Inspector thinks, to cholera and small-pox having been less prevalent in the district than in the previous year. The staff of Vaccinators was not complete during the year as some were on leave. There was one death among the staff. Objection to the spread of vaccination existed in some parts of the circle, and many people were reluctant to undergo the vaccine operation during the time the famine lasted. The Deputy Inspector suggests that vaccination be made compulsory till the people appreciate the benefits of vaccination. Much difficulty exists in procuring arm lymph for transfer, and the Deputy Inspector suggests that the people be allowed a small amount of money to enable the Vaccinators to extract lymph from the arms of children. No batta to mothers was paid during the year. The cost of each successful case was Annas 6 and Pies 4.

## CHINGLEPUT DISTRICT.

The Deputy Inspector reports 22,729 operations during the year under notice with a percentage of 94.47 of success, and the results in 3,479 cases were not known. The total, comprising the work of the permanent and temporary staff, shows an increase of 7,527 cases, exclusive of the work performed by the temporary Vaccinators, when compared with the number of cases vaccinated during the preceding year. The increase is attributed to the relief-camps which were opened in the district on account of famine, and the coolies in these camps were compelled to be vaccinated. The largest amount of work, viz., 3,317, was performed by Second-class Vaccinator Cooposawmy, No. 633, with 2,092 successful results. Small-pox was prevalent in the district and four temporary Vaccinators were entertained to check the progress of the epidemic. The Deputy Inspector suggests that if the Tahsildars and heads of villages be directed to interest themselves in spreading vaccination, that a considerable amount of work can thus easily be performed with the assistance of the Revenue officials. The number of children vaccinated under one year of age was 1,238; of this number 256 were operated on by Second-class Vaccinator Visvanatham, No. 721, with 225 successful results. 37 vaccination certificates were granted to candidates who appeared for examination. The Deputy Inspector states that Second-class Vaccinators of Chingleput Circle have been granted famine batta during the year, while the Vaccinators of the Saidapet Circle have been refused, although they have worked very hard. He complains of the insufficiency of the staff of Vaccinators to meet the wants of the district and the absence of any inducement to the unpaid volunteers to work satisfactorily. The conduct of the staff has

been reported satisfactory and the working lymph in use good. The cost of each successful case has been Annas 2 and Pies 10. On the 18th September 1877 Dr. Shortt visited Saidapet Famine Camp and found much fault with the Vaccinators for carelessness, and directed two of them to be recommended for fine to the President, Local Fund Board. He also visited the Pallavaram Famine Camp on the 20th and Chingleput on the 25th, where he inspected several subjects with good vaccino vesicles at the feeding-place. On the 27th he visited the famine relief camp at Truvallur and left for Salem.

### COIMBATORE DISTRICT.

This district has been divided into two ranges with a First-class Deputy Inspector to each.

#### NORTH COIMBATORE RANGE.

The Deputy Inspector reports 29,033 operations during the year with a success of 96.65 per cent. The total work performed in the two ranges shows an increase of 24,610 cases when compared with that of the preceding year, notwithstanding that a great deal of sickness prevailed in the range and many people left it on account of the famine. The increase is accounted for, viz., first, by the employment of 19 Probationary Vaccinators on Rupees 7 each per mensem; second, result system in the district. On reviewing the comparative work done by the staff of Vaccinators, Temporary Vaccinator B. Cumroodeen stands first, who shows a total of 3,200 cases with a percentage of 98.75 of success. The Deputy Inspector states that obstructions to the spread of vaccination arising from prejudice, &c., are gradually diminishing, but great difficulties have been experienced by the Vaccinators by the withdrawal of peons by Tahsildars. Batta to the extent of Rupees 13-4-0 was spent on account of mothers for furnishing arm lymph. Small-pox was prevalent throughout the district and the mortality from the disease has been 1,358 against 361 during the past year, but steps were taken to put down the spread of the disease whenever it appeared. The number of children vaccinated under one year of age is 3,971. Small-pox after vaccination in a few cases occurred, but the disease was very mild. Forty vaccination certificates were granted to candidates appearing for examinations. The character of the staff of Vaccinators was generally good and the lymph in use effective. The cost of each successful case has been 1 Anna and 8 Pies. Dr. Shortt was at Erode on the 1st November 1877, where he met the Deputy Inspector, and in the evening visited the famine relief camps and saw the Tahsildar, the Passed Hospital Apprentice in charge of the camp. He inspected a large number of subjects and condemned the whole work as being most disgraceful to the department, as the subjects were most carelessly operated on with badly stored lymph, and each having but one or two insertions, and these were in a state of ulceration. There were also 12 cases of small-pox in the camp hospital. He visited the camp again on the 2nd; neither the Deputy Inspector nor the Vaccinator were present, but after waiting for some time in the camp hospital he met the Deputy Inspector on his way back to the town, and went to relief works and orphanage, where he saw several subjects vaccinated only three or four days ago, in which nothing was to be seen at the insertions. The whole work was most unsatisfactory. On the 3rd he left for Bhavani and visited the famine relief camp, where also the work was in the same unsatisfactory state as was seen at Erode. Saw three cases in the town and inspected the equipments of the Vaccinators. On the 5th he went over to the famine camp and found no working lymph. There were 4 cases of small-pox and 26 of measles in the camp hospital. He left the Deputy Inspector to carry on vaccination with the two lymph subjects subsequently brought by the Vaccinator and returned to the town. Visited the camp again in the afternoon, and the Vaccinator who went for a subject did not return. On the 6th he left for Audyoor and visited the relief-camp, where the Vaccinator, quite a youth, showed him one subject with large

maturing pustules said to have been vaccinated four days ago, and no other work was to be seen there; evidently the Vaccinator has been idling for the past two months. On calling on the Deputy Inspector for explanation, he said that this man was taken as a probationer to work on the Burgoor Hills, where fever was reported to have prevailed. Returned to Bhavani and inspected three subjects from the camp with good vesicles. Saw two probationers and found one of them quite unfit for the work. The Vaccinator from the Audyoor Relief Camp who was directed to follow Dr. Shortt into Bhavani was said to have deserted. Dr. Shortt left for Erode on the 8th and arrived at Coimbatore late in the evening. Visited next day the small-pox and famine hospitals with Dr. Morton, the officer in medical charge of the camps, and vaccinated a small gang of 20 members encamped next the small-pox hospital. Inspected the equipments of three Vaccinators and found them correct. Saw also the President of the Local Fund Board and the Zillah Surgeon. On the 11th he inspected the children's nursery with the Collector and suggested the whole unprotected to be vaccinated, and accordingly sent the Deputy Inspector and Vaccinators, and in the course of two days 241 cases were reported to have been vaccinated by them. On the whole the work of the Deputy Inspector of this range was very unsatisfactory, which he attributes to his carelessness and want of attention.

This is an unfavorable report, but it is only fair to the Deputy Inspector to state, that having recently inspected vaccination work in villages of the Coimbatore, Erode and Bhavani Taluks, I have formed a more favorable opinion of the work and superintendence than Dr. Shortt has done.

W.R.C.

#### SOUTH COIMBATORE RANGE.

The Deputy Inspector reports 37,105 operations in this range during the year under notice, with a success of 97.26 per cent. As the district was divided into two vaccine ranges from the beginning of 1877, no comparison can be drawn of the work done during the year with that of the preceding year. Among the staff Probationary Vaccinator Shaick Omer stands first in respect to the quantity of work done, and he has operated on 3,390 cases. This was owing to the opportunities he had in vaccinating the coolies in the various famine relief-camps established in this range. Small-pox was prevalent during the year, and six temporary Probationary Vaccinators were employed to check the disease. These probationers did not find the result system to be attractive, and at last they resigned their appointments after a month. The Deputy Inspector acknowledges the assistance given by the Revenue officials as well as the services of a peon in aiding the Vaccinators in their work. No batta was spent to mothers for furnishing arm lymph as the Vaccinators used the lymph from the cases vaccinated in the relief camps and works. The number of subjects vaccinated under one year of age was 5,198 with 4,912 successful results. 18 vaccination certificates were granted to candidates appearing for examinations. The conduct of the staff, exclusive of probationers, has been good and the lymph in use excellent. The cost of each successful case has been 1 Anna and 6 Pies. On the 16th November 1877 the Deputy Inspector of this range reported himself to Dr. Shortt at Coimbatore, when he was suffering from a bilious complaint. On the 17th he inspected his records, &c., and left for Calicut.

### CUDDAPAH DISTRICT.

In this district there are two circles, each being presided over by a First-class Deputy Inspector.

#### CUDDAPAH CIRCLE.

The total number vaccinated during the year under notice is 12,692 with a percentage of 81.76 of success, and the results in 1,041 cases are not known. On comparison with the work shown in the preceding year there is an increase of 9,459 operations partly owing to the greater opportunities the Vaccinators had of

operating on coolies working in the various famine relief camps and partly to the kind aid rendered by the District Collectors, Divisional Officers, and Tahsildars, who all took a warm interest in promoting vaccination among the famine relief laborers. Great obstruction exists in regard to infantile vaccination, as the parents imagine that young children will have their health ruined by vaccination. The conduct of the Vaccinators was on the whole satisfactory. The largest number, viz., 1,784, was obtained by First-class Vaccinator P. Sashachellum. The mortality from small-pox was 973. Small-pox broke out in almost all parts of the circle, and immediate steps were taken to arrest the disease. Fever also showed itself, committing great havoc during the year, and deaths from it were countless, and this greatly interfered with the progress of vaccination. The salary of Second-class Vaccinators is complained of very much by the Deputy Inspector, as it hardly suffices to meet the expenses incurred by the Vaccinators, and he suggests that the new rules providing batta and extra allowance to Vaccinators be brought into operation. Among the staff there were 4 resignations, 1 dismissal, and 1 desertion. One of these was convicted and punished for submitting false returns. No batta was paid to mothers for furnishing lymph during the year, as no provision was made for this purpose; consequently the mothers were reluctant to allow lymph being taken from their children's arms. The cost of each successful case has been Annas 5 and Pies 3.

#### MADHANAPALLE CIRCLE.

In this circle the Deputy Inspector reports that 7,618 were vaccinated with a success of 88.01 per cent., showing a considerable increase of 4,677 cases over that of the past year. The increase in the number of operations is partly due to compulsory vaccination in getting the inmates of the famine relief camps vaccinated, and partly to the employment of extra hands, viz., three Second-class and four Probationary Vaccinators. During the year the staff was not complete; there were two deaths from cholera and fever, and one was on the sick list for three months. The people in some parts of the circle are averse to being vaccinated owing to ignorance. They believe that if they submit to the operation they will incur the displeasure of their goddess, who, it is supposed, would bring some calamity on their family. Although the Vaccinators convinced many of the people of the advantages of vaccination, yet they would not allow lymph to be taken from the subjects vaccinated. 353 subjects were vaccinated under one year of age, comprising 164 males and 189 females. The Deputy Inspector acknowledges the material assistance given by the Sub-Collector and Vice-President in encouraging vaccination on all his visits to the famine camps. The cost of each successful operation was 6 Annas and 1 Pie. On the 15th July 1877 Dr. Shortt arrived at Madhanapalle, where the Deputy Inspector of the circle met him, when he was engaged in transacting office work. Saw the medical officer and visited the relief-camp on the 16th, and inspected a large number of old cases and the working lymph of the eighth day. Conversed with Lieutenant Money, the officer in charge of the camp. Inspected the records of the Deputy Inspector and the equipments of two Vaccinators, and was much pleased with all he saw there, and left for Punganur the same night.

#### GANJAM DISTRICT.

This district comprises two circles with a First-class Deputy Inspector to each, and in addition there are the hill tracts, in which a First-class Deputy Inspector and a staff of Vaccinators are at work.

#### CHETTERPORE CIRCLE.

The Deputy Inspector reports 8,301 operations with a percentage of 88.7 of success. The total shows an increase of 3,754 cases as compared with the

number operated on during the preceding year. There would have been a still greater increase in the amount of work had it not been for the famine, which partly tended to interfere with vaccination. The co-operation of the Revenue and Village officials is absolutely necessary in promoting vaccination in the district. The largest amount of work, 781, was performed by First-class Vaccinator Balaramasami. Small-pox made its appearance in Russelkonda, Berhampore, and Ganjam, and immediate steps were taken to depute Vaccinators to the infected localities, and thus checked the further spread of the disease. Of the total, 56 were vaccinated under one year of age, comprising 27 males and 29 females. No batta was paid to mothers for furnishing lymph. Much difficulty is felt in procuring lymph from the subjects operated on, as the parents refused to allow of lymph being taken, as they say that the health of their children would be injured if such were done. The working lymph in use was good and effective. Four vaccination certificates were granted to candidates appearing for Government examinations. The conduct of the staff with the exception of a few has been good. The average cost of each successful case has been Annas 7 and Pies 10.

#### CHICACOLE CIRCLE.

During the year 3,992 operations are reported in this circle with a success of 85.1 per cent. The total shows a small increase of 529 cases when compared with the work done during the former year. There would have been still greater increase in the vaccine operations had it not been for cholera, which prevailed in the circle throughout the year. The Oriyah Vaccinators have done their work well as usual, but owing to their ignorance of English they lose all chance of promotion. No ill-effects resulting from vaccination have been noticed. 163 infants under one year of age were vaccinated, comprising 70 males and 93 females. No batta was granted to mothers during the year for furnishing lymph. The average cost of each successful case has been Annas 10 and Pies 6.

#### HILL TRACTS, GANJAM DISTRICT.

The Deputy Inspector attached to these hill tracts reports 2,126 operations during the year under report with a success of 94.82 per cent., thus showing a decrease of 2,529 cases when compared with the total number vaccinated during the previous year. The Deputy Inspector states that this decrease was owing to the total refusal of the Maliahs to submit themselves to the operation on account of the famine. Many of the Maliahs are greatly opposed to vaccination, and it is only when small-pox breaks out that they will submit to the operation. The people who readily submit to vaccination are Sowras, Khonds, Panhoes, and Oriahs. Much difficulty is experienced in procuring supplies of lymph from vaccinated subjects, as the parents object greatly to lymph being taken from their children's arms, as they are under the impression that it will do harm and injure the health of their children. The Deputy Inspector states that the assistance of the local authorities is absolutely necessary in extending vaccination widely among the Maliahs, and he acknowledges with thanks the material help rendered by Mr. W. H. Bartley, the Magistrate of Udayagiri Taluk, in promoting vaccination in his taluk, where the number vaccinated was larger than in any other taluk. The conduct of the staff has been reported good and satisfactory. 177 subjects were vaccinated under one year of age during the year, comprising 85 males and 92 females. Small-pox was not reported to be prevalent during the year, and the working lymph in use was good. 40 capillary tubes charged with fresh vaccine lymph have been sent to medical and other officers. The want of a peon to do the menial work attached to his office is greatly felt. The average cost of each successful case has been Rs. 1-0-1.

## GODAVARI DISTRICT.

There are two circles in this district with a First-class Deputy Inspector to each circle.

## COCANADA CIRCLE.

The Deputy Inspector reports 12,661 operations during the year under review. Of these 11,309 were successful, 861 unsuccessful, and 491 unknown. On comparison with the work of the preceding year there is an increase of 4,375 cases, accounted for chiefly by the prevalence of small-pox in the circle, and to the greater exertions of the staff with the hope of attaining the extra allowance for each successful case above the maximum number given in the revised vaccination rules. Second-class Vaccinator K. V. Sooba Row, No. 967, performed the largest number of operations, viz., 1,953. The Deputy Inspector states that the obstructions to the spread of vaccination which were complained of during the previous years are now gradually diminishing, and that the people are being convinced of the benefits of vaccination by the severe outbreak of small-pox. Small-pox appeared in its most virulent form, and the mortality from it was great owing to the people not having been vaccinated. In February last small-pox was prevalent in the town of Rajahmundry and the mortality from it was great. With the permission of the President and the Zillah Surgeon, the Municipal Vaccinator was aided by the Taluk Vaccinators in checking the disease in its progress, and 1,500 cases were then vaccinated. The Deputy Inspector suggests that compulsory vaccination be introduced into this Presidency as in Bengal and Bombay. 20 cases of small-pox after successful vaccination were seen, but in none of these cases was it fatal. There were no changes among the staff. The conduct of the Vaccinators has been on the whole satisfactory. The average cost of each successful case has been Annas 6 and Pies 10. The Deputy Inspector states that the Local Fund Board have sanctioned a travelling batta of 8 Annas per diem for himself, 3 Annas for both the First and Second-class Vaccinators, and 4 Annas for the Probationary Vaccinators in consideration of their scanty pay.

## ELLORE CIRCLE.

In this circle 5,840 operations are reported by the Deputy Inspector during the year under notice. Of the total 5,001 were successful, 571 unsuccessful, and 268 unknown. An increase of 1,759 cases is shown this year when compared with the work performed during the previous year. Cholera, small-pox, and other diseases were prevalent in the circle throughout the year. The vaccine lymph in use was reported good and effective. The Deputy Inspector states that more work might be done if the Revenue and Native officials interested themselves in the work of vaccination. Batta to the amount of Rupees 50-11-6 was spent on account of mothers for furnishing vaccine lymph from the arms of their children. During the year 45 Vaccination certificates were granted to candidates for Government employ. The conduct of the staff with a few exceptions has been good. 843 infants under one year of age were vaccinated during the year. The average cost of each successful operation has been Annas 6 and Pies 6.

## KISTNA DISTRICT.

There are two circles in this district with a First-class Deputy Inspector presiding over each.

## MASULIPATAM CIRCLE.

In this circle the Deputy Inspector reports 13,958 cases during the year with a percentage of 86.76 of success. On comparison with the work of the previous year there is a large increase of 8,827 operations, attributable chiefly to the great prevalence of small-pox throughout the circle and to the employment of 2 Probationers and 2 additional Vaccinators, as the present staff was found insufficient to meet the various applications received from Tahsildars and Deputy Tahsildars. The largest number, viz., 2,301, was performed by temporary Second-class Vaccinator M. Kistna Row, among the whole staff. Batta to the amount of Rupees 53-9-0 was spent during the year to mothers for furnishing vaccine lymph. The conduct of the staff has been reported good with one or two exceptions. The cost of each successful operation has been Annas 4 and Pies 2. Among the Vaccinators there was one death from cholera and one resignation.

