

REPORT

OF THE

SANITARY COMMISSIONER

FOR

MADRAS,

1869.

WITH

APPENDICES

CONTAINING

STATISTICAL RETURNS OF SICKNESS AND MORTALITY
AMONGST EUROPEAN AND NATIVE TROOPS AND PRISONERS,
AND THE VITAL STATISTICS OF THE
CIVIL POPULATION, &c.



MADRAS:

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OFFICE OF SANITARY COMMISSIONER,
MADRAS, 20th June 1870.

From

W. R. CORNISH, Esq., F.R.C.S.,
Sanitary Commissioner for Madras,

To

THE CHIEF SECRETARY TO GOVERNMENT,
Public Department,
Fort Saint George.

SIR,

I HAVE the honour to submit, for the information of Government, the Annual Sanitary Report for the Madras Presidency for 1869.

2. The Report has been drawn up on the plan of former years, being divided into three parts, viz. :—

I.—*Military.*

II.—*Civil.*

III.—*Miscellaneous.*

3. The principal thing to be noticed in regard to the statistical tables is that the New Nomenclature of diseases and classification has been brought into use, and that tables showing the influence of the married state and of temperate habits in preventing sickness and mortality in British Troops have for the first time been included.

4. The epidemic distribution of cholera in Southern India has been shown in a map constructed after the plan of Dr. Goodeve, and, as the accompanying papers on this subject are rather bulky, they have been printed as a separate report.

5. I must apologize for any short-comings in regard to the sanitary history of the year by the explanation that I only succeeded to the office of Sanitary Commissioner after the year 1869 had ended, and that I have been obliged to draw up the report for that year from official records, without the advantage of personal knowledge and acquaintance of many particulars, which my predecessor, Deputy Inspector General Ranking possessed, and which would doubtless have been prominently noticed had the duty fallen to him.

I have the honour to be,

Sir,

Your most obedient servant,

W. R. CORNISH, F.R.C.S., Surgeon,
Sanitary Commissioner for Madras.

REPORT

OF THE

SANITARY COMMISSIONER FOR MADRAS

FOR

1869.

PART I.

MILITARY.

SECTION I.

EUROPEAN TROOPS—(*Stational Returns.*)

1. The average annual strength of the troops included in the Stational Returns was 10,880; the admissions into hospital were 13,694; the constantly sick 652·6; the deaths in hospital 229, and out of hospital 26, total 255; and the invalided 684. The returns of troops marching or on the move are not included.

These figures give the following ratios to average strength :—

Admitted sick	...	...	...	1258·6	per mille.
Constantly sick	...	...	...	59·98	do.
Deaths	{ in hospital	21·04 }	...	23·34	do.
	{ out of do.	2·3 }	...		
Invalided...	...	...	...	55·7	do.
Total decrement from deaths and invaliding	...	...	...	89·04	do.

The figures include, besides the British Troops, the small remnant of effectives and unattached of the old Indian Service, and the Veteran Companies of Europeans.

2. The returns of the Adjutant-General show that, on the 1st January 1869, the strength of the British Troops in this Presidency was 10,942, while on the 1st January 1870 it had decreased to 9,888.

3. During the year the Army had received by recruiting, drafts, and transfers 2,350 men, and had lost during the same period 3,404.

The decrease is thus accounted for :—

Time-expired	...	...	...	...	367
Invalided	...	...	...	...	684
Discharged by purchase	...	...	...	...	12
Do. otherwise	...	...	...	...	32
Deserted	...	...	...	...	22

Transferred to Corps in other Presidencies...	1,161
Do. to Warrant Grade on promotion	5
Embarked for England	864
Died	257
Total...	3,404

4. The Stational Returns, as noted, include the sickness and mortality of the European Troops of the old Indian Establishment, now reduced to a total of eighteen, and also of the Veteran Establishments located at Palaveram and Vizagapatam, average strength 296.

European Veterans included in Stational Returns.

Sickness and mortality among European troops in the whole Presidency compared for twelve years.

5. The following table will show the proportions of sickness and mortality in European Troops in the Madras Presidency for a period of twelve years.

	Years.	Strength.	Ratio per mille of Strength			
			Admissions.	Deaths		Total.
				In Hospital.	Out of Hospital.	
Inspector-General's Returns, Indian Medical Department.	1858-59	15,482	1880.8	42.3	6.4	48.7
	1859-60	16,921	1028.01	15.9	2.5	18.4
	1860	10,741	1699.4	19.1	2.04	21.2
	1861	15,051	1361.7	14.5	1.8	16.5
	1862	13,920	1291.1	17.09	1.7	18.8
	1863	12,586	1232.4	16.5	3.01	19.5
	1864	13,280	1521.08	16.5	3.6	20.1
	1865	13,623	1426.4	19.5	2.9	22.5
	1866	11,498	1460.6	20.2	1.5	21.7
	1867	10,928	1358.2	15.74	2.37	18.11
Stational Returns...	1868	9,934	1388.3	16.30	3.02	19.32
	1869	10,880	1258.6	21.04	2.38	23.42

It will be observed in reference to the proportion of admissions in 1869 that it has been slightly below the average, while the deaths have been absolutely higher than in any of the ten preceding years.

6. The British Troops have been subjected to no unusual wear and tear of life. The year has been one of profound peace, so far as the movements of troops have been concerned. In the necessary reliefs of corps the men have been if any thing more healthy than those remaining in the settled stations. The increase of mortality is the result, chiefly, of climatic causes.