## GUNTOOR CIRCLE.

The Deputy Inspector of this circle reports that 10,239 cases were vaccinated during the year with a success of 93 per cent. The total shows an increase of 7,251 over that of the previous year, which is accounted for by the entertainment of six additional Vaccinators during the year. In some parts of the circle the people readily come forward for vaccination, but in other parts the people are very much opposed to it. Small-pox prevailed in several places in the circle during the whole year. The conduct of the Vaccinators has been reported good, and the lymph in use effective. Much difficulty is experienced by Vaccinators in procuring arm lymph from the subjects vaccinated. The Deputy Inspector states that a great deal of work might be done if the village authorities would interest themselves in convincing the people of the advantages of vaccination. Rupees 1-2-0 was spent in batta to mothers of vaccinated children. The cost of each successful case has been Annas 3 and Pies 5.

## KURNOOL DISTRICT.

The total number vaccinated in this district is 4,847 with a success of 86 per cent., showing an increase of 1,985 cases when compared with the work performed during the past year. This increase is mainly due to vaccination having been carried on among the coolies in the gangs of the various relief-works through the assistance of the Deputy Collector of Koilkunta Taluk. A larger increase would have been shown this year had the Revenue officers of other taluks afforded greater assistance to the Vaccinators. Obstructions of various kinds still exist in this district to the effectual spread of vaccination. The Deputy Inspector suggests that all Village Kurnumis, Taluaries, Cultoobadies, and other classes of servants be required to produce vaccination certificates like other applicants seeking admission into the Government service; in addition to this that no school-boy should be admitted into any of the Government or aided schools unless he had been previously vaccinated. Small-pox was prevalent throughout the year. It broke out specially in the relief gangs and spread steadily. Immediate steps were taken by deputing the Vaccinators to the infected localities to vaccinate all the unprotected. The total number vaccinated under one year of age has been 517, consisting of 266 males and 251 females. Batta to the amount of Rupees 23-14-9 was given to mothers for furnishing lymph. The conduct of the Vaccinators, with the exception of a few, has been good. One First-class Vaccinator deserted the district without permission and sent in his resignation. The average cost of each successful operation has been Annas 12 and Pies 5.

## MADRAS COLLECTORATE.

The Deputy Inspector reports 116,335 operations during the year under review with a success of 91.09 per cent., and the results in 59,855 cases were not ascertained. On comparison with the work of the preceding year the total shows a marked increase of 64,840 cases. The increase is attributed to the greater number of Vaccinators and to the work carried on in the different camps which were established in the town and suburbs for the famine coolies. A large amount of work was performed among the inmates of the various relief-camps, works, and poor-houses with the assistance of the camp superintendents. No obstructions to the spread of vaccination were met with during the year, as the people came forward of their own accord to get their children and their families vaccinated owing to the severe outbreak of small-pox. Small-pox was prevalent in the town, and on the receipt of mortuary reports Vaccinators were deputed at once to the infected parts to arrest the disease in its progress by vaccinating all the unprotected in the vicinity. The amount of batta to vaccinated subjects was reduced from 6 to 3 Pies, and that of mothers from 8 to 4 Annas at the end of September last, owing to want of funds. The Deputy Inspector states that the batta is now too small to induce the people to be vaccinated, and suggests that it be raised to 6 Pies. He suggests that compulsory vaccination be introduced in the town of Madras as in other Presidencies. The conduct of the Vaccinators has been in general good and the nature of the working lymph in use effective. 7,335 subjects under one year of age were vaccinated, comprising 4,155 males and 3,180 females. Of these 5,090 were successful, 328 unsuccessful, and 1,917 unknown. 534 vaccination certificates were granted to candidates appearing for examinations. Rupees 3,631-7-0 were spent in batta to vaccinated children and mothers for supplying arm lymph. The cost of each successful case has been Annas 2 and Pies 3.

## MADURA DISTRICT.

In this district there are two circles, one being presided over by a First-class Deputy Inspector and the other by a Second-class Deputy Inspector.

## MADURA CIRCLE.

The Deputy Inspector reports 32,704 cases during the year under review, with a success of 90.76 per cent. The total shows an increase of 9,797 operations on comparison with the work of the previous year, and the Deputy Inspector attributes this increase to the employment of additional Vaccinators among his staff, viz., 3 First-class and 9 Second-class Vaccinators during the year, and to the exertions of the staff in vaccinating in the various famine relief-camps. Vaccination continued still backward in some parts of the circle owing to sickness and frivolous excuses advanced by the people. The inhabitants of Eliyankudi, Arupakotai, Tiruchulai, Devikotai, Karakudi, Kondanore and Mana-Madurai, &c., entirely refuse vaccination, and it is hard, the Deputy Inspector says, to convince the people of the benefits resulting from vaccination, and thus the Vaccinators have great difficulties in keeping up arm-to-arm vaccination as the parents will not allow the lymph being extracted from the arms of their children. The Deputy Inspector therefore suggests that vaccination be made compulsory. The quality of the vaccine lymph has been excellent throughout the year. Small-pox prevailed to some extent in parts of the circle, and immediate steps were taken to arrest the disease. In some parts of the zemindaries the inoculators settle themselves and necessary measures are being taken to have the men punished. The number of subjects vaccinated under one year of age is 4,976. The conduct of the Vaccinators has been generally good. 26 vaccination certificates have been granted to candidates for Government employ. The cost of each successful case has been Annas 3 and Pies 6.

## DINDIGUL CIRCLE.

In this circle the Deputy Inspector reports 26,297 operations with a percentage of 96.98 of success, and the results in 481 cases were unknown. On comparison with the work of the previous year there is an increase of 10,244 cases, attributable chiefly to the exertions of the vaccinating staff in carrying vaccination in the

The Deputy Inspector might be told not to write "rubbish" in an official report. The "ancestors" of the people knew nothing about vaccination, and could have made no prohibitions in regard to practices then unknown.

W.R.C.

several famine relief-camps. Most of the ignorant and superstitious Hindus, Lubbays, Cappliers and Thottys, &c., of most of the villages of this circle still hold the impression that the operation of vaccination is against the laws of their respective religions, and that it is utterly prohibited by their ancestors, consequently there are great difficulties experienced in vaccinating. The Deputy Inspector suggests that the village officers be required to keep the Vaccinators in their work as a part of their duty, because, in many instances, when the co-operation of the heads of villages is sought for by Vaccinators, it is not given. The Deputy Inspector also complains of the low salaries of the Vaccinators and requests that the new vaccination rules be brought into operation. A peon is greatly wanted to do the menial work of the office. The conduct of the staff is good and the lymph in use effective. The cost of each successful case is Annas 2 and Pies 2.

## MALABAR DISTRICT.

In this district the Deputy Inspector reports 12,546 operations with a percentage of 95.72 of success, and the results in 829 cases were not known. On comparison with the total vaccinated during the preceding year there is an increase of 2,275 operations, attributable to the greater exertions of the staff of Vaccinators with the object of attaining the extra allowance sanctioned in G.O., No. 1,591, dated

The small proportion of infantile vaccination in this district is bad, and efforts should be made to improve it.

W.R.C.

2nd September 1876. 48 infants under one year of age were vaccinated with 100 per cent. of success. Second-class Vaccinator E. Krishna Numbiar has obtained the largest number of operations, viz., 1,709. Among the Vaccinators there occurred a death from cholera. The Deputy Inspector states that a portion of his staff in the North Malabar Circle has been placed under the orders of the Revenue officials as regards the entire management of their work, and he has no control over these men beyond that of inspecting their work. He therefore requests that he be entrusted with the thorough supervision of the work of his subordinates in all respects. The average cost of each successful case has been Annas 4. Dr. Shortt arrived at Calicut on the evening of the 19th November 1877 and was met by the Deputy Inspector of Vaccination of this district. Saw the Zillah Surgeon and inspected a subject brought by the senior Municipal Vaccinator. Visited the Collector of the district on the subject of vaccination, and suggested the advisability of employing a separate Deputy Inspector for the Tellicherry Circle, as the district is large and greater parts sickly. Inspected the working lymph with the Taluk Vaccinator and the records of the Deputy Inspector and the equipments of the Vaccinators that were present, and found them all in good order. On the 24th he left the place for Nagalore.

The inspection of the work is the chief duty of the Deputy.

W.R.C.

## NELLORE DISTRICT.

Two First-class Deputy Inspectors are working in this district, one to each of the circles into which the district is divided.

## NELLORE CIRCLE.

The Deputy Inspector of this circle reports 31,280 operations with a percentage of 94.06 of success, and the results in 1,113 cases were unknown. The total shows a marked increase of 14,905 cases when compared with the number vaccinated during the preceding year. Most of the inmates of the famine relief-camps and works established in the circle, owing to the famine, were vaccinated. The Relief Officers of these camps rendered very material aid to the Vaccinators in extending vaccination freely among the coolies on the works. 6 temporary Vaccinators were employed during the year and 4 of these were confirmed, ultimately as probationers. These various causes contributed to the increase shown above. First-class Vaccinator Vadamalay, No. 166, has vaccinated the highest number, viz., 4,468 cases. Obstructions of the kind reported last year are still in existence, and the people believe small-pox to be their goddess, and that the practice of vaccination is wrong. The Deputy Inspector suggests that vaccination be rendered compulsory in this Presidency as in England. Small-pox broke out throughout the district and the mortality was great, especially among the famine-stricken people. Every means were taken to arrest the disease. The Deputy Inspector states that village officials, such as Munsifs, Headmen and Kurnums, &c., be compelled to get themselves vaccinated to set an example to their villagers, who look to them for advice and orders. 967 subjects under one year of age were vaccinated, comprising 464 males and 503 females. Infantile vaccination is backward in the district, as the parents refuse to have their children operated on on the plea of tender age. 60 vaccination certificates were granted to candidates appearing for examination; 41 of these had marks of vaccination and 19 of small-pox. The conduct of the staff has been good and the working lymph in use effective. The cost of each successful case has been Annas 1 and Pies 7. The Deputy Inspector states that the Local Fund Board have sanctioned the services of a peon and travelling batta of 12 Annas per diem for himself, 4 Annas for the First-class, 2 Annas for the Second-class, and 1 Anna for Probationary Vaccinators for every day actually travelled.

## ONGOLE CIRCLE.

During the year under review 12,312 cases have been vaccinated in this circle. Of these 11,369 were successful, 358 unsuccessful, and 585 unknown. The total shows an increase of 3,477 operations when compared with the work of the past year, and the Deputy Inspector states that this increase is mainly due to the exertions of the staff and the employment of 8 extra hands as probationers during the year. Small-pox of a virulent type was prevalent in all parts of the circle and energetic measures were adopted to arrest the disease. The inhabitants of the circle are quite ignorant of the benefits accruing from vaccination, and frivolous excuses are constantly advanced by them when a Vaccinator appears for the purpose of vaccinating children. The Deputy Inspector suggests that vaccination be made compulsory. 6 temporary Vaccinators were employed by the Local Fund Board, and they give a total of 1,430 operations with a percentage of 92.87 of success, and the results in 110 cases were unknown. The conduct of the staff has been reported good with the exception of temporary First-class Vaccinator R. Venkatasawmy, who was degraded by the President, Local Fund Board, for neglect of duty. Vaccine lymph is reported good, and the number of infants vaccinated under one year of age is 621. No cases of small-pox after successful vaccination have occurred during the year.

## NORTH ARCOT DISTRICT.

This district comprises two circles with a First-class Deputy Inspector to each.

## CHITTUR CIRCLE.

In this circle 27,790 operations are reported by the Deputy Inspector with a success of 94 per cent., and the results in 1,274 cases were unknown. On comparison with the work of the preceding year a marked increase of 17,128 cases is shown this year, which the Deputy Inspector attributes partly to the greater exertions of the staff and partly to the large number of coolies having been operated on in the famine relief-camps and works. Of the total vaccinated 30 were re-vaccinations, of which 27 were successful. 1,656 infants under one year of age have been vaccinated during the year, consisting of 829 males and 827 females. No obstructions to the spread of vaccination were met with, and the prejudices of the people against vaccination are gradually wearing out and the beneficial results from vaccination are fully appreciated except when small-pox breaks out. The Deputy Inspector complains that Vaccinators are being taken away from their legitimate work to treat cholera patients. Small-pox prevailed in this circle to some extent, especially in the taluks of Punganur and Tirutani and among the famine relief coolies, but the disease was soon arrested and great help was given by the Revenue officials. The mortality from small-pox was 1,942 during the year. The cost of each successful case was Annas 2 and Pies 5. On the 4th July 1877 Dr. Shortt left Madras for Arcot, where he met the Deputy Inspector of Vaccination of this circle on the next day. In the evening visited the relief-camp and inspected many old and new cases which were good, but did not see any working lymph. The next day he started for Wallajapet and inspected the Municipal vaccination, and reprimanded the Vaccinatrix for having had no working lymph, and returned to Madras on the 7th. Left again on the 9th to Gudiyatam and entered into the town with the Deputy Inspector, and inspected one sixth-day and four fifth-day cases vaccinated with stored lymph, and found the vesicles of all of them in a state of maturation, except one vesicle in one of the subjects and a large number of old cases irregularly inserted. Arrived at Palmanair on the 10th and inspected several old cases which were not satisfactory. The Vaccinator had no working lymph to show, and worked only one day in the week instead of six. Visited the relief-camp on the 11th morning and vaccinated 11 subjects with tube lymph and returned to Palmanair, and proceeded to Punganur the same evening, where the Vaccinator produced 3 subjects with scarcely any vesicles in them. Visited the relief-camp there on the 13th and inspected some seventh-day and some old cases which were good. Visited again the relief-camp on the 14th and vaccinated 30 subjects, with the assistance of the superintendent, with arm lymph from a subject selected in the camp. Found the Zemindari Vaccinator sick, suffering from fever and an abscess on one of his legs. Left for Madhanapalle with instructions to the Deputy Inspector to vaccinate as many as he could in the adjoining villages where small-pox was prevailing. On the night of the 16th returned to Punganur, where the Deputy Inspector again met Dr. Shortt and reported that 12 cases were operated on at Chowdapully. On the 17th visited again the famine relief-camp and inspected some good eighth-day cases and vaccinated 9 cases before he returned to the palace. Left for Palmanair where, on the 18th, he saw a few old cases of the Taluk Vaccinator. On the 19th visited the relief-camp and reprimanded the Vaccinator for not producing a single case he operated on the 11th, and left for Chittur the same night, where one Vaccinator with two probationers presented themselves, and the Deputy Inspector showed a good seventh-day case in the town. Dr. Shortt inspected the equipments of the Vaccinators, and left the same evening for Vellore and returned to Madras. Left again for Arcot on the 22nd, and visited the famine relief-camp with the Deputy Inspector, and saw a number of excellent cases with good working lymph. Saw a woman here, who had just been admitted into the relief-camp with an infant attacked with small-pox, whilst the mother herself having good marks of vaccination on her arms was free from the disease; this he pointed out to Major Liardett, the officer in charge of the camp, and left for Arni with instructions to the Deputy Inspector to meet him again on his return from Vellore Circle. Arrived at Arcot on the 1st August 1877, but did not find the Deputy Inspector as directed. Sent for the Vaccinators and visited the famine relief-camp, and inspected a large number of good cases, and saw also the Hospital Assistant. Inspected the equipments of two Vaccinators and a good eighth-day subject brought by one of the

Vellore Circle Vaccinators, and returned to Madras the same evening to get through some office work. Dr. Shortt was again at Arcot on the 15th December 1877, where he inspected the children's nursery and found the work good, and returned to Madras on the 17th. Proceeded again to Arcot on the 21st, and examined 6 cases in the famine camp and found them good.

#### VELLORE CIRCLE.

The Deputy Inspector reports 27,832 operations in this circle with a percentage of 94.34 of success, showing a large increase of 20,876 cases over that of the previous year. This increase is attributable partly to the greater exertions of the vaccinating staff and partly to the ready assistance rendered by the Famine Relief Officers, and also to the payment of batta to children vaccinated. Obstructions of various kinds still prevail in parts of the circle where people are not fully acquainted with the benefits resulting from vaccination, and the Deputy Inspector suggests that the operations should be rendered compulsory. Small-pox made its appearance during the year, but the mortality from the disease was not great. Rupees 189-11-6 were spent on relief-works at Vellore, and 5,045 cases were vaccinated by money payments. In the several relief-camps 10,020 cases were operated on at a cost of Rupees 70. The Deputy Inspector acknowledges with thanks the material assistance given by the Collector Mr. Whiteside, Mr. W. P. Austin, the Sub-Collector, and the several Relief Officers. The number of infants vaccinated under one year of age was 1,422, comprising 703 males and 719 females. Rupees 4-4-0 were spent as batta to mothers of vaccinated children for furnishing arm lymph. 12 vaccination certificates were granted to candidates for Government employ. The average cost of each successful case is Anna 1 and Pies 7. Among the Vaccinators there were one transfer, two resignations, and one dismissal. The President, Local Fund Board, has sanctioned some additional Vaccinators to work in the several relief-camps at the suggestion of the Vice-President. These Vaccinators show a total of 3,837 operations; among these 1,827 cases were vaccinated by payment of batta to children amounting to Rupees 41-13-5. The conduct of the staff of Vaccinators has been generally good. On the 25th July Dr. Shortt arrived at Arni with the Deputy Inspector. The Jaghiredar's Vaccinator reported sick, and he did not attend till the evening of the 26th, when he reported himself with no lymph whatever on the plea of sickness. Arrived at Polur on the next morning, where the Deputy Inspector produced two Vaccinators with several good eighth-day subjects and some old cases. Inspected the equipments of the Vaccinators, and left for Wandiwash, where, on the 28th, saw two good eighth and ninth-day subjects. Returned to Arni again on the 29th, and the Jaghiredar's Vaccinator produced then a good seventh-day case. Inspected the cases brought by one Second-class Vaccinator of Arcot Taluk and another of Wandiwash and their equipments, and left for Vellore during the night. On the 30th proceeded to the relief-camp at Vellore, and inspected a large number of good eighth-day cases and of old cases. Saw Major Liardett and Mr. Austin, the Sub-Collector, on the subject of vaccination. Inspected on the way to Vellore several excellent eighth-day cases of the Municipal Vaccinators in the trench at Vellore. On the 31st visited the Central Jail with the Civil Surgeon, and inspected during the day one subject brought by the Municipal Vaccinatrix, the equipments of 3 Vaccinators, and left for Arcot the same evening.

#### SALEM DISTRICT.

\* In this district there are two circles, one being presided over by a First-class Deputy Inspector and the other a Second-class Deputy Inspector.

#### SALEM CIRCLE.

During the year under notice 84,863 operations were performed in this circle with 33,603 successful and 987 unknown results, showing a marked increase of 24,315 cases over that of the preceding year. The Deputy Inspector ascribes this increase chiefly to vaccination having been carried on most energetically during the famine in the several relief-camps and works. No obstruction to the spread of vaccination was met with during the year. During the famine to a certain extent the people began to come forward of their own will to get themselves vaccinated with the hope of obtaining a meal, or its value, &c., for the day. The Deputy Inspector suggests that vaccination be rendered compulsory for all classes of people on the payment of batta to the poorer classes, to act as an inducement to accept vaccination, and this would be the best means for promoting vaccination to a great extent in the circle. The mortality from small-pox was about 7,000 during the year, showing a high death-rate, and the Deputy Inspector

This is all nonsense. Measles is not a very fatal disease, and the mortality from it in this country is insignificant compared with that from small-pox.

W.R.C.

accounts for this by saying that most of these cases were due to measles and chicken-pox followed by dysentery, &c. "Ummay" is the generic term in Tamil for all eruptive fevers, and small-pox is the only heading opened in the death registers for eruptive fevers; consequently the death-rate of the disease small-pox is highly exaggerated. Vaccinators were deputed to the infected localities to arrest the disease in its progress. 632 children under one year of age have been vaccinated, comprising 341 males and 291 females. The conduct of the staff, with the exception of a few, has been reported satisfactory. The cost of each successful case has been Anna 1 and Pies 9½. On the 10th August 1877 Dr. Shortt left Madras for Salem, and on his way thither the Deputy Inspector of this circle met him at Vaniambadi with the Taluk Vaccinator, and he inspected a large number of good subjects and the equipments of the Vaccinatrix. At Tirupatur the Vaccinator who was directed to meet Dr. Shortt was absent, and the Vaccinator at Morappur met him with a good eighth-day subject. He inspected his equipments and went on to Mallapuram, where the Vaccinator appeared without a subject, but he inspected his equipments and went to Salem. On the 13th arranged to vaccinate some gentlemen's children at Yercaud, and returned to Salem on the 14th. Visited the famine relief-camp with the Deputy Inspector, and reprimanded the Vaccinator for his carelessness, which was pointed out to the Deputy Inspector also, and met the Collector Mr. Longley. On the 16th Dr. Shortt proceeded to Sankaridroog and visited the famine relief-camp, where vaccination was not kept up regularly. The Vaccinator was directed by the Tahsildar to attend immediately on some cholera patients in a village. Saw the Hospital Assistant and instructed the Deputy Inspector what to do for the few cases of small-pox in the camp hospital, and returned to Sankaridroog and thence to Salem, where he saw the Zillah Surgeon. Of the 3 Municipal Vaccinators he inspected the equipments of one, the second was reported sick, and the third was on cholera duty. Met the Collector on the 21st, and on the 22nd Dr. Shortt again visited the famine relief-camp and found the same carelessness in the work. The Vaccinator had defective vision, whom he ordered to be taken before the Zillah Surgeon to ascertain his fitness for further service. Met Mr. Puckle of the Board of Revenue and Major Baynes at the relief-camp. On the 23rd he visited the conjee-house and inspected the work and equipments of the 2 Vaccinators. Went into the town on the 24th, and inspected the work of the Municipal Vaccinators excellently done. Visited also the poor-house, small-pox hospital and dispensary. Examined the records of the Deputy Inspector and Municipal Vaccinatrix, who was still on sick report, and went up to Yercaud to ascertain the results of the children previously vaccinated. Returned to Salem on the 27th and left for Tirupatur on the 28th, where he saw three subjects. Visited the Tirupatur Famine Camp, where the Vaccinator was absent for a long time as his services were taken for a compounder in lieu of his legitimate work. Dr. Shortt returned to Tirupatur and got a supply of vaccine lymph, and visited the camp again the next morning and vaccinated 13 cases. Directed the Vaccinator to vaccinate first and then attend to other works that may be required of him. Visited the Civil Dispensary, where the Medical Officer met him, and went on to Kistnagiri in the evening

of the 30th. On the 28th September 1877 he again met the Deputy Inspector at Morappur and accompanied him into Salem, and after some office work Dr. Shortt proceeded up to Yercaud. On the 8th January 1878 he was again at Salem, where he met the Deputy Inspector and enquired about the large mortality from small-pox.

#### OOSOOR CIRCLE.

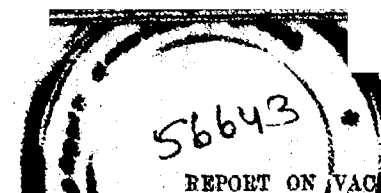
The Deputy Inspector of this circle reports 17,809 operations during the year with a success of 89 per cent., showing an increase of 8,479 cases when compared with the total vaccinated during the preceding year. The increase alluded to is chiefly due to the staff having been increased, and to the assistance given by the Vice-President, Local Fund Board. The people of this circle, except a few, greatly objected to vaccination owing to famine and cholera. The Deputy Inspector complains of the inadequacy of the staff of Vaccinators to meet the wants of the circle. There were two dismissals, one resignation, and one transfer among the staff. The Deputy Inspector suggests that the new rules providing extra allowance to Vaccinators should be brought into operation as an encouragement to the scantily paid Vaccinators to work more steadily, and he fancies that considerable increase would be effected in the vaccine operation if the above suggestion be adopted. The Deputy Inspector acknowledges the interest evinced by the Vice-President, Local Fund Board, in promoting vaccination in his circle. The average cost of each successful case is Annas 2 and Pies 8. 944 infants under one year of age were vaccinated, comprising 497 males and 447 females. No batta to mothers for furnishing lymph was spent during the year in consequence of there being no provision made for the purpose. The "Price Vaccinators" have been amalgamated with the Local Fund staff when the revised rules were brought into operation from the beginning of the current year. Small-pox prevailed to a great extent in the circle, and immediate steps were taken to arrest the disease. Dr. Shortt was at Kistnagiri on the 31st August 1877, and went to the famine relief-camp, where vaccination was kept up in a careless manner. There were 40 cases of small-pox in the camp, who were all crowded together in a small hut that could scarcely accommodate 6 patients, which he pointed out to the Native superintendent in charge of the camp. Reprimanded the Vaccinators and deputed two Vaccinators in the camp till the whole of the inmates were vaccinated, and a third one to vaccinate all the friends, relatives, and attendants of the small-pox patients. Arranged with the superintendent of the camp for the vaccination of the new-comers. Saw the Sub-Collector, Mr. Wilkinson, at Kistnagiri on the subject of vaccination in the circle. Vaccinated 152 subjects in the camp with the Deputy Inspector and 3 Vaccinators, and left Kistnagiri and thence for Oosoor. On the 2nd September he visited the Oosoor Famine Camp, where vaccination was not well kept up. There were 11 cases of small-pox in the camp hospital. Inspected a number of subjects and the working lymph and found them good. Directed the Deputy Inspector to vaccinate the inmates of the whole camp and leave a Vaccinator to vaccinate the new-comers as they come daily. Saw the Apothecary in medical charge of the camp, and Dr. Wells, the Honorary Surgeon. Inspected the equipments of 3 Vaccinators and the records of the Deputy Inspector, and left for Bangalore.

#### SOUTH ARCOT DISTRICT.

This district has been divided into two circles with a First-class Deputy Inspector presiding over one circle and a Second-class Deputy Inspector over the other.

#### CUDDALORE CIRCLE.

The total number vaccinated in this circle during the year was 11,284 with a success of 89.9 per cent., and the results in 775 cases were unknown. Of the



total 6,047 were male and 5,237 females. This year shows a decrease of 516 operations when compared with the work of the preceding year, and the Deputy Inspector accounts for this first, by the prevalence of famine, and second, to the prevalence of fever, dysentery, &c. First-class Vaccinator Aroonachellum Moodelly, No. 128, has obtained the largest number of cases, viz., 2,433, among the whole staff, and he stands also first in respect to infantile vaccination. The Deputy Inspector states that the above named Vaccinator has been recommended for extra allowance for each successful operation in excess of 1,200 in the year, as provided in the revised rules, to act as an inducement to other Vaccinators to compete for the reward. Objections regarding the practice of vaccination are gradually dying out in many of the larger towns, and there the people freely come forward of their own will to get their children vaccinated; but in the remote corners of this circle some people are quite ignorant of the results of vaccination, and they believe small-pox to be one of their deities. When the treatises on vaccination are explained to them, they look to the village authorities to set them an example, but they do not; and the Deputy Inspector suggests that vaccination be made compulsory for Village Munsifs, Monegars, Kurnums and their families, and that the Revenue authorities should be requested to take a greater interest in the work of vaccination by takeeds to their village subordinates. Small-pox prevailed to a great extent in the circle, and the havoc committed by it was greater than in the previous year. Among the staff there were one dismissal, one resignation, and three transfers. The Deputy Inspector acknowledges with thanks the material assistance given by F. R. H. Sharpe, Esq., the Acting President of the district, in promoting vaccination. The conduct of the staff, with one or two exceptions, has been good. The Deputy Inspector complains that no travelling allowance is granted to him, whilst it is allowed to some Deputy Inspectors in other districts. The value of each successful case has been Annas 4 and Pies 7.

#### VIRUDACHALAM CIRCLE.

During the year under review the district of South Arcot was divided into two vaccine circles, and the Deputy Inspector to this circle was appointed in May 1877. He reports 5,264 operations with a percentage of 84.9 of success. This circle comprises three taluks with an area of 15,568 square miles and an estimated population of 598,684. The staff consists of 1 Second-class Deputy Inspector, 3 First-class and 3 Second-class Vaccinators, 2 Probationers and a peon. Second-class Vaccinator S. Narainasawmy has performed the largest number of cases, viz., 1,263, among the whole staff. The usual obstructions to the spread of vaccination still exist in some parts of the circle from religious superstition, the people believing that there is a small-pox goddess presiding over them. The extraction of lymph for transfer from the cases vaccinated is objected to by the people, and the only means the Deputy Inspector suggests to overcome this obstacle, as well as to promote vaccination in the circle, is to make it compulsory. Small-pox was prevalent slightly during the year, and every precaution was taken to check the disease. No irregularities in the progress of vaccination nor any ill-effects resulting from the operation were noticed. The conduct of the staff has been good and the working lymph effective. The Deputy Inspector complains that no travelling batta or other allowances are conceded to himself and his staff as provided in the Revised Vaccination Rules, dated 2nd September 1876, No. 1,591. The value of each successful case has been Annas 5.

#### SOUTH CANARA DISTRICT.

In this district the Deputy Inspector reports 42,140 operations during the year under review with a percentage of 90.24 of success, comprising 24,014 males and 18,126 females. The total shows a decrease of 1,913 cases when compared with the work performed during the preceding year. This decrease, the Deputy Inspector states, is attributable to small-pox not having been so prevalent as in the

previous year, consequently the demand for vaccination was not so great. The staff was also incomplete for some time as a few Vaccinators were on leave during the year. The 10 temporary Vaccinators who were employed by the Local Fund Board during 1876-77 continued at work for three months, viz., April, May and June 1877, when their services were dispensed with as small-pox gradually subsided. They show a total of 9,767 operations of the number given above with a percentage of 88.58 of success. Second-class Vaccinator Bastian Gore, No. 987, obtained 4,334 operations, being the largest number among the whole staff. The Deputy Inspector states that people of this district rush to the Vaccinators for vaccination only when small-pox makes its appearance, and during its continuance large numbers are vaccinated; but when the disease abates they are reluctant to get themselves vaccinated and plead some excuse or other to avoid the operation. He therefore suggests that compulsory vaccination be introduced. The offer of rewards to the Vaccinators in excess of 1,200 cases performed in any year is allowed in this district, and the Vaccinators are trying their best to obtain the extra allowance. Small-pox of a virulent type continued for three months, viz., April, May and June during the year, and every means were taken to put a stop to the further spread of the disease. 659 subjects under one year of age were successfully vaccinated during the year. The conduct of the staff, with the exception of a few, has been good. Two Vaccinators were detected having received remuneration from the people vaccinated, and with the sanction of the President, Local Fund Board, they were prosecuted before the Magistrate under Section 161 of the Indian Penal Code and sentenced to pay a fine of 51 Rupees each. The vaccine lymph in use is excellent. The average cost of each successful case has been Anna 1 and Pies 8.

#### TANJORE DISTRICT.

There are two First-class Deputy Inspectors at work in this district, one to each of the circles into which the district has been divided.

##### TANJORE CIRCLE.

Fifteen thousand seven hundred and ninety-nine operations are reported in this circle during the year under notice with a success of 96.93 per cent., thus showing an increase of 6,078 cases when compared with that of the past year. Had not most of the Vaccinators been employed in treating cholera patients the increase would have been greater than that now shown. Owing to the prevalence of cholera and famine objections to the spread of vaccination were raised by the people in some parts of the circle. Small-pox was prevalent during the year in the famine relief-camps, and Vaccinators were immediately deputed to vaccinate all the unprotected, and through the assistance rendered by the Medical authorities the disease gradually subsided. The Deputy Inspector suggests that compulsory vaccination be introduced in this Presidency as in Bombay. Infants vaccinated under one year of age amount to 1,575, consisting of 777 males and 798 females. The largest number, 368, was vaccinated by Second-class Vaccinator T. Jaganadum Pillay, No. 154, who has stood first among the whole staff in this respect for the past three years. Great difficulties existed in maintaining supplies of arin lymph owing to the prevalence of cholera and famine: some of the famine-stricken people left their houses after being vaccinated in search of their daily bread, and the Vaccinators in consequence lost their working lymph and had recourse to preserved lymph. Inoculation is practised in this circle, and the Sub-Magistrate of Arandangy arrested an inoculator through the assistance of the Police authorities, and sentenced him to ten months' imprisonment. Batta to the amount of Rupees 52-3-0 was given to mothers for furnishing vaccine lymph. During the year the Local Fund Board have sanctioned the appointment of two additional First-class Vaccinators, one for each taluk, and extra allowance of 2 Annas per successful case above 100 in accordance with the Revised Vaccination Rules. The Deputy Inspector complains that no

travelling batta is given to himself or his Vaccinators, and such indulgences are granted in some other districts. The average cost of each successful case has been Annas 3 and Pies 7.

##### NEGAPATAM CIRCLE.

The Deputy Inspector reports 10,919 operations during the year with a success of 91.07 per cent. On comparison with the work of the previous year there is an increase of 2,019 cases this year attributable to the staff being complete, there having been no casualty or vacancy among the Vaccinators. Objections to the spread of vaccination do not exist in most parts of the circle, but there are in some parts a few ignorant people who have strong prejudices against vaccination. The prejudices, the Deputy Inspector hopes, will soon vanish by the frequent visits and exertions of the Vaccinators. The Local Fund Board have sanctioned an extra allowance of 2 Annas per successful operation in excess of 100 in any month to Vaccinators as an encouragement in their work. One small-pox inoculator, Gopal Naick, was punished with two weeks' rigorous imprisonment, and another in the Tiruturaipundi Taluk is being sought for by the Police. Small-pox prevailed in the early part of the year in the circle in a very virulent form, and steps were at once taken to arrest the disease. The Deputy Inspector suggests that vaccination be rendered compulsory, and that small-pox cases should be isolated from the unvaccinated people. 698 infants under one year of age have been vaccinated during the year, comprising 354 males and 344 females, and the highest number, 181, has been obtained by First-class Vaccinator Balakistnen, No. 783. The lymph in use has been good, and Rupees 15-5-10 were paid to mothers as batta for supplying vaccine lymph. The conduct of the Vaccinators has been reported satisfactory, and the cost of each successful case has been Annas 4 and Pies 8.

#### TINNEVELLY DISTRICT.

This district comprises two circles, one being presided over by a First-class Deputy Inspector and the other by a Second-class Deputy Inspector.

##### TINNEVELLY CIRCLE.

The Deputy Inspector of this circle reports 16,275 operations during the year under notice with a success of 91.27 per cent. The total shows an increase of 5,700 cases over that of the preceding year. First-class Vaccinator Govindasamy Pillay, No. 703, was found to have been imprisoned for two years for theft of jewels, &c., in 1871, and the President, Local Fund Board of the district, dismissed the Vaccinator on Deputy Inspector informing him of the above circumstance. One Theroomalay Chetty of Sengumapooram of the Virudupati Division was prosecuted before the Second-class Magistrate of the Satur Taluk with the permission of the President, and was fined the sum of Rupees 15, or in default to undergo one month's imprisonment, for having obstructed a Vaccinator in carrying out his work. The Deputy Inspector states that he has been specially engaged with two Vaccinators in conducting vaccine operation in a thickly populated village called Ervadi of the Nanguneri Taluk, and nearly 200 cases have been vaccinated by payment of batta of Rupees 11-2-3 as an inducement. The Deputy Inspector complains that no travelling batta or the services of a peon have been granted to him. No ill-effects resulting from vaccination have been noticed; but in a few instances ulceration occurred owing to the application of irritating remedies. Batta paid to mothers for furnishing lymph during the year was Rupees 36-2-6. The conduct of the staff, with a few exceptions, has been reported satisfactory. The working lymph in use was excellent, and the cost of each successful case is Annas 3 and Pies 8.

## SHERMAVAI CIRCLE.

The total number vaccinated during the year was 6,578 with a percentage of 84.41 of success. On comparison with the work performed during the preceding year there is an increase of 1,641 cases, accounted for by the greater exertions of the vaccinating staff and the material assistance afforded by the Revenue officials under the Collector J. B. Pennington, Esq. Vaccination continues still backward in the circle, and the usual frivolous objections of a bad day, sickness, absence of relatives or parents, &c., are put forth. In some parts the people are so stubborn that no coaxing or persuasion can induce them to undergo the operation. Many difficulties exist in maintaining arm lymph for transfer, as the people in general refuse to allow the lymph being extracted from the arms of their children, as they think that it will enfeeble their children. In a village called *Ernadi* thickly populated by Lubbays, the Vaccinators have to contend against great difficulties in getting the people vaccinated and in extracting lymph from those operated on. They say that the operation of vaccination is against the doctrines of their religion, and they would rather prefer the visitation of small-pox. A First-class Mahomedan Vaccinator was specially deputed to persuade these people as much as possible to accept vaccination, and 197 cases have since been operated on. Five vaccination certificates have been granted to candidates for Government employ, and 80 to village officials who were newly appointed: of the latter 14 were vaccinated at the time the certificates were granted to them. Small-pox broke out in the southern part of the Nanguneri Taluk, and two Vaccinators were immediately sent out to arrest the further spread of the disease. 703 children under one year of age were vaccinated with a percentage of 88.19 of success, comprising 378 males and 325 females. The quality of lymph has been good throughout the year. Rupees 16-6-6 were spent in batta to mothers for furnishing lymph. The conduct of the staff was reported satisfactory, and the cost of each successful case was Annas 5 and Pies 2.