7. The hot and dry season of 1869 was noted all over Southern India for its high average temperature, prolonged in many places beyond the usual course of the season.

Sunstroke, apoplexy, and ardent fevers were more than usually prevalent in the hotter stations, especially at Kamptee and Secunderabad. Epidemic cholera prevailed amongst British Troops at Kamptee, Secunderabad, Thayetnyoo, and Fort Saint George.

The cholera deaths (25 in number, or 27, including two cases of choleraic diarrhoea) have helped to swell considerably the total mortality; and during the year under review, hepatic diseases have been more than usually fatal at all the large stations occupied by European Troops. A total of 57 deaths, or 5.23 per mille of strength from this class of diseases alone, shows that in regard to liver

diseases the sanitary administration of British Troops in India is still susceptible of improvement. The mortality from hepatitis has been higher at Secunderabad and Bangalore than at other larger stations occupied by Europeans.

8. The health of the different arms of the service, Artillery, Cavalry, and Infantry is shown in the following table, for which I am indebted to the kindness of Inspector-General Hadaway:—

				Artillery.	Cavalry.	Infantry.
Average strength	...	...	...	2,817	892	6,568
Admissions	...	...	...	4,173	1,196	8,285
Died	{ In hospital			70	23	120
	{ Out of do.			12	1	13
Daily sick	...	...	...	197	56	385
Invalided	...	...	...	153	48	372
Ratio per 1,000 of Strength.						
Admissions	...	...	...	1481.3	1340.8	1261.4
Deaths	{ In hospital			24.8	25.7	18.2
	{ Out of do.			4.2	1.1	1.9
Daily sick	...	...	...	69.2	62.7	58.6
Invalided	...	...	...	54.3	53.8	56.6

9. It will be seen that the proportion of admissions and of mortality have been highest in the Artillery (1481.3 and 29.1 per mille respectively), next highest in the Cavalry (1340.8 and 26.9 per mille), and lowest of all in the Infantry Corps (1261.4 and 20.2 per mille).

Different arms of the service compared.

10. The following table contrasts the admission and death ratios of the several arms of the service with the results of a series of years:—

Years.	Artillery.		Cavalry.		Infantry.	
	A.	D.	A.	D.	A.	D.
1861	1790.7	24.79	1426.1	26.15	1201.0	13.72
1862	1452.0	22.86	1081.0	17.42	1204.0	20.60
1863	1751.2	23.27	1078.1	22.83	1153.0	23.37
1864	1924.3	28.47	1208.0	15.74	1503.0	23.47
1865	1597.1	25.06	1511.5	20.43	1428.3	26.58
1866	1524.3	35.07	1535.1	21.26	1446.9	23.41
1867	1471.8	17.4	1210.0	21.8	1378.3	20.5
1868	1498.6	20.2	1025.1	22.7	1409.0	20.4
Means...	1626.2	24.5	1259.3	21.0	1340.4	21.4
1869	1481.3	20.0	1340.8	26.8	1261.4	20.1

Here it will be observed that the mortality, both in the Artillery and Cavalry, has been much higher than the mean of the eight preceding years, while in the Infantry the death-rate has been slightly below the average.

11. The number of persons invalided as shown in the Medical Returns was 573.

Invaliding. These numbers do not quite tally with the Adjutant-General's figures, for the reason that the Medical Returns show the number who have passed Medical Boards for change of climate or discharge, while the latter shows the total invalids that have actually left the country.

Of these 573 invalids, 85 were for discharge from the service and 488 for change of climate. The number for 1868 was 634, being in the proportion of 62.41 per mille of average strength. In 1867 the proportion was 54.6 per mille, and in 1869 it was 55.7.

The facilities of transport now existing probably affect the ratios of invaliding for change of climate, for since 1864 the ratios have been, on the whole, increasing.

12. The stations of Fort Saint George, Bangalore, and Bellary have shown the highest proportions of invaliding for discharge from the service, while Secunderabad, Rangoon, and Thayetmyoo show the heaviest ratios of men sent away for change of climate.

The facilities for invaliding, which have existed for some years past, must not be lost sight of in estimating the causes of the difference in the mortality rates of the Indian Army in olden times and in the present.

Station.	NUMBERS INVALIDED FOR			RATIOS PER MILLE TO AVERAGE STRENGTH OF STATION.		
	Change of Climate.	Discharged.	Total.	Change of Climate.	Discharged.	Total.
Fort Saint George	35	13	48	39.28	14.59	53.87
Saint Thomas' Mount	15	2	17	30.74	4.09	34.83
Trichinopoly	6	...	6	41.66	...	41.66
Bangalore	35	21	56	26.29	15.78	42.07
Cannanore	36	5	41	36.69	5.09	41.79
Bellary	45	17	62	42.90	16.20	59.10
Secunderabad	116	18	164	63.34	7.81	71.15
Kamptee	20	...	20	28.61	...	28.61
Rangoon	73	3	76	75.10	3.08	78.18
Thayetmyoo	74	6	80	87.47	7.09	94.56
Tonghoo	3	...	3	36.58	...	36.58

13. Soldiers' mortality, in accordance with a well known law, increases with advancing age, and, although the results in the Army are often modified by other conditions, such as bringing a large number of recruits to India at an early age, the general law in a series of years invariably asserts itself. Thus, in the mean of five years, we see the steady progression in mortality in the quinquennial periods of Soldiers' ages' from 7.9 per mille below the age of 20 years to 53.37 at the age of 40 and upwards.

Years.	Under 20 years.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 and upwards.
Mean of five years	7.90	14.72	22.71	30.78	39.29	53.37
1868	8.6	8.8	19.7	29.8	32.1	40.2
1869	3.7	18.2	18.9	27.4	53.8	38.1

The results of 1869 show a higher rate of mortality for the periods of 20 to 24

years, and 35 to 39 than the average results afford, and, on the other hand, the results for the other quinquennial periods of the Soldiers' age are below the average.

14. The following table shows the mortality of British Soldiers according to length of residence in India.

Period of residence.	DEATHS PER MILLE OF STRENGTH.		
	1867.	1868.	1869.
Deaths under 1 year of residence	19.3	19.2	27.2
From 1 to 2 years	13.2	16.0	42.1
" 2 to 3 "	15.0	16.6	25.03
" 3 to 4 "	19.1	18.2	34.1
" 4 to 5 "	44.7	24.0	23.9
" 5 to 6 "	11.7	2.8	21.2
" 6 to 7 "	8.6	5.5	3.6
Above 7 years	17.6	19.1	18.3

It will be observed that the men under four years' residence have suffered the highest ratios of mortality, especially those in the period from one to two years in the country.

15. The returns of sickness and mortality of the married and unmarried for the whole Army are not quite complete, some batteries or corps having left the Presidency before the end of the year, and the returns of others not being at hand.

The general results, however so far as returns have been received may be thus given:—

The ratios of daily sick were:—

Married men ... 27.3 per mille.
Unmarried do. ... 68.8 do.

The rates of mortality:—

Married men ... 20.1 do.
Unmarried do. ... 24.8 do.

It will be observed that there is a greater difference between the ratios of daily sick than of deaths in the two classes. This is accounted for, in some degree, by the greater proportion of enthetic diseases in the unmarried class, but independently of this particular disadvantage under which the unmarried Soldier exists, there can be no doubt that married men are less in hospital, more efficient for duty, and subjected to a lower ratio of mortality than the unmarried men. Besides the probability that a married man will be less given to intemperance and other habits dangerous to health, it must not be forgotten that in India he occupies a separate quarter, and enjoys in some degree whatever benefits may result from isolation, and escapes the grave dangers, which in epidemic seasons are common to the inhabitants of large barracks.

16. From the returns received, and as shown in the following table, it would appear that the average strength of married men in the Madras Army was 1,139, and of unmarried 7,359, or rather more than one married man to seven unmarried.

—	UNMARRIED.			MARRIED.			PER-CENTAGE TO STRENGTH.						Remarks.
	Average Strength.	Average Daily Sick.	No. of Deaths.	Average Strength.	Average Daily Sick.	No. of Deaths.	Unmarried.		Married.		Total.		
							Daily sick.	Deaths.	Daily Sick.	Deaths.	Admissions.	Deaths.	
Artillery...	2,185	170.63	57	454	13.55	9	7.81	2.60	2.98	1.98	132.62	2.50	{ Exclusive of 3-5th, A-23rd, A-14th B-14th Brigades R. A.
Cavalry...	727	49.49	20	130	3.62	3	6.80	2.75	2.78	2.30	129.63	2.68	
Infantry...	3,973	224.80	90	419	7.34	9	5.65	2.26	1.63	2.00	105.02	2.24	{ Exclusive of 2-19th and 2-21st Regts. & Hd. Qrs. 76th Regt. Poonamallee, Wellington, & Raman-droog.
Depots ...	474	61.43	16	106	6.68	2	12.95	3.37	6.30	1.88	186.20	3.10	
Total...	7,359	506.35	183	1,139	31.19	23	6.88	2.48	2.73	2.01	120.44	2.42	

17. The returns of temperate and intemperate men like those of married and unmarried are not quite complete for the whole Army. The figures must otherwise be received with caution, inasmuch as only the habitual offenders, whose drunkenness becomes a Military offence, are included amongst the "intemperate," while probably many of the so called "temperate" men take an excess of liquor at times when the indulgence is not likely to be discovered.

It is well known in the Army that many habitual soakers escape the penalties of the Military crime of drunkenness, by taking their liquor "discreetly," and at times when they are not likely to be called upon for duty. The returns appear to show no particular advantage in health of temperate over intemperate men, so far as the proportion of daily sick is concerned.

The ratios of daily sick were:—

Temperate men ... 61.5 per mille.
Intemperate do. ... 61.0 do.

But when we come to examine the ratios of mortality it will be observed that they appear much heavier amongst the "intemperate," than in the "temperate" Thus:—

Temperate deaths to strength ... 24.8 per mille.
Intemperate do. do. ... 30.5 do.

The following table shows the sickness and mortality among temperate and intemperate men of H. M.'s British Troops serving in the Madras Presidency during the year 1869:—

—	TEMPERATE.			INTEMPERATE.			PERCENTAGE TO STRENGTH.						
	Average Strength.	Average Daily Sick.	No. of Deaths.	Average Strength.	Average Daily Sick.	No. of Deaths.	Temperate.		Intemperate.		Total.		
							Daily Sick.	Deaths.	Daily Sick.	Deaths.	Admissions.	Deaths.	
Artillery...	2,185	157.91	56	301	13.45	10	7.19	2.55	4.47	3.32	139.78	2.64	{ Exclusive of 3-5th, A-23rd, G-9th, A-14th, and B-14th Brigade R. A.
Cavalry ...	822	47.34	21	35	5.77	2	5.75	2.55	16.48	5.71	129.63	2.68	
Infantry..	4,059	208.57	90	363	22.68	10	5.13	40.59	6.24	2.75	105.02	2.24	{ Exclusive of 2-19th, 2-21st Regts. and Head Qrs. 76th. Only Poonamallee and Raman-droog.
Depôts ...	170	32.08	13	22	2.10	...	18.87	7.64	9.45	...	33.98	2.30	
Total..	7,246	445.90	180	721	44.03	22	6.15	2.48	6.10	3.05	121.86	2.53	