## TRICHINOPOLY DISTRICT.

The Deputy Inspector reports 15,615 operations during the year under review with a success of 95.90 per cent., and the results in 2,327 cases were unknown. Of the total there were 7,961 males and 7,654 females. On comparison with the work of the preceding year there is a marked decrease of 4,481 cases which the Deputy Inspector attributes to the following causes: 1st, the abolition of the result system which was in force during the previous year; 2nd, the introduction of the new vaccination rules in the district, and the maximum number of cases to be performed by the staff being put down at 50 per cent. for First-class Vaccinator and 30 for Second-class; 3rd, the prevalence of famine; and 4th, the incompleteness of the staff (until the end of the latter part of the year) occasioned by dismissals, leave of absence, and in training of new-comers to the vacant posts. Two Vaccinators were punished by the Magistrate, one with a fine of 50 Rupees and the other simple imprisonment for two months, for false entries of vaccination results. Each famine camp was visited by Vaccinators, and good work was performed by the assistance of the Relief Officers under orders from the Collector. There were two dismissals, one resignation, and one transfer among the staff. 1,563 infants under one year of age were vaccinated; of these 1,295 were successful, 66 unsuccessful, and 112 unknown. The largest number of operations, viz., 1,762, was obtained by Second-class Vaccinator Moorogassam, who stands first among the whole staff. The conduct of the Vaccinators, with one or two exceptions, has been good. Small-pox broke out throughout the district, and 3 temporary Vaccinators were entertained as the present staff was found insufficient. The Deputy Inspector states that all the taluk officials have rendered material assistance in promoting vaccination in the district, and the names of such officials have been brought to the notice of the Collector with a view of being published in the District Gazette in recognition of their services. The working lymph in use was found effective and good. 87 vaccination certificates were granted to candidates proceeding for examination and for securing employment as Village Munsifs and Kurnams, &c. The cost of each successful case has been Annas 4 and Pies 8.

## VIZAGAPATAM DISTRICT.

This district has been divided into two ranges with one First-class Deputy Inspector at work in one range, and a Second-class Deputy Inspector in the other. Besides these there are the Hill Tracts of Jeypore, in which another First-class Deputy Inspector and a staff of Vaccinators are working.

## VIZAGAPATAM RANGE.

In this range 9,116 operations were reported during the year with a percentage of 98.29 of success, and the results in 21 cases were unknown. The total comprises 4,644 males and 4,472 females. On comparison with the work of the past year there is a decrease of 2,335 cases, which is accounted for 1st, by the unfavorable state of the season; 2ndly, the prevalence of cholera; 3rdly, the employment of Vaccinators to treat cholera patients under orders of the President, Local Fund Board. Since the receipt of G.O., dated 25th May 1877, No. 1,573, all the Vaccinators employed in this duty have been relieved and ordered off to their legitimate work of vaccination. Inoculation has to some extent been put a stop to in this range as the President, Local Fund Boards, has issued instructions to the Taluk and Divisional Magistrates to prosecute any persons practising inoculation. The Deputy Inspector states that as Government has ruled that all seeking Government employ must produce certificates of vaccination, the village authorities are now alive to the benefits of vaccination, and set an example to their people by having their children vaccinated. Small-pox prevailed more or less throughout the range during the year, and every means were taken to check the further spread of the disease. 8 cases of small-pox after vaccination occurred, but the disease was in a mild form in these cases. Obstructions of various kinds still exist against vaccination among the people. First-class Vaccinator G. Veerannah has obtained the largest number of operations, viz., 1,275. The conduct of the staff, with a few exceptions, has been good, and the lymph in use effective. 139 infants under one year of age were vaccinated. Only 6 Annas were paid as batta to mothers for furnishing lymph. The cost of each successful case has been Annas 7 and Pie 1.

## VIZIANAGRAM RANGE.

The Deputy Inspector reports that 12,989 operations were performed during the year, comprising 6,625 males and 6,364 females, with an average per cent. of 98.94 of success. The total shows a decrease of 2,253 cases below that of the previous year, and the Deputy Inspector attributes this decrease to the prevalence of cholera and other diseases in the range. There are still great obstructions to the spread of vaccination in this range. Cholera prevailed throughout the taluks and committed great havoc, and it materially interfered with the progress of vaccination. A few Vaccinators were deputed to distribute cholera pills for a few months during the year. Small-pox appeared in all the taluks in a very severe form, and immediate steps were taken to arrest the disease. The Deputy Inspector suggests that vaccination be made compulsory and the practice of inoculation be strictly prohibited. 752 infants under one year of age were operated on, comprising 374 males and 378 females. Of these 737 were successful, 13 unsuccessful, and 2 unknown. The vaccine lymph in use was good and effective. The conduct of the Vaccinators, with a few exceptions, has been good. The Deputy Inspector states that the Acting President, Mr. Goodrich, gave great help in promoting vaccination in the district. The average cost of each successful case has been Annas 5 and Pies 3.

## JEYPORE HILL TRACTS.

The Deputy Inspector reports 3,654 operations with a percentage of 82.45 of success, and the results in 307 cases were unknown. The total shows an increase of 279 operations when compared with the work of the past year. Prejudices against the practice of vaccination among the hill tribes called Khonds and Sowras still prevail owing to ignorance. Nothing can convince these people of the advantages of vaccination, and the Vaccinators have great difficulties to contend against, for, when they make their appearance in the villages, the people go into the jungles and hide themselves, leaving the old and dying to answer the questions of Vaccinators. Should the Vaccinators come across the people by chance great opposition is met with, and the people will not allow their children to be vaccinated. Small-pox inoculation is practised in these parts among the Odeas and hill tribes, and the Deputy Inspector states that if the practice be prohibited by law or otherwise that the number of vaccination cases would soon be increased. Small-pox was prevalent during the latter part of the year in the district, but the mortality from it was not great. The quality of the working lymph was good throughout the year. The conduct of the staff has been satisfactory. No batta was paid to mothers for furnishing lymph. 274 infants were vaccinated during the year; of these 222 were successful, 23 unsuccessful, and 29 unknown. The cost of each successful case has been Rupees 1-1-7.

## MILITARY CANTONMENTS.

## BANGALORE.

Two Vaccinators (one a First-class and the other a Second-class) are stationed in this cantonment, and they show a total of 1,399 operations done during the year with a percentage of 94.22 of success, and the results in 25 cases were unknown. On comparison with the work of the preceding year the total shows a decrease of 267 cases, for which no explanation is given. The female Second-class Vaccinator gives a total of 574 cases; of these 528 were successful, 29 unsuccessful, and 17 unknown. She appears to work to the satisfaction of the Garrison Surgeon. 550 infants under one year of age were vaccinated during the year. The caste and sex of those vaccinated are as follows:—

|                            |     |     |     |     |     |     | Males. | Females. |
|----------------------------|-----|-----|-----|-----|-----|-----|--------|----------|
| Europeans and East Indians | ... | ... | ... | ... | ... | ... | 74     | 114      |
| Hindus                     | ... | ... | ... | ... | ... | ... | 607    | 467      |
| Mahomedans                 | ... | ... | ... | ... | ... | ... | 81     | 56       |
| Total                      | ... | ... | ... | ... | ... | ... | 762    | 637      |

## SECUNDERABAD.

A First-class Vaccinator (male) and a Second-class Vaccinator (female) worked in this cantonment throughout the year. They report 8,595 operations with a success of 91.41 per cent., and the results in 205 cases were not ascertained. The total shows an increase of 609 cases when compared with the work of the previous year, comprising 1,795 males and 1,800 females. The number of subjects successfully vaccinated under one year of age was 2,630. The caste and sex of those vaccinated are given below.

|                            |     |     |     |     |     |     | Males. | Females. |
|----------------------------|-----|-----|-----|-----|-----|-----|--------|----------|
| Europeans and East Indians | ... | ... | ... | ... | ... | ... | 30     | 22       |
| Hindus                     | ... | ... | ... | ... | ... | ... | 1,390  | 1,293    |
| Mahomedans                 | ... | ... | ... | ... | ... | ... | 375    | 485      |
| Total                      | ... | ... | ... | ... | ... | ... | 1,795  | 1,800    |

## KAMPTEE.

One Second-class Vaccinator worked during the year in this cantonment. He reports a total of 1,796 operations with a percentage of 87.73 of success, showing an increase of 1,208 cases over the work of the previous year, and the results in 2 cases were unknown. Of the total there were 988 males and 808 females. 776 infants under one year of age were successfully vaccinated. The caste and sex of these are as follow:—

|                            |     |     |     |     |     |     | Males. | Females. |
|----------------------------|-----|-----|-----|-----|-----|-----|--------|----------|
| Europeans and East Indians | ... | ... | ... | ... | ... | ... | 22     | 24       |
| Hindus                     | ... | ... | ... | ... | ... | ... | 783    | 665      |
| Mahomedans                 | ... | ... | ... | ... | ... | ... | 183    | 119      |
| Total                      | ... | ... | ... | ... | ... | ... | 988    | 808      |

## ZEMINDARIES.

Thirteen Vaccinators are employed by four Zemindaries—Pittapur, in the Godavari District, Jeypore in Vizagapatam, Venkatagiri in Nellore, and Arni Jaghire in the North Arcot District. Their collective work amounts to 6,113 cases during the year with a success of 89.64 per cent. On comparison with the number vaccinated during the past year there appears an increase of 2,266 operations. The particulars of work performed by these Zemindari Vaccinators are given in the accompanying tabular form:—

| Zemindaries. | Districts.  | Number of Vaccinators. | Sex.   |          |        | Primary Vaccination. |                 |                                |                                   | Percentage of Success. |                 |
|--------------|-------------|------------------------|--------|----------|--------|----------------------|-----------------|--------------------------------|-----------------------------------|------------------------|-----------------|
|              |             |                        | Males. | Females. | Total. | Total.               | Successful.     |                                |                                   | Primary Vaccination.   | Re-vaccination. |
|              |             |                        |        |          |        |                      | Under one year. | Above one and under six years. | Total of all ages over six years. |                        |                 |
| Jeypore      | Vizagapatam | 6                      | 1,198  | 769      | 1,967  | 1,967                | 118             | 1,167                          | 337                               | 82.46                  | ...             |
| Pittapur     | Godavari    | 2                      | 701    | 464      | 1,165  | 1,165                | 23              | ...                            | 968                               | 87                     | ...             |
| Venkatagiri  | Nellore     | 2                      | 1,058  | 879      | 1,932  | 1,928                | 20              | ...                            | 1,774                             | 93.51                  | 75              |
| Arni Jaghire | North Arcot | 1                      | 572    | 477      | 1,049  | 1,049                | 50              | 244                            | 630                               | 98.47                  | ...             |
| Total        |             | 13                     | 3,524  | 2,589    | 6,113  | 6,109                | 220             | 1,511                          | 3,748                             | 89.68                  | 75              |

## CIVIL DISPENSARIES.

Two Vaccinators (one in the Old and the other in the New Town) of Cuddalore worked throughout the year under the immediate supervision of the Medical Officers in charge of these institutions. They show a total of 584 operations with a percentage of 77.4 of success, and the results in 120 cases were unsuccessful. 55 infants under one year of age were successfully operated on during the year. The particulars of their work are given below:—

| Name of Dispensaries. | District.   | Number of Vaccinators. | Total Vaccinated. | Primary Vaccination. |                 |                                |                                   | Percentage of Successful. |                 |
|-----------------------|-------------|------------------------|-------------------|----------------------|-----------------|--------------------------------|-----------------------------------|---------------------------|-----------------|
|                       |             |                        |                   | Total.               | Successful.     |                                |                                   | Primary Vaccination.      | Re-vaccination. |
|                       |             |                        |                   |                      | Under one year. | Above one and under six years. | Total of all ages over six years. |                           |                 |
| Old Town, Cuddalore   | South Arcot | 1                      | 388               | 388                  | 36              | 134                            | 157                               | 84.27                     | ...             |
| New Town, do.         |             | 1                      | 196               | 196                  | 19              | 90                             | 28                                | 69.89                     | ...             |
| Total                 |             | 2                      | 584               | 584                  | 55              | 224                            | 185                               | 77.4                      | ...             |

## MUNICIPALITIES.

There are in all 47 Municipalities in this Presidency with 65 Vaccinators employed by them. The returns from some of the Municipalities have been received very late during the year, although they were called for urgently; and in a few of them the returns were received very irregularly, not in the form required by this department. Most of the returns do not show the cost of vaccination. No Vaccinators are employed in the Municipalities of Mettapolliem and Gooty. The total work performed in all the Municipalities amounts to 59,288 operations, showing a marked increase of 18,116 cases when compared with the work of the former year. In some Municipalities the Vaccinators were deputed to attend on cholera patients. The particulars of work done in the several Municipalities are shown in the Appendix No. 1.

## RAILWAYS.

The Railway Apothecaries show a total of 10 operations during the year, comprising 8 males and 2 females, with a percentage of 70 of success. On comparison with the work of the preceding year there is a falling off of 47 cases, for which no explanation is offered. Only one subject was successfully vaccinated under one year of age.

## MEDICAL SUBORDINATES.

The Medical Subordinates performed 28,584 operations during the year under notice with a success of 68 per cent., comprising 23,230 males and 5,354 females. The total shows an increase of 12,831 cases when compared with the work of the previous year. The general monthly returns for January, February and March 1878 from the Mysore and Ceded Districts have not been received at this office, and if the work for these months be included, the increase would have been greater than that shown above. First-class Hospital Assistant Maduranayagum, No. 156, operated on 2,277 cases, being the largest number; of these 1,950 were successful. Next to him stands Second-class Hospital Assistant T. Sabapathy, No. 691. He reports 2,009 operations. The Medical Subordinates who obtained over 100 operations each during the year are given in the accompanying statement.

| Rank and Name.                                | General Number. | Stations.                      | Number Vaccinated. | Successful. | Ratio Percentage of Success. |
|-----------------------------------------------|-----------------|--------------------------------|--------------------|-------------|------------------------------|
| First-class Hospl. Asst. Maduranayagum        | 156             | Central Jail, Salem            | 2,277              | 1,950       | 85.63                        |
| Second-class do. T. Sabapathy                 | 691             | District Jail, Madura          | 2,009              | 971         | 49.32                        |
| Third-class do. Bishoon Nanth                 | ...             | Central Jail, Salem            | 1,590              | 1,357       | 85.34                        |
| Second-class do. P. Doorgiah                  | 666             | Jail, Cuddapah                 | 1,583              | 1,061       | 67.02                        |
| First-class do. A. Coopoosawmy                | 595             | Do. Chingleput                 | 1,559              | 10          | .06                          |
| Third-class do. P. Peromani Naidu             | 954             | District Jail, Palamcottah     | 1,404              | 1,295       | 92.23                        |
| Second-class do. Appavoo Pillay               | 863             | Central Jail, Salem            | 998                | 817         | 81.86                        |
| Third-class do. A. T. Veeraragavaloo          | 923             | District Jail, Calicut         | 869                | 597         | 68.69                        |
| Assistant Apothecary D. F. O'Keefe            | ...             | H. M.'s Penitentiary, Madras   | 833                | 217         | 26.05                        |
| Second-class Hospl. Asst. P. Appavoo          | 845             | Do. do.                        | 744                | 251         | 33.73                        |
| Third-class do. C. Francis                    | ...             | Central Jail, Salem            | 560                | 445         | 79.46                        |
| Do. E. A. Simon                               | 1,014           | 40th Regiment N.I.             | 534                | 417         | 78.08                        |
| Second-class do. T. Maduranayagum             | 736             | District Jail, Tanjore         | 483                | 337         | 69.77                        |
| Third-class do. C. T. Sigamoney               | 992             | 4th (P.W.O.) L.C., Bellary     | 483                | 11          | 2.28                         |
| First-class do. Shaik Madar                   | 639             | Jail, Chittur                  | 476                | 409         | 85.92                        |
| Assistant Apothecary W. H. Cooper             | ...             | 26th Regt., Trichnr.           | 466                | 385         | 82.61                        |
| First-class Hospl. Asst. Parthasarthy Moodaly | 672             | Temporary Jail, Trichinopoly   | 408                | 377         | 92.40                        |
| Do. A. Paul                                   | 635             | District Jail, Tellicherry     | 390                | 289         | 74.10                        |
| Third-class do. Mittenlall                    | ...             | 35th Regiment N.I., Kamptee    | 335                | 80          | 23.87                        |
| Do. Shaik Abdool Khader                       | ...             | 40th Regiment                  | 301                | 236         | 78.40                        |
| First-class do. Chetter Singh                 | 224             | Chittur Town                   | 291                | 254         | 87.28                        |
| Second-class do. R. Peter                     | 708             | District Jail, Mangalore       | 239                | 173         | 72.38                        |
| Do. T. Veerabudren                            | 800             | District Jail, Kurnool         | 238                | 183         | 76.89                        |
| Do. C. Cundasawmy                             | ...             | 2nd Regt., Kamptee             | 230                | 196         | 85.21                        |
| First-class do. A. Narrainsawmy               | 500             | Sub-Collector's Dept., Salem   | 219                | 138         | 63.01                        |
| Second-class do. A. Gooriah                   | 650             | Police Hospital, Rajahmundry   | 203                | 175         | 86.20                        |
| Do. M. Lutchminen Moodelly                    | ...             | Sub-Jail Relief Camp, Dindigul | 188                | 153         | 81.38                        |
| First-class do. Balasoundrum                  | 645             | Berhampore                     | 153                | 70          | 45.75                        |
| Third-class do. A. Maria Dassen               | ...             | .....                          | 143                | 119         | 80.40                        |
| Do. Abdool Majied                             | ...             | 31st Regt., Rapur              | 132                | 110         | 83.33                        |
| First-class Apothecary W. McKenzie            | ...             | Cantonment Hospital            | 132                | 85          | 64.39                        |
| Third-class Hospl. Asst. S. Coopoosawmy       | 955             | 2nd Regiment                   | 130                | 126         | 96.92                        |
| Do. V. Sooharoyen                             | 909             | 1st M. L. C.                   | 129                | 120         | 93.02                        |
| Do. Chengulvaraya Moodelly                    | 1,145           | Famine Camp, Trichinopoly      | 129                | 94          | 72.86                        |
| Do. Shaik Delwar Ally                         | ...             | 9th Regt., Cannanore           | 126                | 117         | 72.85                        |

| Rank and Name.           |              |                        | General Number. | Stations.                              | Number Vaccinated. | Successful. | Ratio Percent. age of Success. |
|--------------------------|--------------|------------------------|-----------------|----------------------------------------|--------------------|-------------|--------------------------------|
| First-class Hospl. Asst. | Narrainsawmy | ...                    | 369             | Central and District Jail, Coimbatore. | 125                | 79          | 63.2                           |
| Third-class              | do.          | P. Mootosawmy          | 1,025           | Temporary Jail, Palghat.               | 122                | 115         | 94.26                          |
| Do.                      | do.          | S. Y. Narrainsawmy     | 996             | Sub-Jail Town, Baligoda.               | 119                | 81          | 68.06                          |
| Do.                      | do.          | P. Ranganakooloo       | 928             | Jail, Russelkonda                      | 118                | 95          | 80.50                          |
| Do.                      | do.          | T. Ganapathy Pillay.   | 977             | Collector's Department, Vallam.        | 114                | 84          | 73.68                          |
| Do.                      | do.          | Puram Lall             | ...             | 22nd Regt., Kamptee.                   | 113                | 99          | 87.61                          |
| Do.                      | do.          | M. D. Arokianaden      | 977             | 25th Regiment                          | 113                | 86          | 76.10                          |
| Do.                      | do.          | J. Paravathulu         | ...             | Russelkonda                            | 109                | 73          | 66.97                          |
| Do.                      | do.          | S. Anthony             | 978             | 38th Regiment N. I., Trichinopoly.     | 106                | 62          | 58.76                          |
| First-class              | do.          | M. R. Rajahgopant      | 399             | Chingleput Town                        | 105                | 89          | 84.49                          |
| Third-class              | do.          | Daman Khan             | ...             | Central Jail, Trichinopoly.            | 105                | 79          | 75.23                          |
| Second-class             | do.          | T. Narrainsawmy Naidu. | 733             | Civil Dispensary, Kadiri.              | 100                | 95          | 95                             |

(Signed) JAS. ANDERSON LAING, Surgeon,  
*Inspector of Vaccination and*  
*Depy. Sanitary Commissioner,*  
*Madras Presidency.*

OFFICE OF INSPECTOR OF VACCINATION, &c.,  
 MADRAS PRESIDENCY,  
 MADRAS, 10th June 1878,

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## APPENDICES.