18. In examining some years ago the influence of intemperate habits in the production of fatal diseases in India, I went carefully through the statements of all the deaths of Civil and Military Officers of the Government, received in the Office of the Medical Department for a period of twenty-two years. The general results afforded by an examination of many hundreds of these statements went to show that the intemperate did not die in a greater ratio from fevers, cholera, and miasmatic diseases than the temperate, but that they were carried off in a very unusual degree by diseases of the nervous system, and especially by insolation and apoplexy. In the course of these inquiries I noted that by far the greater proportion of the persons of intemperate habits died in the hot months of April, May, June, and July, and common experience testifies that the hot season on the plains of India is especially fatal to free livers, or those who consume much alcohol.

The physiological explanation of this tendency to death in the hot season is that the warmer and more rarified the atmosphere becomes the less oxygen it contains in a given bulk, and consequently the difficulty which the habitual consumer of alcohol has in getting the alcohol eliminated from the system. The increased action of the skin as an excretory organ, during the prevalence of hot weather, no doubt compensates in some degree for the diminished powers of oxidation of the respired air, but any thing that interferes with the free action of the skin at such seasons, places the drunkard's life in great jeopardy.

A slight feverish attack in such cases, by stopping the normal exhalation of the skin, will often induce all the symptoms of alcoholic poisoning.

As regards the pathological changes induced by the habitual excessive consumption of alcohol, they are the same in India as in all other countries, viz., degeneration of the various tissues of the body, especially of the muscles and coats of the blood vessels, degeneration and hardening of the liver, and alterations in structure of the secreting tissue of the kidneys.

The morbid changes take place perhaps more rapidly in this country than in temperate climates on account of the greater difficulty which the climate interposes for the oxidation of alcohol in the body, and the smaller amount of bodily exercise which is taken.

With regard to that particular form of hepatic disease ending in abscess, so fatal to Europeans in India, I have not been able to satisfy myself that the intemperate have suffered in a greater degree than the temperate. The livers of chronic drunkards are nearly always diseased, and in the condition known to pathologists as "cirrhosis," but this condition rarely ends in, or is rarely associated with, abscess. The temperate livers, in fact, are generally the most frequent victims of hepatic abscess.

This particular form of disease is certainly not diminishing in India. Sanitary improvements of stations have as yet been able to effect nothing for its diminution. The disease is more fatal than cholera or fever, that is, it destroys more lives in the British portion of the Madras Army, and as yet Sanitary and Medical science have been unable to devise any effective measures for its prevention. The fact that light-skinned and foreign races are its most frequent victims would seem to indicate that it has some relation to climatic conditions, which are inimical to Europeans, or to modes of life peculiar to Europeans. I

notice the subject particularly here, in the hope that the members of the Medical profession, who may have the opportunity of studying the obscure causes of hepatic abscess, will endeavour to add to the general stock of knowledge something more definite and practical than we are at present acquainted with.

19. It would be premature at present to discuss in its sanitary aspect the recent change in Military law, which punishes drunkenness by fine instead of imprisonment. The data at present available are not sufficient to show any trustworthy results.

Excessive drinking in the Army may be expected to diminish gradually, when the enlistment of men, whose antecedents bespeak irregularity of habits, is generally discouraged.

20. The average strength of the Commissioned Officers of H. M.'s British Troops was 408; the total number placed on the sick list was 458, and of these 8 died. The proportions of sickness and mortality were 1122·4 and 19·6 per mille respectively.

The causes of death in the fatal cases were fevers 2, lung diseases 1, dysentery 1, asthenia 1, accidents 1, and other diseases 2. Trustworthy returns of Military Officers of the Indian Service are not available for the purposes of this report.

21. The strength of Soldiers' wives of the British Army was 1,268, and of these 32 died of disease. The ratios of admissions and mortality being 1031·5 and 25·2 per mille respectively.

Amongst the admissions are recorded 292 cases of "child-birth," and the ratio of admissions from this cause, 230·2 per mille of strength, is much higher than from any disease or class of diseases. No casualty occurred in connection with these cases of labour, a fact which testifies to the humane care and attention provided by the Government and its Medical Officers for Regimental women in their hour of peril. Omitting the admissions from child-birth, the proportion of medically treated amongst the women is low, and the mortality not heavy, though higher than in either of the two former years.

Years.	RATIO PER MILLE.	
	Admissions	Deaths
1867	816·6	1·31
1868	857·03	10·81
1869	1031·5	25·2

The ratios of former years are contrasted in the margin with those of 1869.

The causes of death amongst the women were fevers 5, cholera 4, phthisis 3, heart disease 1, hepatitis 3, dysentery 6, diarrhoea 4, other diseases 6.

Cholera prevailed chiefly amongst the married quarters at Thayetmyoo.

22. The strength of Soldiers' children, included in the returns, averaged 2,121, the ages varying from sixteen years to a few hours or days. The number treated was 1,427, and the deaths were 157, the ratio of admissions being 672·7 per mille of strength, and the deaths 74·02.

The mortality appears to be very heavy, but, when it is remembered that the greater proportion of it is the result of the disorders of early infancy, such as convulsions, teething, and diarrhoea, (72 deaths of the 157 occurred from these causes alone) it is very questionable whether Soldiers' children really die in a larger proportion in this country than the children of the lower classes of our town populations do in England.

The statistics as at present framed do not classify these deaths according to age, so that it is not practicable to compare the death-rates at different ages with those of the British population. I hope in future reports to be able to show the ratios of mortality at various ages.

Actuaries in reporting on the several service funds in India, have conclusively established that up to certain ages the value of child life in India, amongst the families of the higher classes, is much superior to the rates obtaining in England and Wales.

A little reflection will show that whereas infantile life in the so-called temperate zones is more frequently endangered by sudden lowering of temperature than any other single cause, the children born in the plains of India must, to a great extent, be saved from those sudden congestive attacks of the respiratory organs, which in colder countries are so trying to infantile life.

Practically the statistics of the causes of death show this to be the case.

An epidemic of measles, chiefly at Bangalore, caused 8 deaths, fevers 2, cholera, most severe and fatal at Thayetmyoo, 7, convulsions 23, hydrocephalus 4, teething 21, croup 1, dysentery 8, diarrhoea 28, worms 1, asthenia 5, skin diseases 2, other causes 47. The returns show no evidence of that fatality from lung diseases, which affects children in colder countries.

23. The following table gives, with some approach to accuracy, the admissions and deaths amongst the troops, which are not included in the Stational Returns.

It would appear that during the year about 3,874 men, 282 women, and 464 children were travelling from one station to another. This strength is not quite accurate, as in some of the marching reports the strength is omitted to be entered.

The admissions into hospital of the troops only were 138, and one death occurred in a detachment at sea, the particulars of which cannot be ascertained—an officer also died; the number marching being 106.

That so large a number of persons should be moved, with so little sickness and mortality, is a striking instance of the diminished risks attending the movements of British Troops in India, since lines of railway and steam boats have given greater facilities for travelling.

SECTION II.

STATIONAL SICKNESS AND MORTALITY.

Madras.

(Fort Saint George).

Latitude 13° 4' North. Longitude 80° 14' East.

Mean Temperature, 82.

Average Rain-fall, inches 47.18

Rain-fall in 1869, inches 32·31.

24. The strength of the British troops in garrison has averaged 819; the total admissions were 885; the constantly sick 43·6; deaths 16; 14 **Strength, sickness, and mortality.** *in*, and 2 *out* of hospital. But besides these deaths there were six casualties in a detachment sent out to Palaveram on account of cholera, which should properly be debited to the loss of troops in Fort Saint George.

25. The ratios of sickness and mortality for the past four years in this station are recorded in the margin. It will be observed that there has been a great reduction in the proportion of admissions and of constantly sick. The death-rate has been unfavourably influenced by an outbreak of cholera, and if the six deaths which occurred in the detachment sent out of the Fort, where cholera appeared, are added to the total mortality, the death-rate of the garrison for the past year would be 26·8 per mille instead of 19·5.

26. The table below gives the constitution of the force for the year. It will be observed that the details of the Infantry contribute the largest proportion of admissions and deaths :—

	CORPS.								RATIO PER 1,000 OF STRENGTH.							
	45th Regiment.		2-5th Brigade R. A.		Details R. A.		Details Infantry.		45th Regiment.		2-5th Brigade R. A.		Details R. A.		Details Infantry.	
No of weeks resident.	52		52		4		52									
Strength ...	712		67		80		33									
Total admissions ...	717		67		9		92		1007·0		1000·0		112·5		2788·0	
Daily Sick ...	33·9		3·2		2·7		6·4		47·6		47·7		33·7		194·0	
Died in Hospital ...	8		1		...		5		11·2		14·9		...		151·5	
Do. out of do.	...		2		...		...		...		29·8		...		...	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	64	...	6	...	2	...	4	...	89·9	...	89·5	...	25·0	...	121·2	...
Cholera ...	9	5	...	...	...	...	...	...	12·6	7·0	...	...	...	...	...	...
Dysentery ...	7	...	...	...	...	...	13	...	9·8	...	...	...	...	...	394·0	...
Diarrhoea ...	41	...	2	1	1	...	3	...	57·5	...	29·8	14·9	12·5	...	90·9	...
Hepatitis ...	11	1	2	...	...	...	11	1	15·4	1·4	29·8	...	...	...	333·3	30·3