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## A—VACCINE DEPARTMENT.

STATEMENT No. I. showing Particulars of Vaccination in the Madras Presidency during the Year 1877-78.

| Number. | Circles and Districts.             | Establishment.                | Population of District or Circle according to Census of 1871. | Average Population per Square Mile. | Average Number of Vaccinators employed throughout the Season. | Total Number of Persons Vaccinated. |          | Average Number by each Vaccinator. | Primary Vaccination. |                 |                               |                                   | Re-vaccination. |        | Percentage of Successful Cases. |          | Persons successfully Vaccinated per 1,000 of Population. | Average Annual Number of Persons successfully Vaccinated during previous five Years. |                  | Average Annual Number of Deaths from Small-pox during previous five Years. |                  |
|---------|------------------------------------|-------------------------------|---------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------|-------------------------------------|----------|------------------------------------|----------------------|-----------------|-------------------------------|-----------------------------------|-----------------|--------|---------------------------------|----------|----------------------------------------------------------|--------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------|------------------|
|         |                                    |                               |                                                               |                                     |                                                               | Males.                              | Females. |                                    | Total.               | Under one Year. | Over one and under six Years. | Total of all Ages over six Years. | Successful.     | Total. | Successful.                     | Primary. |                                                          | Number.                                                                              | Ratio per 1,000. | Number.                                                                    | Ratio per 1,000. |
| 1       | 2                                  | 3                             | 4                                                             | 5                                   | 6                                                             | 7                                   |          | 8                                  | 9                    | 10              | 11                            | 12                                | 13              | 14     | 15                              | 16       | 17                                                       | 18                                                                                   | 19               | 20                                                                         | 21               |
| 1       | Vaccine Depot and Madras District. | Permanent                     | 397,552                                                       | 14,724                              | 28                                                            | 64,519                              | 51,816   | 4,154                              | 112,714              | 7,274           | ...                           | 42,764                            | 3,621           | 1,557  | 91.08                           | 86.64    | 129                                                      | 22,367                                                                               | 59               | 639                                                                        | 2                |
| 2       | Chingleput District.               | Permanent                     | 900,957                                                       | 944                                 | 13                                                            | 6,671                               | 8,199    | 1,280                              | 16,870               | 1,149           | 5,778                         | 6,661                             | ...             | ...    | 93.61                           | ...      | ...                                                      | ...                                                                                  | ...              | ...                                                                        | ...              |
|         | Do.                                | Temporary                     | ...                                                           | ...                                 | 4                                                             | 2,969                               | 3,960    | 1,479                              | 5,919                | 351             | 1,656                         | 2,525                             | ...             | ...    | 75.88                           | ...      | ...                                                      | ...                                                                                  | ...              | ...                                                                        | ...              |
|         | Do.                                | Red Hills Female Relief-Camp. | ...                                                           | ...                                 | 1                                                             | 2,309                               | 3,618    | 4,637                              | 4,586                | 613             | ...                           | 3,637                             | 243             | 192    | 94                              | 79.94    | ...                                                      | ...                                                                                  | ...              | ...                                                                        | ...              |
|         |                                    | Total                         | 900,957                                                       | 944                                 | 18                                                            | 13,989                              | 19,677   | 1,394                              | 27,374               | 2,113           | 7,364                         | 12,838                            | 243             | 192    | 81.68                           | 79.88    | 25                                                       | 9,573                                                                                | 10               | 1,886                                                                      | 2                |
| 3       | Chittoor Circle                    | Permanent                     | 1,326,292                                                     | 254                                 | 21                                                            | 14,839                              | 12,951   | 1,333                              | 27,790               | 1,682           | 9,666                         | 14,930                            | 30              | 27     | 94                              | 90       | 19                                                       | 8,021                                                                                | 6                | 1,919                                                                      | 2                |
| 4       | Vellore Circle                     | Permanent                     | 638,961                                                       | 391                                 | 8                                                             | 12,367                              | 15,465   | 2,479                              | 27,819               | 1,889           | 6,249                         | 18,610                            | 13              | 7      | 84.34                           | 53.94    | ...                                                      | ...                                                                                  | ...              | ...                                                                        | ...              |
|         | Do.                                | Temporary                     | ...                                                           | ...                                 | 2                                                             | 1,837                               | 1,950    | 3,837                              | 3,837                | 143             | 1,160                         | 2,066                             | ...             | ...    | 87.77                           | ...      | ...                                                      | ...                                                                                  | ...              | ...                                                                        | ...              |
|         | Do.                                | Zemindar, Arni Jaghira.       | ...                                                           | ...                                 | 1                                                             | 572                                 | 477      | 1,049                              | 1,049                | 50              | 344                           | 639                               | ...             | ...    | 98.47                           | ...      | ...                                                      | ...                                                                                  | ...              | ...                                                                        | ...              |
|         |                                    | Total                         | 638,961                                                       | 391                                 | 11                                                            | 14,836                              | 17,892   | 2,974                              | 32,705               | 1,591           | 7,763                         | 21,315                            | 13              | 7      | 93.74                           | 53.94    | 45                                                       | 7,097                                                                                | 11               | 1,083                                                                      | 1                |
| 5       | Cuddalore Circle.                  | Permanent                     | 1,101,324                                                     | 326                                 | 18                                                            | 6,047                               | 5,237    | 868                                | 11,274               | 1,089           | 5,698                         | 3,406                             | 10              | 7      | 89.9                            | 70       | 9                                                        | 10,960                                                                               | 9                | 1,750                                                                      | 2                |
| 6       | Virudachalam Circle                | Permanent                     | 538,684                                                       | 332                                 | 8                                                             | 2,701                               | 2,563    | 683                                | 5,234                | 341             | ...                           | 4,133                             | 30              | 12     | 84.9                            | 40       | 7                                                        | 4,489                                                                                | 7                | 778                                                                        | 1                |
| 7       | Tiruchinopoly District.            | Permanent                     | 1,112,607                                                     | 310                                 | 16                                                            | 7,631                               | 7,236    | 929                                | 14,867               | 1,267           | ...                           | 10,917                            | ...             | ...    | 96.90                           | ...      | ...                                                      | ...                                                                                  | ...              | ...                                                                        | ...              |
|         | Do.                                | Temporary                     | ...                                                           | ...                                 | 2                                                             | 390                                 | 418      | 249                                | 748                  | 8               | ...                           | 509                               | ...             | ...    | 91.82                           | ...      | ...                                                      | ...                                                                                  | ...              | ...                                                                        | ...              |
|         |                                    | Total                         | 1,112,607                                                     | 310                                 | 19                                                            | 7,961                               | 7,654    | 716                                | 15,615               | 1,265           | ...                           | 11,426                            | ...             | ...    | 81.46                           | ...      | 11                                                       | 15,224                                                                               | 14               | 300                                                                        | 7                |

|    |                          |                                                   |           |     |     |        |        |        |       |        |       |        |        |     |       |       |       |     |        |     |       |     |
|----|--------------------------|---------------------------------------------------|-----------|-----|-----|--------|--------|--------|-------|--------|-------|--------|--------|-----|-------|-------|-------|-----|--------|-----|-------|-----|
| 8  | Tanjore Circle           | Permanent                                         | 969,735   | 436 | 18  | 8,143  | 7,356  | 15,799 | 877   | 15,799 | 1,492 | ...    | 13,308 | ... | ...   | 50.50 | ...   | 16  | 8,453  | 8   | 591   | 1   |
| 9  | Nagapattinam Circle.     | Permanent                                         | 319,961   | 540 | 12  | 5,890  | 4,929  | 10,919 | 909   | 10,310 | 649   | ...    | 9,039  | 409 | 258   | 92.19 | 63.08 | 12  | 7,814  | 9   | 567   | 1   |
| 10 | Madurai Circle           | Permanent                                         | 1,246,798 | 255 | 33  | 16,767 | 15,902 | 32,669 | 989   | 32,635 | 4,443 | 13,603 | 11,171 | 34  | 17    | 90.76 | 50    | ... | ...    | ... | ...   |     |
|    | Do.                      | Private Vaccinators                               | ...       | ... | 1   | 20     | 15     | 35     | 35    | 21     | ...   | 14     | ...    | ... | 100   | ...   | ...   | ... | ...    | ... | ...   |     |
|    |                          | Total                                             | 1,246,798 | 255 | 34  | 16,787 | 15,917 | 32,704 | 982   | 32,670 | 4,464 | 13,603 | 11,185 | 34  | 17    | 90.77 | 50    | ... | 22,301 | 18  | 565   | 22  |
| 11 | Dindigul Circle          | Permanent                                         | 954,965   | 270 | 18  | 13,072 | 13,225 | 26,297 | 1,460 | 26,263 | 4,763 | 10,296 | 10,413 | 34  | 20    | 96.96 | 53.82 | ... | ...    | ... | ...   |     |
|    | Do.                      | Hospital Assistant as Vaccinator at Pulney Hills. | ...       | ... | ... | 54     | 69     | 113    | 113   | 43     | ...   | 26     | ...    | ... | 62.71 | ...   | ...   | ... | ...    | ... | ...   |     |
|    |                          | Total                                             | 954,965   | 270 | 18  | 13,126 | 13,294 | 26,410 | 1,579 | 26,376 | 4,806 | 10,396 | 10,442 | 34  | 20    | 96.84 | 53.82 | ... | ...    | ... | 1,517 | 1   |
| 12 | Tirunelveli Circle       | Permanent                                         | 1,181,111 | 330 | 17  | 8,624  | 7,651  | 16,275 | 957   | 16,289 | 1,736 | 8,002  | 5,110  | 6   | 2     | 91.27 | 33.33 | 13  | 11,466 | 9   | 1,852 | 2   |
| 13 | Shermadurai Circle       | Permanent                                         | 438,294   | 872 | 8   | 3,567  | 3,011  | 6,578  | 822   | 6,558  | 620   | ...    | 1,921  | 20  | 15    | 89.41 | 75    | 12  | 4,752  | 10  | 628   | 1   |
| 14 | Cuddalore Circle         | Permanent                                         | 784,750   | 169 | 21  | 7,906  | 5,386  | 12,692 | 804   | 12,692 | 416   | 4,307  | 5,455  | ... | ...   | 93.76 | ...   | 13  | 22,041 | 23  | 531   | 7   |
| 15 | Madhavale Circle.        | Permanent                                         | 550,169   | 100 | 15  | 4,319  | 3,939  | 7,613  | 632   | 7,547  | 289   | 1,802  | 2,513  | 21  | 46    | 86.01 | 69.25 | 10  | 2,629  | 5   | 464   | 84  |
| 16 | Karunel District         | Permanent                                         | 928,766   | 120 | 12  | 2,539  | 1,743  | 4,347  | 362   | 4,336  | 461   | ...    | 2,236  | 11  | 11    | 86    | 100   | 4   | 2,736  | 3   | 937   | 1   |
| 17 | Bellary Circle           | Permanent                                         | 395,172   | 86  | 13  | 3,429  | 3,299  | 6,728  | 517   | 6,690  | 2,154 | ...    | 8,057  | 29  | 17    | 89.62 | 80    | 13  | 9,187  | 23  | 369   | 93  |
| 18 | Pennakonda Circle.       | Permanent                                         | 375,715   | 130 | 3   | 1,316  | 1,134  | 2,450  | 612   | 2,424  | 668   | ...    | 1,359  | 24  | 9     | 81.67 | ...   | 5   | 2,927  | 8   | 373   | 69  |
| 19 | Gooty Circle             | Permanent                                         | 609,982   | 163 | 6   | 3,029  | 2,854  | 5,882  | 360   | 5,854  | 2,369 | ...    | 2,774  | 28  | 24    | 87.5  | ...   | 8   | 4,006  | 6   | 761   | 1   |
| 20 | Salem Circle             | Permanent                                         | 1,368,087 | 255 | 17  | 16,904 | 17,959 | 34,863 | 2,650 | 34,770 | 623   | 9,038  | 23,658 | 33  | 52    | 96.40 | 89.24 | 24  | 9,976  | 7   | 2,313 | 1   |
| 21 | Ossoor Circle            | Permanent                                         | 553,896   | 196 | 15  | 7,859  | 8,156  | 16,015 | 1,157 | 15,830 | 862   | ...    | 13,462 | 156 | 145   | 80    | ...   | ... | ...    | ... | ...   | ... |
|    | Do.                      | Temporary                                         | ...       | ... | 2   | 876    | 733    | 1,609  | 504   | 1,609  | 29    | ...    | 1,352  | ... | ...   | ...   | ...   | ... | ...    | ... | ...   | ... |
|    |                          | Total                                             | 553,896   | 196 | 17  | 8,735  | 8,889  | 17,624 | 1,736 | 17,439 | 891   | ...    | 14,848 | 153 | 146   | 80.25 | ...   | ... | ...    | ... | ...   | ... |
| 22 | Nilgiri Circle.          | Permanent                                         | 36,461    | 36  | 2   | 1,642  | 1,263  | 2,905  | 1,452 | 2,788  | 264   | ...    | 3,301  | 117 | 79    | 87.95 | 76.86 | 72  | ...    | ... | 14    | ... |
| 23 | North Coimbatore Circle. | Permanent                                         | 795,610   | 234 | 13  | 12,304 | 11,176 | 23,480 | 1,806 | 23,406 | 3,326 | ...    | 17,969 | 54  | 63    | 96.52 | 92.64 | ... | ...    | ... | ...   | ... |
|    | Do.                      | Temporary                                         | ...       | ... | 2   | 2,754  | 2,739  | 5,558  | 2,775 | 5,504  | 325   | ...    | 4,768  | 53  | 32    | 97.12 | ...   | ... | ...    | ... | ...   | ... |
|    |                          | Total                                             | 795,610   | 234 | 15  | 15,058 | 13,975 | 29,038 | 1,946 | 28,906 | 3,654 | ...    | 22,746 | 127 | 104   | 91.23 | 91.81 | 36  | ...    | ... | ...   | ... |

STATEMENT No. I. showing Particulars of Vaccination in the Madras Presidency during the Year 1877-78---(Continued).

| Number. | Circles and Districts.         | Establishment.                                                              | Population of District or Circle according to Census of 1871. | Average Population per Square Mile. | Average Number of Vaccinators employed throughout the Season. | Total Number of Persons Vaccinated. |          | Average Number of Persons Vaccinated by each Vaccinator. | Primary Vaccination. |        |                 |                               |                                   |             | Re-vaccination. |             | Percentage of Successful Cases. |                 | Persons successfully Vaccinated per 1,000 of Population. | Average Annual Number of Persons and coastally Vaccinated during previous five Years. |                  | Average Annual Number of Deaths from Small-pox during previous five Years. |
|---------|--------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------|---------------------------------------------------------------|-------------------------------------|----------|----------------------------------------------------------|----------------------|--------|-----------------|-------------------------------|-----------------------------------|-------------|-----------------|-------------|---------------------------------|-----------------|----------------------------------------------------------|---------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------|
|         |                                |                                                                             |                                                               |                                     |                                                               | Males.                              | Females. |                                                          | Total.               | Total. | Under one Year. | Over one and under six Years. | Total of all Ages over six Years. | Successful. | Total.          | Successful. | Primary.                        | Re-vaccination. |                                                          | Number.                                                                               | Ratio per 1,000. |                                                                            |
| 1       |                                | \$                                                                          | 4                                                             | 5                                   | 6                                                             | 7                                   | 8        | 9                                                        | 10                   | 11     | 12              | 13                            | 14                                | 15          | 16              | 17          | 18                              | 19              | 20                                                       | 21                                                                                    |                  |                                                                            |
| 24      | South Coimbatore Circle.       | Permanent                                                                   | 922,156                                                       | 321                                 | 20                                                            | 18,861                              | 18,244   | 37,105                                                   | 4,912                | ..     | 80,185          | ..                            | ..                                | 97.96       | ..              | 38          | 26,921                          | 16              | 1,893                                                    | ..                                                                                    | 6                |                                                                            |
| 25      | Malabar District. Do. Do.      | Permanent Temporary Private                                                 | 2,138,933                                                     | 344                                 | 11                                                            | 8,086                               | 2,624    | 10,720                                                   | 45                   | ..     | 8,827           | ..                            | ..                                | 95.72       | ..              | ..          | ..                              | ..              | ..                                                       | ..                                                                                    | ..               |                                                                            |
|         |                                | Total                                                                       | 2,148,933                                                     | 344                                 | 17                                                            | 9,289                               | 3,257    | 12,546                                                   | 48                   | ..     | 11,174          | ..                            | ..                                | 89.41       | ..              | 6           | 14,168                          | 7               | 6,301                                                    | 3                                                                                     | ..               |                                                                            |
| 26      | South Canara District. Do. Do. | Permanent Temporary Hospital Assistant as Vaccinator at Admin. divi Branch. | 888,650                                                       | 202                                 | 20                                                            | 18,626                              | 13,747   | 32,373                                                   | 564                  | ..     | 27,388          | 1,693                         | 1,324                             | 86.18       | 78.11           | ..          | ..                              | ..              | ..                                                       | ..                                                                                    | ..               |                                                                            |
|         |                                | Total                                                                       | 888,650                                                       | 202                                 | 30                                                            | 24,119                              | 16,221   | 42,340                                                   | 728                  | ..     | 36,866          | 1,983                         | 1,471                             | 90.43       | 79.01           | 43          | 16,488                          | 18              | 466                                                      | ..                                                                                    | 62               |                                                                            |
| 27      | Nelore Circle Do. Do.          | Permanent Temporary Zemindari, Venkata-giri.                                | 703,867                                                       | 180                                 | 13                                                            | 12,398                              | 12,411   | 25,399                                                   | 855                  | ..     | 22,316          | 393                           | 879                               | 94.14       | 88.34           | ..          | ..                              | ..              | ..                                                       | ..                                                                                    | ..               |                                                                            |
|         |                                | Total                                                                       | 703,867                                                       | 180                                 | 21                                                            | 17,065                              | 16,167   | 33,212                                                   | 979                  | ..     | 29,327          | 1,047                         | 922                               | 91.25       | 88.06           | 34          | 14,659                          | 20              | 2,176                                                    | 3                                                                                     | ..               |                                                                            |
| 28      | Onge Circle Do. Do.            | Permanent Temporary Private                                                 | 643,022                                                       | 197                                 | 22                                                            | 6,536                               | 5,776    | 12,312                                                   | 591                  | 4,705  | 6,073           | ..                            | ..                                | 92          | ..              | ..          | ..                              | ..              | ..                                                       | ..                                                                                    | ..               |                                                                            |
|         |                                | Total                                                                       | 643,022                                                       | 197                                 | 31                                                            | 7,529                               | 6,627    | 14,156                                                   | 919                  | 5,431  | 6,661           | ..                            | ..                                | 94.90       | ..              | 27          | 6,439                           | 16              | 1,394                                                    | 3                                                                                     | ..               |                                                                            |

| No. | Sanctioned Circle Do. | Permanent | Temporary | 1909-10 | 1910-11 | 1911-12 | 1912-13 | 1913-14 | 1914-15 | 1915-16 | 1916-17 | 1917-18 | 1918-19 | 1919-20 | 1920-21 | 1921-22 | 1922-23 | 1923-24 | 1924-25 | 1925-26 | 1926-27 | 1927-28 | 1928-29 | 1929-30 | 1930-31 | 1931-32 | 1932-33 | 1933-34 | 1934-35 | 1935-36 | 1936-37 | 1937-38 | 1938-39 | 1939-40 | 1940-41 | 1941-42 | 1942-43 | 1943-44 | 1944-45 | 1945-46 | 1946-47 | 1947-48 | 1948-49 | 1949-50 | 1950-51 | 1951-52 | 1952-53 | 1953-54 | 1954-55 | 1955-56 | 1956-57 | 1957-58 | 1958-59 | 1959-60 | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 | 1966-67 | 1967-68 | 1968-69 | 1969-70 | 1970-71 | 1971-72 | 1972-73 | 1973-74 | 1974-75 | 1975-76 | 1976-77 | 1977-78 | 1978-79 | 1979-80 | 1980-81 | 1981-82 | 1982-83 | 1983-84 | 1984-85 | 1985-86 | 1986-87 | 1987-88 | 1988-89 | 1989-90 | 1990-91 | 1991-92 | 1992-93 | 1993-94 | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 | 2000-01 | 2001-02 | 2002-03 | 2003-04 | 2004-05 | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 | 2023-24 | 2024-25 | 2025-26 | 2026-27 | 2027-28 | 2028-29 | 2029-30 | 2030-31 | 2031-32 | 2032-33 | 2033-34 | 2034-35 | 2035-36 | 2036-37 | 2037-38 | 2038-39 | 2039-40 | 2040-41 | 2041-42 | 2042-43 | 2043-44 | 2044-45 | 2045-46 | 2046-47 | 2047-48 | 2048-49 | 2049-50 | 2050-51 | 2051-52 | 2052-53 | 2053-54 | 2054-55 | 2055-56 | 2056-57 | 2057-58 | 2058-59 | 2059-60 | 2060-61 | 2061-62 | 2062-63 | 2063-64 | 2064-65 | 2065-66 | 2066-67 | 2067-68 | 2068-69 | 2069-70 | 2070-71 | 2071-72 | 2072-73 | 2073-74 | 2074-75 | 2075-76 | 2076-77 | 2077-78 | 2078-79 | 2079-80 | 2080-81 | 2081-82 | 2082-83 | 2083-84 | 2084-85 | 2085-86 | 2086-87 | 2087-88 | 2088-89 | 2089-90 | 2090-91 | 2091-92 | 2092-93 | 2093-94 | 2094-95 | 2095-96 | 2096-97 | 2097-98 | 2098-99 | 2099-00 | 2100-01 | 2101-02 | 2102-03 | 2103-04 | 2104-05 | 2105-06 | 2106-07 | 2107-08 | 2108-09 | 2109-10 | 2110-11 | 2111-12 | 2112-13 | 2113-14 | 2114-15 | 2115-16 | 2116-17 | 2117-18 | 2118-19 | 2119-20 | 2120-21 | 2121-22 | 2122-23 | 2123-24 | 2124-25 | 2125-26 | 2126-27 | 2127-28 | 2128-29 | 2129-30 | 2130-31 | 2131-32 | 2132-33 | 2133-34 | 2134-35 | 2135-36 | 2136-37 | 2137-38 | 2138-39 | 2139-40 | 2140-41 | 2141-42 | 2142-43 | 2143-44 | 2144-45 | 2145-46 | 2146-47 | 2147-48 | 2148-49 | 2149-50 | 2150-51 | 2151-52 | 2152-53 | 2153-54 | 2154-55 | 2155-56 | 2156-57 | 2157-58 | 2158-59 | 2159-60 | 2160-61 | 2161-62 | 2162-63 | 2163-64 | 2164-65 | 2165-66 | 2166-67 | 2167-68 | 2168-69 | 2169-70 | 2170-71 | 2171-72 | 2172-73 | 2173-74 | 2174-75 | 2175-76 | 2176-77 | 2177-78 | 2178-79 | 2179-80 | 2180-81 | 2181-82 | 2182-83 | 2183-84 | 2184-85 | 2185-86 | 2186-87 | 2187-88 | 2188-89 | 2189-90 | 2190-91 | 2191-92 | 2192-93 | 2193-94 | 2194-95 | 2195-96 | 2196-97 | 2197-98 | 2198-99 | 2199-00 | 2200-01 | 2201-02 | 2202-03 | 2203-04 | 2204-05 | 2205-06 | 2206-07 | 2207-08 | 2208-09 | 2209-10 | 2210-11 | 2211-12 | 2212-13 | 2213-14 | 2214-15 | 2215-16 | 2216-17 | 2217-18 | 2218-19 | 2219-20 | 2220-21 | 2221-22</ |
|-----|-----------------------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|
|-----|-----------------------|-----------|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----------|

MILITARY CANTONMENTS.

|                    | Salem District | 2   | 773   | 626   | 1,319 | 639   | 1,335 | 529   | 712   | 64  | 89  | 94-22 | 68-42 | 15  | 1,022 | 12  | ... |
|--------------------|----------------|-----|-------|-------|-------|-------|-------|-------|-------|-----|-----|-------|-------|-----|-------|-----|-----|
| 1 Bangalore ...    | 81,810         | ... | ...   | ...   | ...   | ...   | ...   | ...   | ...   | ... | ... | ...   | ...   | ... | ...   | ... | ... |
| 2 Secunderabad ... | 52,448         | 2   | 1,795 | 1,800 | 3,505 | 1,797 | 3,595 | 2,830 | 776   | ... | ... | 91-41 | ...   | 64  | 2,016 | 38  | ... |
| 3 Kanchi ...       | 47,244         | 2   | 986   | 808   | 1,796 | 898   | 1,796 | 776   | 798   | ... | ... | 97-73 | ...   | 33  | 903   | 19  | ... |
| Total ...          | 1,61,512       | 6   | 3,565 | 3,234 | 6,790 | 1,132 | 6,726 | 3,905 | 2,296 | 64  | 89  | 92-49 | 60-83 | 8   | ...   | ... | ... |

## RAILWAY APOTHECARIES.

[illegible]

## A—VACCINE DEPARTMENT.

STATEMENT No. I. showing Particulars of Vaccination in the Madras Presidency during the Year 1877-78—(Continued).

| Number. | Circles and Districts. | Establishment. | Population of District or Circle according to Census of 1871. | Average Population per Square Mile. | Average Number of Vaccinators employed throughout the Session. | Total Number of Persons Vaccinated. | Primary Vaccination. |                 |                               |                                   | Re-vaccination. |             | Percentage of Successful Cases. |                 | Persons successfully Vaccinated per 1,000 of Population. | Average Annual Number of Persons successfully Vaccinated during previous five years. |                  | Average Annual Number of Deaths from Small-pox during previous five years. |                  |
|---------|------------------------|----------------|---------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------|-------------------------------------|----------------------|-----------------|-------------------------------|-----------------------------------|-----------------|-------------|---------------------------------|-----------------|----------------------------------------------------------|--------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------|------------------|
|         |                        |                |                                                               |                                     |                                                                |                                     | Total.               | Under one Year. | Over one and under six Years. | Total of all Ages over six Years. | Total.          | Successful. | Primary.                        | Re-vaccination. |                                                          | Number.                                                                              | Ratio per 1,000. | Number.                                                                    | Ratio per 1,000. |

## MEDICAL SUBORDINATES.

## MUNICIPALITIES.

| Number. | Circles and Districts. | Establishment. | Population of District or Circle according to Census of 1871. | Average Population per Square Mile. | Average Number of Vaccinators employed throughout the Session. | Total Number of Persons Vaccinated. | Primary Vaccination. |                 |                               |                                   | Re-vaccination. |             | Percentage of Successful Cases. |                 | Persons successfully Vaccinated per 1,000 of Population. | Average Annual Number of Persons successfully Vaccinated during previous five years. |                  | Average Annual Number of Deaths from Small-pox during previous five years. |                  |
|---------|------------------------|----------------|---------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------|-------------------------------------|----------------------|-----------------|-------------------------------|-----------------------------------|-----------------|-------------|---------------------------------|-----------------|----------------------------------------------------------|--------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------|------------------|
|         |                        |                |                                                               |                                     |                                                                |                                     | Total.               | Under one Year. | Over one and under six Years. | Total of all Ages over six Years. | Total.          | Successful. | Primary.                        | Re-vaccination. |                                                          | Number.                                                                              | Ratio per 1,000. | Number.                                                                    | Ratio per 1,000. |

| Number. | Circles and Districts. | Establishment. | Population of District or Circle according to Census of 1871. | Average Population per Square Mile. | Average Number of Vaccinators employed throughout the Session. | Total Number of Persons Vaccinated. | Primary Vaccination. |                 |                               |                                   | Re-vaccination. |             | Percentage of Successful Cases. |                 | Persons successfully Vaccinated per 1,000 of Population. | Average Annual Number of Persons successfully Vaccinated during previous five years. |                  | Average Annual Number of Deaths from Small-pox during previous five years. |                  |
|---------|------------------------|----------------|---------------------------------------------------------------|-------------------------------------|----------------------------------------------------------------|-------------------------------------|----------------------|-----------------|-------------------------------|-----------------------------------|-----------------|-------------|---------------------------------|-----------------|----------------------------------------------------------|--------------------------------------------------------------------------------------|------------------|----------------------------------------------------------------------------|------------------|
|         |                        |                |                                                               |                                     |                                                                |                                     | Total.               | Under one Year. | Over one and under six Years. | Total of all Ages over six Years. | Total.          | Successful. | Primary.                        | Re-vaccination. |                                                          | Number.                                                                              | Ratio per 1,000. | Number.                                                                    | Ratio per 1,000. |

N.B.—Dispensary vaccination is excluded from this statement and is given separately in Statement No. III. The number of deaths from small-pox during previous five years was calculated for calendar years.

\* Figures taken from the Census Report of 1871.

## A—VACCINE

STATEMENT No. II. showing the Cost of the Department in the

| Number. | Circles and Districts.        |                                                       | Establishment.                                             |                                |                          |              |               |              | Expenses.             |                       |                |
|---------|-------------------------------|-------------------------------------------------------|------------------------------------------------------------|--------------------------------|--------------------------|--------------|---------------|--------------|-----------------------|-----------------------|----------------|
|         |                               |                                                       | Inspector of Vaccination and Deputy Sanitary Commissioner. | First-class Deputy Inspectors. | Second-class Inspectors. | Vaccinators. |               |              | Pay of Establishment. | Travelling Allowance. | Contingencies. |
|         |                               |                                                       |                                                            |                                |                          | First-class. | Second-class. | Probationer. |                       |                       |                |
| 1       | 2                             | 3                                                     | 4                                                          | 5                              | 6                        | 7            | 8             | 9            | 10                    | 11                    | 12             |
| 22      | Gosser Circle Do.             | Permanent                                             | ...                                                        | ...                            | 1                        | 3            | 6             | 3            | Rs. 2,181 10 5        | A. P. 417 0 3         | Rs. 68 10 7    |
|         |                               | Temporary                                             | ...                                                        | ...                            | ...                      | 3            | ...           | ...          | ...                   | ...                   | ...            |
|         |                               | Total                                                 | ...                                                        | ...                            | 1                        | 3            | 9             | 3            | 2,181 10 5            | 417 0 3               | 68 10 7        |
| 23      | Nilgiri Circle.               | Permanent                                             | ...                                                        | ...                            | 2                        | ...          | ...           | ...          | 552 0 0               | ...                   | ...            |
| 24      | North Coimbatore Circle Do.   | Permanent                                             | ...                                                        | 1                              | 2                        | 4            | 16            | 1            | 2,278 1 0             | 250 4 0               | 50 7 6         |
|         |                               | Temporary                                             | ...                                                        | ...                            | ...                      | 2            | ...           | ...          | 249 4 8               | ...                   | ...            |
|         |                               | Total                                                 | ...                                                        | 1                              | 2                        | 6            | 16            | 1            | 2,527 5 8             | 250 4 0               | 50 7 6         |
| 25      | South Coimbatore Circle       | Permanent                                             | ...                                                        | 1                              | 2                        | 5            | 16            | 1            | 2,514 4 6             | 173 0 0               | 768 10 0       |
| 26      | Malabar District Do.          | Permanent                                             | ...                                                        | 1                              | 4                        | 7            | ...           | ...          | 2,140 11 1            | 163 6 10              | 103 15 6       |
|         |                               | Temporary                                             | ...                                                        | ...                            | ...                      | 6            | ...           | ...          | 152 2 2               | ...                   | ...            |
|         |                               | Total                                                 | ...                                                        | 1                              | 4                        | 12           | ...           | ...          | 2,292 13 3            | 163 6 10              | 103 15 6       |
| 27      | South Canara District Do. Do. | Permanent                                             | ...                                                        | 1                              | 5                        | 7            | 8             | 1            | 3,578 7 10            | ...                   | 135 12 7       |
|         |                               | Temporary                                             | ...                                                        | ...                            | ...                      | 10           | ...           | ...          | 369 1 2               | ...                   | ...            |
|         |                               | Hospital Assistant as Vaccinator at Amindivi Islands. | ...                                                        | ...                            | ...                      | ...          | ...           | ...          | 600 0 0               | ...                   | ...            |
|         |                               | Total                                                 | ...                                                        | 1                              | 5                        | 17           | 8             | 1            | 4,547 9 0             | ...                   | 135 12 7       |
| 28      | Nellore Circle Do. Do. Do.    | Permanent                                             | ...                                                        | 1                              | 4                        | 7            | 4             | 1            | 2,774 1 4             | 305 1 0               | 58 4 8         |
|         |                               | Temporary                                             | ...                                                        | ...                            | ...                      | 6            | ...           | ...          | 281 9 7               | ...                   | ...            |
|         |                               | Venkatagiri Zemindari.                                | ...                                                        | ...                            | ...                      | 2            | ...           | ...          | 110 0 0               | ...                   | ...            |
|         |                               | Total                                                 | ...                                                        | 1                              | 4                        | 13           | 4             | 1            | 3,165 10 11           | 305 1 0               | 58 4 8         |
| 29      | Ongole Circle Do.             | Permanent                                             | ...                                                        | 1                              | 4                        | 7            | 8             | 1            | 2,951 11 8            | 592 9 0               | 268 15 1       |
|         |                               | Temporary                                             | ...                                                        | ...                            | ...                      | 6            | ...           | ...          | 300 3 0               | ...                   | ...            |
|         |                               | Total                                                 | ...                                                        | 1                              | 4                        | 13           | 8             | 1            | 3,251 14 8            | 592 9 0               | 268 15 1       |
| 30      | Machilipatnam Circle Do.      | Permanent                                             | ...                                                        | 1                              | 5                        | 4            | 2             | ...          | 2,128 1 4             | ...                   | 120 0 0        |
|         |                               | Temporary                                             | ...                                                        | ...                            | ...                      | 2            | ...           | ...          | 956 10 2              | ...                   | ...            |
|         |                               | Total                                                 | ...                                                        | 1                              | 7                        | 9            | 2             | ...          | 3,084 11 6            | ...                   | 120 0 0        |
| 31      | Guntur Circle.                | Permanent                                             | ...                                                        | 1                              | 1                        | 11           | ...           | 1            | 2,019 14 11           | ...                   | 188 13 11      |
| 32      | Cocanada Circle Do.           | Permanent                                             | ...                                                        | 1                              | 5                        | 8            | 3             | 1            | 3,731 2 8             | 1,074 10 0            | 865 14 1       |
|         |                               | Pithapur Zemindari.                                   | ...                                                        | ...                            | ...                      | 2            | ...           | ...          | 203 14 0              | 59 9 0                | 40 0 0         |
|         |                               | Total                                                 | ...                                                        | 1                              | 7                        | 8            | 3             | 1            | 3,935 0 8             | 1,134 8 0             | 905 14 1       |
| 33      | Ellore Circle                 | Permanent                                             | ...                                                        | 1                              | 5                        | 2            | ...           | 1            | 1,937 0 4             | ...                   | 117 4 0        |
| 34      | Vijayanagara Circle.          | Permanent                                             | ...                                                        | 1                              | 7                        | 9            | 3             | ...          | 2,731 12 1            | 171 12 0              | 1,063 14 0     |
| 35      | Vizianagaram Circle.          | Permanent                                             | ...                                                        | ...                            | 1                        | 7            | 11            | 8            | 2,835 12 8            | 193 2 11              | 149 3 5        |
| 36      | Jaypore Tracts Do.            | Permanent                                             | ...                                                        | 1                              | ...                      | 6            | ...           | ...          | 1,367 3 9             | 143 8 0               | 15 8 10        |
|         |                               | Zemindari                                             | ...                                                        | ...                            | ...                      | 8            | ...           | ...          | 838 2 11              | ...                   | ...            |
|         |                               | Total                                                 | ...                                                        | 1                              | ...                      | 14           | ...           | ...          | 2,205 6 8             | 143 8 0               | 15 8 10        |