Regiments. Wing of do. Batteries. Detachments. Details.	STRENGTH.				SICKNESS AND MORTALITY AMONGST								Remarks.
	Officers.	Men.	Women.	Children.	Officers.		Men.		Women.		Children.		
					A.	D.	A.	D.	A.	D.	A.	D.	
H. M.'s 2-24th Regiment	28	506	35	56	...	...	25	...	...	...	...	...	Sickness amongst officers, women and children is not given. The sickness amongst men occurred while encamped at Arcoum (19 and Tadputri (7).
C-D. Brigade R. A.	...	108	...	...	...	...	14	...	...	...	...	...	2 of the admissions occurred while at Setta-buldee Fort.
5-23rd do.	...	91	21	38	...	...	4	...	...	...	1	*1	* Died of teething.
B-20th do.	...	133	39	59	...	...	...	...	...	...	...	...	
G-9th do.	...	144	...	...	...	...	5	...	...	...	...	...	
B-14th do.	...	111	...	...	...	...	5	...	...	...	...	...	
C-9th do.	...	146	10	16	...	...	...	...	...	...	...	...	
C-14th do.	...	73	15	12	...	...	...	...	...	...	...	...	
A-14th do.	...	...	...	...	...	...	1	...	...	...	...	...	
Detachment H. M.'s 2-10th Regiment	...	70	...	...	1	1	3	...	3	...	...	...	The strength is not given.
Do. 2-24th do.	6	198	1	2	...	...	37	...	...	...	...	...	The Detachment remained 28 days in camp, and the sickness occurred then. One officer (Captain Power) died of Syncope.
Do. 45th do. and Details.	8	253	29	42	...	...	...	...	...	...	...	...	15 cases of the admissions occurred while in camp.
Do. 2-21st Fusiliers	3	109	...	...	...	...	...	...	...	...	...	...	
Do. 1st Royals	21	601	37	60	...	...	8	...	...	...	...	...	
Do. 76th Regiment	...	61	4	3	...	...	...	...	1	...	...	...	
Do. 90th do.	2	32	4	9	...	...	8	...	...	...	...	...	
Do. A-9th Brigade R.A.	8	146	16	23	...	...	4	...	...	...	...	...	
Details of H. M.'s British Troops	15	645	44	78	...	...	10	1	2	...	...	...	
Invalids and time-expired men	5	441	27	61	...	...	14	...	1	...	...	...	
Total	106	3,874	282	464	1	1	138	1	7	...	3	1	

The outbreak of cholera was confined to H. M.'s 45th Regiment.

27. As regards the particulars of this outbreak there are some points of interest. **Outbreak of cholera.** est in a sanitary point of view, which deserve to be recorded.

Cholera began to be prevalent in the town of Madras in the month of July, and on the 4th August a fatal case occurred in H. M.'s 45th Regiment, but was not followed by other cases. Early in September some details arrived from **Burmah**, and these were distributed chiefly in two barrack rooms, which were in consequence overcrowded.

Before the arrival of these details, the Medical Officer had represented that, on account of the presence of cholera in the town, and its general unhealthiness at that season, he feared that an addition to the number of men in the barrack rooms might be productive of evil consequences. This representation, although supported by the Deputy Inspector-General of Hospitals, British Medical Service, was over-ruled by the Military authorities of the division, and the overcrowding actually took place. From the 3rd to 7th September the D. barrack, an upstairs room, which according to regulation holds only sixty-four men, had a total of ninety-four men sleeping in it. Unfortunately this portion of the fort barracks, and the room on the ground-floor beneath it, is a locality in which cholera not unfrequently prevails.

The disease appeared on the 7th September, not in the D. barrack which was overcrowded, but in a downstairs barrack. Measures were at once adopted to evacuate the rooms in which cholera had occurred, but the detachment which moved out to Palaveram took the disease with them, losing six men out of seven attacked. In all, fifteen men were attacked in this outbreak with a mortality of ten, making, with the solitary case of cholera in August, eleven deaths in H. M.'s 45th Regiment.

It has been suggested as probable that the cholera from which the 45th Regiment suffered had been brought over by the detachment of details from **Burmah**. A very fatal form of cholera had been prevailing at **Thayetmyoo** in August, and it is understood that one of the details was a convalescent from cholera.

But it seems hardly necessary to go so far to account for the outbreak. The *fomes* might have been brought in the clothes of the men from **Thayetmyoo**, or the disease might have originated much nearer home, seeing that cholera was epidemic at the time in the Madras town.

The fact of the outbreak following so close upon overcrowding, points to the grave dangers likely to result in unhealthy seasons of the year when the regulated proportion of space is withheld. The removal of the infected detachment of the Regiment to the station of Palaveram, instead of to the recognized cholera encampment at the Red Hills, was an error that might have been followed by serious consequences.

Fortunately (as explained in the special cholera report for 1869) the European residents of Palaveram were not attacked. In this outbreak five cases out of the fifteen occurred in men who had been sleeping in the D. Barrack-room. The Artillery in the Fort did not have a single case.

28. The small proportion of venereal admissions during 1869, as compared with former years, would seem to indicate that the working of the Contagious Diseases' Act in Madras has been attended with

Diminished Prevalence of Venereal Disease.

1866 . 562.2 per mille
1867 ... 412.7 "
1868 ... 435.8 "
1869 ... 231.9 "
marked benefit to the health of the European soldiery. From a proportion of more than *one-half* of admissions from this class of disease in 1866, there has been a reduction to less than *one-fourth* in 1869. The decrease in 1869 is very marked.

As regards the type of syphilitic diseases prevalent amongst women registered under the Contagious Diseases' Act, there can be no doubt that it has been gradually diminishing in virulence. Indurated sores are of very rare occurrence, and the cases usually yield readily to treatment.

The difficulties of working the Act in a large and scattered town like Madras have been, and still are considerable, but the results of the first year of its operation are, on the whole, quite as satisfactory as can be reasonably expected. Many classes of prostitutes have escaped registration, but it is believed that the greater portion of those who cohabit with European Soldiers are brought under the supervision of the Health Officer of the town.

29. The strength of women and children was 113 and 149 respectively, and the mortality of the former was at the rate of 17.7 per mille of strength, and of the latter 53.7.

30. The health of the Civil population of Madras has been, on the whole, fairly good, though an epidemic of cholera in July, August, September, and October proved fatal to 568 persons. Fevers, dysentery, and diarrhoea have been less prevalent and less fatal than usual.