\* The cost of the temporary Vaccinators in Coimbatore

## DEPARTMENT.

Madras Presidency during the Year 1877-78—(Continued).

| Total Cost. | Paid from       |                   |              |                 |                                            | Total.      | Number of all successful Vaccination and Re-vaccination. | Average Cost of each successful Case. |
|-------------|-----------------|-------------------|--------------|-----------------|--------------------------------------------|-------------|----------------------------------------------------------|---------------------------------------|
|             | Imperial Funds. | Provincial Funds. | Local Funds. | Municipalities. | Native States, Zemindars or Private Funds. |             |                                                          |                                       |
|             | Rs. A. P.       | Rs. A. P.         | Rs. A. P.    | Rs. A. P.       | Rs. A. P.                                  |             |                                                          |                                       |
| 13          | 14              | 15                | 16           | 17              | 18                                         | 19          | 20                                                       | 21                                    |
| 2,667 5 3   | ...             | ...               | 2,667 5 3    | ...             | ...                                        | 2,667 5 3   | 14,476                                                   | 0 2 8                                 |
| ...         | ...             | ...               | ...          | ...             | ...                                        | ...         | 1,411                                                    | ...                                   |
| 2,667 5 3   | ...             | ...               | 2,667 5 3    | ...             | ...                                        | 2,667 5 3   | 15,887                                                   | 0 2 8                                 |
| 552 0 0     | ...             | ...               | 552 0 0      | ...             | ...                                        | 552 0 0     | 2,634                                                    | 0 3 3                                 |
| 2,878 12 6  | ...             | ...               | 2,878 12 6   | ...             | ...                                        | 2,878 12 6  | 21,388                                                   | 0 1 11                                |
| 249 4 8     | ...             | ...               | 249 4 8      | ...             | ...                                        | 249 4 8     | 5,136                                                    | 0 0 9                                 |
| 2,828 1 2   | ...             | ...               | 2,828 1 2    | ...             | ...                                        | 2,828 1 2   | 26,504                                                   | 0 1 8                                 |
| 3,455 14 6  | ...             | ...               | 3,455 14 6   | ...             | ...                                        | 3,455 14 6  | 35,098                                                   | 0 1 6                                 |
| 2,708 1 5   | ...             | ...               | 2,708 1 5    | ...             | ...                                        | 2,708 1 5   | 9,572                                                    | 0 4 0                                 |
| 152 2 2     | ...             | ...               | 152 2 2      | ...             | ...                                        | 152 2 2     | 1,624                                                    | 0 1 6                                 |
| 2,860 3 7   | ...             | ...               | 2,860 3 7    | ...             | ...                                        | 2,860 3 7   | 11,196                                                   | 0 4 1                                 |
| 3,714 4 5   | ...             | ...               | 3,714 4 5    | ...             | ...                                        | 3,714 4 5   | 29,226                                                   | 0 2 0                                 |
| 369 1 2     | ...             | ...               | 369 1 2      | ...             | ...                                        | 369 1 2     | 8,634                                                    | 0 0 7                                 |
| 600 0 0     | ...             | ...               | 600 0 0      | ...             | ...                                        | 600 0 0     | 199                                                      | 3 0 3                                 |
| 4,683 5 7   | ...             | ...               | 4,683 5 7    | ...             | ...                                        | 4,683 5 7   | 38,059                                                   | 0 1 11                                |
| 3,167 7 1   | ...             | ...               | 3,167 7 1    | ...             | ...                                        | 3,167 7 1   | 24,049                                                   | 0 3 1                                 |
| 281 9 7     | ...             | ...               | 281 9 7      | ...             | ...                                        | 281 9 7     | 5,373                                                    | 0 0 10                                |
| 110 0 0     | ...             | ...               | ...          | ...             | 110 0 0                                    | 110 0 0     | 1,896                                                    | 0 0 11                                |
| 3,559 0 8   | ...             | ...               | 3,449 0 8    | ...             | 110 0 0                                    | 3,559 0 8   | 31,228                                                   | 0 1 10                                |
| 3,813 3 9   | ...             | ...               | 3,813 3 9    | ...             | ...                                        | 3,813 3 9   | 11,369                                                   | 0 5 4                                 |
| 300 8 0     | ...             | ...               | 300 3 0      | ...             | ...                                        | 300 3 0     | 1,227                                                    | 0 8 10                                |
| 4,113 6 9   | ...             | ...               | 4,113 6 9    | ...             | ...                                        | 4,113 6 9   | 12,596                                                   | 0 9 2                                 |
| 2,257 2 1   | ...             | ...               | 2,257 2 1    | ...             | ...                                        | 2,257 2 1   | 6,943                                                    | 0 5 3                                 |
| 956 10 2    | ...             | ...               | 956 10 2     | ...             | ...                                        | 956 10 2    | 6,842                                                    | 0 2 7                                 |
| 3,213 12 8  | ...             | ...               | 3,213 12 8   | ...             | ...                                        | 3,213 12 8  | 13,785                                                   | 0 3 9                                 |
| 2,208 12 10 | ...             | ...               | 2,208 12 10  | ...             | ...                                        | 2,208 12 10 | 10,239                                                   | 0 3 5                                 |
| 5,171 10 9  | ...             | 1,084 0 0         | 4,087 10 9   | ...             | ...                                        | 5,171 10 9  | 10,308                                                   | 0 8 0                                 |
| 303 7 0     | ...             | ...               | ...          | ...             | 303 7 0                                    | 303 7 0     | 1,021                                                    | 0 4 9                                 |
| 5,475 1 9   | ...             | 1,084 0 0         | 4,087 10 9   | ...             | 303 7 0                                    | 5,475 1 9   | 11,329                                                   | 0 7 9                                 |
| 2,054 4 10  | ...             | ...               | 2,054 4 10   | ...             | ...                                        | 2,054 4 10  | 5,001                                                    | 0 6 6                                 |
| 3,966 6 1   | ...             | ...               | 2,966 6 1    | ...             | ...                                        | 3,966 6 1   | 8,955                                                    | 0 7 1                                 |
| 3,178 3 0   | ...             | ...               | 3,178 3 0    | ...             | ...                                        | 3,178 3 0   | 12,851                                                   | 0 5 3                                 |
| 1,531 4 7   | ...             | 1,475 4 7         | 56 0 0       | ...             | ...                                        | 1,531 4 7   | 1,391                                                    | 1 1 7                                 |
| 838 2 11    | ...             | ...               | ...          | ...             | 838 2 11                                   | 838 2 11    | 1,822                                                    | 0 8 3                                 |
| 3,899 7 6   | ...             | 1,475 4 7         | 56 0 0       | ...             | 838 2 11                                   | 3,899 7 6   | 3,013                                                    | 0 12 7                                |

Circle is included in the Permanent Establishment.

## A-VACCINE.

STATEMENT No. II, showing the Cost of the Department in the

| Number.                                | Circles and Districts. |               | Establishment.                                             |                                |                                 |              |               |          |                       | Expenses.                |                     |                    |
|----------------------------------------|------------------------|---------------|------------------------------------------------------------|--------------------------------|---------------------------------|--------------|---------------|----------|-----------------------|--------------------------|---------------------|--------------------|
|                                        |                        |               | Inspector of Vaccination and Deputy Sanitary Commissioner. | First-class Deputy Inspectors. | Second-class Deputy Inspectors. | Vaccinators. |               |          | Pay of Establishment. | Travelling Allowance.    | Contingencies.      |                    |
|                                        |                        |               |                                                            |                                |                                 | First-class. | Second-class. | Peonies. |                       |                          |                     |                    |
| 1                                      | 2                      | 3             | 4                                                          | 5                              | 6                               | 7            | 8             | 9        | 10                    | 11                       | 12                  |                    |
| 37                                     | Chatterpore Circle.    | Permanent ... | ...                                                        | 1                              | ...                             | 8            | 9             | ...      | 1                     | RS. A. P.<br>3,589 10 11 | RS. A. P.<br>25 0 6 | RS. A. P.<br>3 7 6 |
| 38                                     | Chicacole Circle.      | Permanent ... | ...                                                        | 1                              | ...                             | 2            | 8             | ...      | ...                   | 2,056 13 2               | 78 8 0              | 39 4 3             |
| 39                                     | Ganjam Hill Tracts.    | Permanent ... | ...                                                        | 1                              | ...                             | ...          | 6             | ...      | ...                   | 1,492 5 7                | 512 8 8             | 18 11 4            |
| Total of the Circles and Districts ... |                        |               | 1                                                          | 31                             | 7                               | 189          | 841           | 92 26    | 1,22,235 3 9          | 7,020 14 8               | 9,866 2 2           |                    |

## MILITARY

|       |              |           |     |     |     |   |   |     |         |     |     |
|-------|--------------|-----------|-----|-----|-----|---|---|-----|---------|-----|-----|
| 1     | Bangalore    | Permanent | ... | ... | ... | 1 | 1 | ... | 336 0 0 | ... | ... |
| 2     | Secunderabad | Do.       | ... | ... | ... | 1 | 1 | ... | 336 0 0 | ... | ... |
| 3     | Kamptee      | Do.       | ... | ... | ... | 1 | 1 | ... | 120 0 0 | ... | ... |
| Total |              |           | ... | ... | ... | 2 | 2 | ... | 792 0 0 | ... | ... |

## MUNICI

|    |              |                       |     |     |     |   |     |     |                            |     |          |
|----|--------------|-----------------------|-----|-----|-----|---|-----|-----|----------------------------|-----|----------|
| 1  | Chicacole    | Ganjam District       | ... | ... | ... | 1 | ... | ... | 144 0 0                    | ... | 14 13 8  |
| 2  | Berhampore   | Do.                   | ... | ... | ... | 1 | ... | ... | 96 1 6                     | ... | 13 0 0   |
| 3  | Vizagapatam  | Vizagapatam Dist.     | ... | ... | ... | 1 | ... | ... | 102 13 9                   | ... | 17 8 7   |
| 4  | Birdipatam   | Do.                   | ... | ... | ... | 1 | ... | ... | 120 0 0                    | ... | 60 14 0  |
| 5  | Vizianagaram | Do.                   | ... | ... | ... | 1 | ... | ... | 180 0 0                    | ... | 7 0 0    |
| 6  | Cocanada     | Godavari District     | ... | ... | ... | 1 | ... | ... | 195 0 0                    | ... | 57 5 0   |
| 7  | Rajahmundry  | Do.                   | ... | ... | ... | 1 | ... | ... | 120 0 0                    | ... | 14 2 8   |
| 8  | Ellore       | Do.                   | ... | ... | ... | 1 | ... | ... | 168 0 0                    | ... | 85 0 0   |
| 9  | Masulipatam  | Kistna District       | ... | ... | ... | 1 | ... | ... | 164 8 8                    | ... | 80 3 7   |
| 10 | Guntur       | Do.                   | ... | ... | ... | 1 | ... | ... | 154 0 0                    | ... | 20 10 4  |
| 11 | Nellore      | Nellore District      | ... | ... | ... | 1 | ... | ... | 144 0 0                    | ... | 16 0 0   |
| 12 | Conjeveram   | Chingleput District   | ... | ... | ... | 1 | ... | ... | 180 0 0                    | ... | 16 0 0   |
| 13 | Cuddalore    | South Arcot Dist.     | ... | ... | ... | 1 | ... | ... | 123 0 0                    | ... | 55 7 0   |
| 14 | Chilambaram  | Do.                   | ... | ... | ... | 1 | ... | ... | 132 0 0                    | ... | 9 11 0   |
| 15 | Trichinopoly | Trichinopoly District | ... | ... | ... | 1 | 3   | 2   | 536 3 0                    | ... | 492 14 6 |
| 16 | Srirangam    | Do.                   | ... | ... | ... | 1 | ... | ... | 92 8 0                     | ... | 6 9 0    |
| 17 | Tanjore      | Tanjore District      | ... | ... | ... | 1 | 1   | ... | 291 0 0                    | ... | 85 9 2   |
| 18 | Cambacorum   | Do.                   | ... | ... | ... | 1 | ... | ... | 180 0 0                    | ... | 72 9 0   |
| 19 | Mayavaram    | Do.                   | ... | ... | ... | 1 | ... | ... | 120 0 0                    | ... | ...      |
| 20 | Nagapattinam | Do.                   | ... | ... | ... | 1 | 4   | ... | 210 7 4                    | ... | 10 2 8   |
| 21 | Mannargudi   | Do.                   | ... | ... | ... | 1 | ... | ... | 150 0 0                    | ... | 10 0 0   |
| 22 | Madura       | Madura District       | ... | ... | ... | 1 | 2   | ... | 458 14 0                   | ... | ...      |
| 23 | Dindigul     | Do.                   | ... | ... | ... | 1 | ... | ... | 160 0 0                    | ... | 11 12 0  |
| 24 | Tinnevely    | Tinnevely District    | ... | ... | ... | 2 | ... | ... | 282 0 0                    | ... | 2 4 0    |
| 25 | Palemottah   | Do.                   | ... | ... | ... | 1 | 1   | ... | 129 9 6                    | ... | 62 2 6   |
| 26 | Tuticorin    | Do.                   | ... | ... | ... | 1 | ... | ... | 178 0 0                    | ... | ...      |
| 27 | Kurnool      | Kurnool District      | ... | ... | ... | 1 | ... | ... | 168 0 0                    | ... | ...      |
| 28 | Cuddapah     | Cuddapah District     | ... | ... | ... | 1 | ... | ... | 120 0 0                    | ... | ...      |
| 29 | Bellary      | Bellary District      | ... | ... | ... | 1 | 2   | ... | 456 0 0                    | ... | ...      |
| 30 | Adoni        | Do.                   | ... | ... | ... | 1 | ... | ... | 188 14 1                   | ... | ...      |
| 31 | Coaty        | Do.                   | ... | ... | ... | 1 | ... | ... | No Vaccinator was employed | ... | ...      |
| 32 | Anantapur    | Do.                   | ... | ... | ... | 1 | ... | ... | 76 0 0                     | ... | 157 14 4 |
| 33 | Vellore      | North Arcot Dist.     | ... | ... | ... | 2 | ... | ... | 210 0 0                    | ... | ...      |
| 34 | Walajahpet   | Do.                   | ... | ... | ... | 1 | ... | ... | 212 0 0                    | ... | 5 0 0    |
| 35 | Salem        | Salem District        | ... | ... | ... | 1 | 2   | ... | 550 12 0                   | ... | 17 14 0  |
| 36 | Coimbatore   | Coimbatore District   | ... | ... | ... | 1 | ... | ... | 160 2 8                    | ... | ...      |
| 37 | Erode        | Do.                   | ... | ... | ... | 1 | ... | ... | 180 0 0                    | ... | 2 10 0   |
| 38 | Kannur       | Do.                   | ... | ... | ... | 1 | ... | ... | 90 0 0                     | ... | ...      |
| 39 | Malappuram   | Nilgiri District      | ... | ... | ... | 1 | ... | ... | No Vaccinator was employed | ... | 10 4 9   |
| 40 | Goacondamund | Do.                   | ... | ... | ... | 1 | ... | ... | 239 3 5                    | ... | ...      |
| 41 | Coondor      | Do.                   | ... | ... | ... | 1 | ... | ... | 216 0 0                    | ... | 6 0 0    |
| 42 | Mangalore    | South Canara Dist.    | ... | ... | ... | 1 | 1   | 1   | 340 8 1                    | ... | 40 0 0   |
| 43 | Talicherry   | Malabar District      | ... | ... | ... | 1 | ... | ... | 140 1 0                    | ... | ...      |

## DEPARTMENT.

Madras Presidency during the Year 1877-78—(Continued).

| Total Cost.          | Paid from       |                   |                      |                 |                                             | Total.               | Number of all successful Vaccination and Re-vaccination. | Average Cost of each successful Case. |
|----------------------|-----------------|-------------------|----------------------|-----------------|---------------------------------------------|----------------------|----------------------------------------------------------|---------------------------------------|
|                      | Imperial Funds. | Provincial Funds. | Local Funds.         | Municipalities. | Native States, Zemindars, or Private Funds. |                      |                                                          |                                       |
| 13                   | 14              | 15                | 16                   | 17              | 18                                          | 19                   | 20                                                       | 21                                    |
| Rs. A. P. 3,613 2 11 | Rs. A. P. ...   | Rs. A. P. ...     | Rs. A. P. 3,618 2 11 | Rs. A. P. ...   | Rs. A. P. ...                               | Rs. A. P. 8,618 2 11 | 7,367                                                    | Rs. A. P. 0 7 10                      |
| 2,174 9 5            | ...             | ...               | 2,174 9 5            | ...             | ...                                         | 2,174 9 5            | 3,992                                                    | 0 10 6                                |
| 3,023 9 2            | ...             | 2,028 9 2         | ...                  | ...             | ...                                         | 2,028 9 2            | 2,016                                                    | 1 0 1                                 |
| 1,282 10 0           | 1,282 10 0      | 23,762 0 8        | 1,06,630 13 7        | 7,175 2 5       | 1,271 9 11                                  | 1,30,222 4 7         | 576,138                                                  | 0 3 10                                |

## CANTONMENTS.

|         |     |         |     |     |         |         |       |        |
|---------|-----|---------|-----|-----|---------|---------|-------|--------|
| 336 0 0 | ... | 336 0 0 | ... | ... | ...     | 836 0 0 | 1,280 | 0 4 3  |
| 586 0 0 | ... | 336 0 0 | ... | ... | ...     | 836 0 0 | 8,406 | 0 1 7  |
| 120 0 0 | ... | ...     | ... | ... | 120 0 0 | 120 0 0 | 1,574 | 0 1 3  |
| 792 0 0 | ... | 672 0 0 | ... | ... | 120 0 0 | 792 0 0 | 6,260 | 0 1 10 |

## PALITIES.

|                       |     |     |     |           |     |           |       |         |
|-----------------------|-----|-----|-----|-----------|-----|-----------|-------|---------|
| 158 13 8              | ... | ... | ... | 158 13 8  | ... | 158 13 8  | 196   | 0 12 0  |
| 109 1 6               | ... | ... | ... | 109 1 6   | ... | 109 1 6   | 280   | 0 7 7   |
| 120 1 4               | ... | ... | ... | 120 1 4   | ... | 120 1 4   | 213   | 0 9 0   |
| 180 14 0              | ... | ... | ... | 180 14 0  | ... | 180 14 0  | 385   | 0 7 6   |
| 187 0 0               | ... | ... | ... | 187 0 0   | ... | 187 0 0   | 584   | 0 5 4   |
| 195 0 0               | ... | ... | ... | 195 0 0   | ... | 195 0 0   | 1,410 | 0 2 0   |
| 177 5 0               | ... | ... | ... | 177 5 0   | ... | 177 5 0   | 938   | 0 3 0   |
| 182 2 3               | ... | ... | ... | 182 2 3   | ... | 182 2 3   | 816   | 0 3 6   |
| 265 0 0               | ... | ... | ... | 265 0 0   | ... | 265 0 0   | 1,318 | 0 3 4   |
| 234 12 3              | ... | ... | ... | 234 12 3  | ... | 234 12 3  | 975   | 0 3 10  |
| 164 10 4              | ... | ... | ... | 164 10 4  | ... | 164 10 4  | 2,235 | 0 1 2   |
| 196 0 0               | ... | ... | ... | 196 0 0   | ... | 196 0 0   | 1,263 | 0 2 6   |
| 178 7 0               | ... | ... | ... | 178 7 0   | ... | 178 7 0   | 1,090 | 0 2 7   |
| 141 11 0              | ... | ... | ... | 141 11 0  | ... | 141 11 0  | 481   | 0 4 0   |
| 1,029 1 0             | ... | ... | ... | 1,029 1 0 | ... | 1,029 1 0 | 1,959 | 0 8 5   |
| 99 0 0                | ... | ... | ... | 99 0 0    | ... | 99 0 0    | 350   | 0 4 5   |
| 327 9 2               | ... | ... | ... | 327 9 2   | ... | 327 9 2   | 1,079 | 0 4 10  |
| 252 9 0               | ... | ... | ... | 252 9 0   | ... | 252 9 0   | 791   | 0 5 1   |
| 120 0 0               | ... | ... | ... | 120 0 0   | ... | 120 0 0   | 332   | 0 5 9   |
| 220 9 9               | ... | ... | ... | 220 9 9   | ... | 220 9 9   | 787   | 0 4 5   |
| 160 0 0               | ... | ... | ... | 160 0 0   | ... | 160 0 0   | 520   | 0 4 11  |
| 458 14 0              | ... | ... | ... | 458 14 0  | ... | 458 14 0  | 2,713 | 0 2 8   |
| 160 0 0               | ... | ... | ... | 160 0 0   | ... | 160 0 0   | 6,882 | 0 0 4   |
| 293 12 0              | ... | ... | ... | 293 12 0  | ... | 293 12 0  | 482   | 0 9 9   |
| 131 13 6              | ... | ... | ... | 131 13 6  | ... | 131 13 6  | 872   | 0 5 8   |
| 240 2 0               | ... | ... | ... | 240 2 0   | ... | 240 2 0   | 859   | 0 5 0   |
| 168 0 0               | ... | ... | ... | 168 0 0   | ... | 168 0 0   | 164   | 1 0 4   |
| 120 0 0               | ... | ... | ... | 120 0 0   | ... | 120 0 0   | 518   | 0 3 8   |
| 456 0 0               | ... | ... | ... | 456 0 0   | ... | 456 0 0   | 1,517 | 0 4 9   |
| 188 14 4              | ... | ... | ... | 188 14 4  | ... | 188 14 4  | 1,048 | 0 2 10  |
| In this Municipality. |     |     |     |           |     |           |       |         |
| 76 0 0                | ... | ... | ... | 76 0 0    | ... | 76 0 0    | 340   | 0 3 7   |
| 397 14 4              | ... | ... | ... | 397 14 4  | ... | 397 14 4  | 8,198 | 0 0 9   |
| 212 0 0               | ... | ... | ... | 212 0 0   | ... | 212 0 0   | 512   | 0 6 8   |
| 555 12 0              | ... | ... | ... | 555 12 0  | ... | 555 12 0  | 1,668 | 0 5 4   |
| 178 0 8               | ... | ... | ... | 178 0 8   | ... | 178 0 8   | 1,398 | 0 2 0   |
| 180 0 0               | ... | ... | ... | 180 0 0   | ... | 180 0 0   | 263   | 0 10 11 |
| 92 10 0               | ... | ... | ... | 92 10 0   | ... | 92 10 0   | 314   | 0 4 8   |
| In this Municipality. |     |     |     |           |     |           |       |         |
| 249 3 5               | ... | ... | ... | 249 3 5   | ... | 249 3 5   | 899   | 0 4 5   |
| 216 0 0               | ... | ... | ... | 216 0 0   | ... | 216 0 0   | 763   | 0 4 6   |
| 246 8 1               | ... | ... | ... | 246 8 1   | ... | 246 8 1   | 2,005 | 0 1 11  |
| 189 1 0               | ... | ... | ... | 189 1 0   | ... | 189 1 0   | 557   | 0 5 5   |

## A—VACCINE

STATEMENT NO. II, showing the Cost of the Department in the

| Number.                         | Circles and Districts. | Establishment.                                             |                                |                                 |              |               |               |                       | Expenses.             |                |            |
|---------------------------------|------------------------|------------------------------------------------------------|--------------------------------|---------------------------------|--------------|---------------|---------------|-----------------------|-----------------------|----------------|------------|
|                                 |                        | Inspector of Vaccination and Deputy Sanitary Commissioner. | First-class Deputy Inspectors. | Second-class Deputy Inspectors. | Vaccinators. |               |               | Pay of Establishment. | Travelling Allowance. | Contingencies. |            |
|                                 |                        |                                                            |                                |                                 | First-class. | Second-class. | Probationers. |                       |                       |                |            |
| 1                               | 2                      | 3                                                          | 4                              | 5                               | 6            | 7             | 8             | 9                     | 10                    | 11             | 12         |
| 14                              | Calicut                | Malabar District...                                        | ...                            | ...                             | ...          | 2             | ...           | ...                   | Rs. A. P.             | Rs. A. P.      | Rs. A. P.  |
| 15                              | Palghat                | Do. ...                                                    | ...                            | ...                             | ...          | 1             | ...           | ...                   | 230 0 0               | ...            | 24 0 0     |
| 16                              | Cochin                 | Do. ...                                                    | ...                            | ...                             | ...          | 1             | ...           | ...                   | 120 0 0               | ...            | 120 0 0    |
| 17                              | Cannanore              | Do. ...                                                    | ...                            | ...                             | ...          | 1             | ...           | ...                   | 144 0 0               | ...            | 27 12 6    |
|                                 |                        |                                                            |                                |                                 |              |               |               |                       | 260 0 0               | ...            | ...        |
| Total of the Municipalities ... |                        | ...                                                        | ...                            | ...                             | 29           | 36            | 2             | 1                     | 8,868 11 3            | ...            | 1,447 5 5  |
| Grand Total ...                 |                        | 1                                                          | 31                             | 7                               | 200          | 380           | 94            | 27                    | 1,31,295 15 0         | 7,020 14 8     | 11,313 7 5 |

26.49

## DEPARTMENT.

Madras Presidency during the Year 1877-78—(Continued).

| Total Cost.  | Paid from       |                   |               |                 |                                             | Total.       | Number of all successful Vaccination and Re-vaccination. | Average Cost of each successful Case. |
|--------------|-----------------|-------------------|---------------|-----------------|---------------------------------------------|--------------|----------------------------------------------------------|---------------------------------------|
|              | Imperial Funds. | Provincial Funds. | Local Funds.  | Municipalities. | Native States, Zemindars, or Private Funds. |              |                                                          |                                       |
| 13           | 14              | 15                | 16            | 17              | 18                                          | 19           | 20                                                       | 21                                    |
| Rs. A. P.    | Rs. A. P.       | Rs. A. P.         | Rs. A. P.     | Rs. A. P.       | Rs. A. P.                                   | Rs. A. P.    | Rs. A. P.                                                | Rs. A. P.                             |
| 254 0 0      | ...             | ...               | ...           | 254 0 0         | ...                                         | 254 0 0      | 1,117                                                    | 0 3 7                                 |
| 120 0 0      | ...             | ...               | ...           | 120 0 0         | ...                                         | 120 0 0      | 612                                                      | 0 3 2                                 |
| 171 12 6     | ...             | ...               | ...           | 171 12 6        | ...                                         | 171 12 6     | 444                                                      | 0 6 2                                 |
| 260 0 0      | ...             | ...               | ...           | 260 0 0         | ...                                         | 260 0 0      | 1,080                                                    | 0 3 10                                |
| 10,316 0 8   | ...             | ...               | ...           | 10,316 0 8      | ...                                         | 10,316 0 8   | 52,635                                                   | 0 3 2                                 |
| 1,50,330 5 8 | 1,282 10 0      | 24,434 0 8        | 1,05,630 13 7 | 17,491 3 1      | 1,491 9 11                                  | 1,50,330 5 8 | 6,36,027                                                 | 0 3 9                                 |

## B- DISPENSARY VACCINATION.

STATEMENT No. III. showing Dispensary Vaccination in the Madras Presidency during the  
Official Year 1877-78.

| Districts.             | Number of Dispensaries in each District to which a Vaccinator is attached. | Average Number of Vaccinators attached to Dispensaries during the Season. | Total Number of Persons vaccinated. | Average Number of Persons vaccinated by each Vaccinator. | Primary Vaccination. |                 |                               |                    | Re-vaccination. |             | Percentage of Successful Cases. |                 |
|------------------------|----------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------|----------------------------------------------------------|----------------------|-----------------|-------------------------------|--------------------|-----------------|-------------|---------------------------------|-----------------|
|                        |                                                                            |                                                                           |                                     |                                                          | Total.               | Under one Year. | Over one and under six Years. | Total of all Ages. | Total.          | Successful. | Primary.                        | Re-vaccination. |
|                        |                                                                            |                                                                           |                                     |                                                          |                      |                 |                               |                    |                 |             |                                 |                 |
| 1                      | 2                                                                          | 3                                                                         | 4                                   | 5                                                        | 6                    | 7               | 8                             | 9                  | 10              | 11          | 12                              | 13              |
| South Arcot.           |                                                                            |                                                                           |                                     |                                                          |                      |                 |                               |                    |                 |             |                                 |                 |
| Old Town, Cuddalore... | 1                                                                          | 1                                                                         | 388                                 | 388                                                      | 388                  | 36              | 134                           | 157                | ...             | ...         | 84.27                           | ...             |
| New Town, Cuddalore.   | 1                                                                          | 1                                                                         | 196                                 | 196                                                      | 196                  | 19              | 90                            | 28                 | ...             | ...         | 69.89                           | ...             |
| Total ...              | 2                                                                          | 2                                                                         | 584                                 | 292                                                      | 584                  | 55              | 224                           | 185                | ...             | ...         | 77.4                            | ...             |

COMPARATIVE STATEMENT No. IV. showing the Number of Persons Primarily Vaccinated and the Number of those Persons who were Successfully Vaccinated in the Madras Presidency in each of the undermentioned Official Years.

| Establishment.           | Persons Primarily Vaccinated. |          |          |          |          |          |          |         |         |         |         |  |
|--------------------------|-------------------------------|----------|----------|----------|----------|----------|----------|---------|---------|---------|---------|--|
|                          | Years ended 31st March.       |          |          |          |          |          |          |         |         |         |         |  |
|                          | 1871-72.                      | 1872-73. | 1873-74. | 1874-75. | 1875-76. | 1876-77. | 1877-78. |         |         |         |         |  |
| Local Funds ...          | 190,229                       | 222,620  | 285,398  | 263,856  | 359,929  | 327,293  | 272,733  | 410,497 | 350,763 | 676,998 | 664,976 |  |
| Military Cantonments     | 4,463                         | 3,765    | 4,270    | 3,823    | 4,859    | 5,923    | 4,810    | 4,987   | 4,514   | 6,796   | 6,281   |  |
| Municipalities ...       | 28,208                        | 42,219   | 42,646   | 37,898   | 33,606   | 28,832   | 25,077   | 40,441  | 35,302  | 57,333  | 51,141  |  |
| Native States ...        | 33,723                        | 31,528   | 4,424    | 3,797    | 5,891    | 4,245    | 3,637    | 3,847   | 3,255   | 6,109   | 5,479   |  |
| Private Vaccinators ...  | 1,104                         | 3,223    | 5,192    | 5,008    | 6,052    | 5,934    | 5,508    | 3,043   | 2,795   | 471     | 471     |  |
| Railway Apothecaries     | 23                            | 12       | 4        | 4        | 10       | 9        | ...      | 57      | 49      | 10      | 7       |  |
| Medical Subordinates ... | 18,389                        | 22,447   | 20,800   | 14,477   | 17,351   | 11,032   | 7,067    | 15,753  | 9,553   | 28,584  | 19,438  |  |
| Dispensaries ...         | 684                           | 751      | 675      | 685      | 2,029    | 408      | 397      | 87      | 77      | 684     | 864     |  |
| Total ...                | 276,822                       | 336,430  | 363,399  | 329,593  | 428,667  | 372,048  | 319,129  | 478,727 | 408,398 | 776,705 | 648,087 |  |

N.B.—Re-vaccinations are wholly excluded from this statement.

GOVERNMENT OF MADRAS.  
PUBLIC DEPARTMENT.

*Read letter from the Sanitary Commissioner, dated 18th September 1878, No. 53, submitting the Report on Vaccination for the year 1877-78.*

ORDER THEREON, 17th October 1878, No. 1526.

Towards the close of the year to which the above report relates Dr. Shortt, the Inspector of Vaccination, retired from the public service and was succeeded by Surgeon J. H. Laing. The Government have already in their Order, dated 26th June 1878, No. 1116, expressed their appreciation of Dr. Shortt's devoted services in furtherance of vaccine knowledge among the people of this Presidency.

2. Dr. Laing, his successor, has had the sphere of his duties enlarged by being appointed Deputy Sanitary Commissioner as well as Inspector of Vaccination. This arrangement was suggested to Government by the Sanitary Commissioner, and they trust that it may eventuate in the more efficient working of the department and the progress of sanitation in the Presidency generally.

3. In their review on the report for 1876-77 the Government drew attention to the absence of returns from certain Municipalities, to confusion arising from want of accuracy in the definition of the limits of some sub-divisions, and to other matters connected with the completeness and accuracy of the returns theretofore adopted. The Government are glad to note considerable improvement in these administrative and statistical details, and have every confidence that, under Dr. Cornish's able supervision and guidance, the defects noticed in these respects will be entirely removed and the department will be as deserving of credit for accuracy in these respects as it has been for energy and progress in securing the more important ends in view.

4. The regular vaccine staff consisted, all told, of 573 employes, of whom 92 were probationers, but including Local Fund and Municipal vaccinators there were 713 officers and subordinates. Extra hands were also employed temporarily in several districts in connection with outbreaks of small-pox and in famine centres.

5. The large increase in the number of operations was remarked on last year, but in the year under review, in consequence of the prevalence of the disease and the control which was exercised by Government officials over vast numbers of people assembled on famine works or in famine camps, the number nearly doubled itself, being 787,730 against 483,192 in the preceding year, being a gross increase of 304,538 operations. Of these 776,705 were primary against 478,727 in 1876-77. In 1871-72 the number was 236,823 only. Making every allowance for the facilities which the exceptional circumstances of the year afforded, the Government cannot but regard these figures as indicative of very satisfactory progress, and that amongst many sections of the people repugnance to the operation is fast losing its strength. The returns of the current year will probably show a very marked decrease, but the subjection of so large a proportion of the population to the process must tend to raise their appreciation of the efficacy of the prophylactic. The Government regret to observe that in many districts full benefit was not taken by the officers concerned of the power they possessed of persuading numbers of people who had become properly amenable to the operation.

5064.3  
of special establishments for vaccine work in the Presidency appears to have been very effective and to reflect much credit on his immediate subordinates.

The lymph used seems to have been generally of excellent quality. Its failure in some instances is reported to have been in large measure due to the addition of many of the famine-stricken subjects.

The proportion of infantile vaccinations to births is still very low. Rapid progress in this respect is hardly to be expected though the district and subordinate officers may help to disseminate knowledge on this important subject, and encourage the people to submit to the operation by their counsel and example.

9. Before deciding upon the point referred to in paragraph 11, the Government desire to have before them the opinion of the Surgeon-General; but, unless there are other reasons for the retention of these figures in the returns besides that mentioned by the Sanitary Commissioner, they should be excluded.

10. The Government fully agree with the Sanitary Commissioner that officers in charge of dispensaries should be required to regard vaccine work as part of their hospital duties.

12. They further approve the Sanitary Commissioner's suggestion that the Presidency town should appear in the returns under Municipalities.

13. The total expenditure on vaccination was Rupees 1,50,330, nearly five-sixths of which was by Local Fund Boards and Municipalities, the charge to Provincial being only Rupees 24,434. The cost per head shows a satisfactory reduction, viz., three annas and nine pies against four annas and ten pies in the preceding year. The results of the vaccine operations in Kurnool still continue quite out of proportion to the outlay. The President, after consulting the Local Fund Board, will submit a special report on the present state of affairs and the best means for improving the vaccine administration.

(True Extract.)

(Signed) H. B. GRIGG.