The following table shows the mortality in Madras for the past ten years:—

Years.	Small-pox.	Fevers.	Dysentery.	Diarrhoea.	Cholera.	Other Diseases.	General Total.
1860	245	2,459	1,326	1,012	2,580	5,876	13,498
1861	655	2,169	1,353	981	2,776	5,436	13,370
1862	1033	2,235	1,171	1,032	3,635	5,625	14,731
1863	112	2,117	1,240	914	1,684	5,791	11,858
1864	173	2,083	1,103	893	574	5,583	10,409
1865	44	2,190	1,159	1,062	944	5,817	11,216
1866	103	2,256	1,318	947	2,984	6,273	13,881
1867	623	2,456	1,420	846	614	6,286	12,245
1868	799	2,232	1,019	812	13	7,327	12,202
Total...	3,787	20,197	11,109	8,499	15,804	54,014	1,13,410
Average...	420.8	2244.1	1234.3	944.3	1756.0	6001.6	12601.1
1869	38	2,015	888	668	568	7,085	11,262
Increase...	...	...	...	...	...	1083.4	...
Decrease...	382.8	229.1	346.3	276.3	1188.0	...	1339.1

Water-supply and drainage.

31. No change has been made during the year in regard to water-supply or drainage of the town.

The works for the former are expected to be complete by the end of 1871, and as regards the latter no steps have as yet been taken to carry out Captain Tulloch's scheme, wholly or in part. A Committee, of which the Sanitary Commissioner was a member, was appointed by Government to report on the best means of keeping the waters of the Cooum in a pure state, and the recommendations of the Committee on this head have been referred to the Municipality for consideration.

The drainage arrangements of the Fort, and the condition of the ditch surrounding it, are still most unsatisfactory.

32. The following table exhibits the ratios of sickness and mortality in certain specified diseases among European and Native Troops and Prisoners, in Madras, as required by the Secretary of State for India in Despatch No. 635, of the 18th May 1869 :—

1869 :—					MORTALITY				Invaliding.
Year 1869.	Sickness.				In Hospital.	Out of Hospital.	Total.		
<i>European Troops.</i>									
Average strength 819.									
Fevers	92.6	...	...	...	...	...	...	4.48	
Dysentery	24.4	...	...	...	...	...	...	1.12	
Diarrhoea	57.3	1.22	...	...	...	...	...	...	
Hepatitis	29.3	2.44	...	...	...	...	...	...	
Cholera	10.9	6.10	...	...	...	...	...	...	
All diseases	1080.5	17.02	2.4	19.42	...	...	...	53.87	
<i>Native Troops.</i>									
Average strength 2,154.									
Fevers	77.0	0.4	0.4	0.8	...	...	...	...	
Dysentery	12.07	...	...	...	...	...	...	...	
Diarrhoea	17.1	0.4	0.4	0.8	...	...	...	...	
Hepatitis	1.3	0.9	...	0.9	...	...	...	...	
Cholera	1.8	0.4	...	0.4	...	...	...	...	
All diseases	441.0	7.4	4.1	11.5	...	...	...	...	
<i>Prisoners.</i>									
Average strength 467.									
Fevers	203.3	...	...	...	...	...	...	...	
Dysentery	68.5	2.1	...	2.1	...	...	...	...	
Diarrhoea	160.5	2.1	...	2.1	...	...	...	...	
Hepatitis	...	...	...	...	...	...	...	...	
Cholera	8.5	2.1	...	2.1	...	...	...	...	
All diseases	1038.5	10.7	...	10.7	...	...	...	...	

Saint Thomas' Mount.

Latitude 13° 0' North. Longitude 80° 15' East.

Height above sea, 60 feet.

Mean temperature 81°.

Average rain-fall, 41.7 inches.

Strength, sickness, and mortality.

33. The average strength of this garrison was 487; the total admissions 579; average daily sick 32.8; deaths (all in hospital) 14.

Comparison with former years.			
Years.	Admissions.	Daily Sick.	Deaths.
1866 ...	1538.6	72.8	26.40
1867 ...	1358.0	63.9	14.80
1868 ...	1428.5	71.9	16.35
1869 ...	1188.9	67.3	28.7

34. The ratios of sickness and mortality of 1869 are contrasted in the margin with the results of three previous years.

35. The troops and batteries at the station during the year are noted in the following table :—

	CORPS.						RATIO PER 1,000 OF STRENGTH.					
	A. 9th Brigade R. A.	B. 20th Brigade R. A.	B. 23rd Brigade R. A.	6. 5th Brigade R. A.	4. 5th Brigade R. A.	Details.	A. 9th Brigade R. A.	B. 20th Brigade R. A.	B. 23rd Brigade R. A.	6. 5th Brigade R. A.	4. 5th Brigade R. A.	Details.
No. of weeks resident ...	8	43	52	51	52	52	...	...	...	...	...	...
Strength ...	134	153	143	77	92	29	...	...	...	...	...	...
Total admissions ...	43	120	125	141	129	21	320.9	784.3	874.1	1831.1	1402.1	724.1
Daily sick ...	7.3	8.5	7.2	7.2	6.8	3.5	54.4	55.5	50.3	93.5	73.9	120.7
Deaths in hospital ...	1	2	2	3	5	1	7.4	13.1	13.9	38.9	54.3	34.5
Deaths out of do ...	...	...	...	...	...	...	...	...	...	...	...	...
Fevers ...	A. D. A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.	A. D. A. D. A. D. A. D. A. D.
Cholera ...	1	6	8	26	21	1	7.4	39.2	55.9	33.7	228.2	10.8
Dysentery ...	7	3	2	7	6	2	52.2	19.6	13.9	90.9	65.2	34.5
Diarrhoea ...	10	3	4	2	6	...	74.6	19.6	27.9	26.0	65.2	...
Hepatitis ...	2	1	5	10	8	1	14.9	32.6	69.9	103.9	10.8	...

36. The sickness and mortality appears to have been highest in the 6-5th and 4-5th Brigades. The mortality, it will be noticed, is heavier, while the admissions to hospital were fewer than in any of the three preceding years. Amongst the deaths there was one case of fever, one cholera, two phthisis, one sunstroke, one heart disease, one pneumonia, three hepatic diseases, two delirium tremens, and two of accidental injuries. The single cholera case occurred amongst the details, a man of the detachment of the 45th Regiment which was moved out to Palaveram from Fort Saint George on account of cholera. On arriving at Palaveram he got a pass from his Commanding Officer to return to Madras, but being taken ill at the Mount he was admitted into the Artillery Hospital for treatment, where he died.

37. A few cases of cholera, nine in all, occurred in the Mount bazaar during September and October. Most of these cases occurred after the death of the Soldier of the 45th Regiment, but two cases occurred in the bazaar before the detachment of the 45th Regiment passed through the station. The disease never attained epidemic proportions.

38. As regards enthetic diseases the marginal return shows the proportion of admissions for the last three years. There has been a decrease in the admissions in 1869, though not so large as is desirable. In G. O. No. 4,185 A. dated 7th December 1869, Government has included all villages, &c., within a radius of four miles of the station under the Cantonment Act, so far as the rules in Section 5 for the control of venereal disease are concerned. It is hoped that, with this extension of the field of Police supervision, all public women residing in the limits may now be registered. The total number registered in 1869 was fifty-four.

39. The following table shows the sickness and mortality of the European women and children of the station during the year :—

	WOMEN.		CHILDREN.		Ratio per mille. ALL CLASSES.	
	Strength.	Deaths.	Strength.	Deaths.	Women.	Children.
Commissioned Officers	11	...	17	1	...	...
Warrant do.	2	...	2	...	...	...
Non-Commissioned Officers and Soldiers	106.0	3	177.0	10	28.39	56.50

The mortality amongst children was 106.1 per mille in 1868; but in the period under review only 56.5. A new women and children's hospital was completed, but not occupied during the year.

40. The water-supply of the Mount is reported to have been again very deficient, owing to the scanty rain-fall of the north-east monsoon. The whole supply is dependent on wells, and these, during the two last monsoon seasons, had become very low. A permanent water-supply is much needed for this Cantonment.

The space in barracks and hospital is stated to have averaged 90.57 superficial feet and 2,963 cubic feet per patient in hospital.

41. The dry earth system of conservancy is followed at the Mount. Six public latrines have been built during the year for the use of the Native bazaar, and 110 receptacles for ashes and house refuse.

42. The following table gives the sickness and mortality from the specified diseases among the European and Native Troops and Prisoners in Jail.

Year 1869.						Sickness.	MORTALITY.			Invaliding.
							In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>										
Average strength 487.										
Fevers	...	...	...	...	131.2	2.05	...	2.05	2.04	
Dysentery	...	...	...	...	55.4	...	...	...	2.04	
Diarrhoea	...	...	...	...	51.3	...	...	...	...	
Hepatitis	...	...	...	...	53.3	4.10	...	4.10	4.09	
Cholera	...	...	...	...	2.05	2.05	...	2.05	...	
All diseases	...	...	...	...	1188.9	28.7	...	28.7	34.83	
<i>Native Troops.</i>										
Average strength 208.										
Fevers	...	...	...	...	192.2	...	...	...	...	
Dysentery	...	...	...	...	28.6	...	4.8	4.8	...	
Diarrhoea	...	...	...	...	9.6	...	4.8	4.8	...	
Hepatitis	...	...	...	...	...	...	...	...	...	
Cholera	...	...	...	...	...	...	...	...	...	
All diseases	...	...	...	...	701.9	14.4	14.4	28.8	...	
<i>Prisoners.</i>										
Average strength 74.										
Fevers	...	...	...	...	499.9	13.5	...	13.5	...	
Dysentery	...	...	...	...	67.5	...	...	...	...	
Diarrhoea	...	...	...	...	162.1	...	...	...	...	
Hepatitis	...	...	...	...	13.5	...	...	...	...	
Cholera	...	...	...	...	...	...	...	...	...	
All diseases	...	...	...	...	135.1	13.5	...	13.5	...	

Poonamallee.

(Depôt.)

Latitude 13° North. Longitude 80°10' East.

Mean temperature 82.°

Average rain-fall, 51.7 inches.

43. The average strength of the depôt has been 142; the admissions 519; Strength, sickness, and mortality. average daily sick 32.1; deaths 12, of which 11 occurred *in*, and 1 *out* of hospital.

44. The ratios of admissions and deaths are contrasted in the margin with the results of three previous years. In a depot which receives, chiefly, invalids and worn out men, the variations in the ratios of sickness and mortality must always be considerable, and the proportions very high.

45. The admissions at the depot were largely made up of cases of phthisis, rheumatism, dysentery, hepatic diseases, and venereal cases, the diseases, in fact, which contribute so largely to the invaliding of the British Soldier in India.

46. The causes of death were small-pox one, dysentery one, phthisis two, hepatic disease six, sun-stroke one, and cancer of the stomach one.

47. No case of cholera occurred in the station during the year. There was one fatal case of small-pox, but that appears to have been the only case at the depot. Ophthalmia (the common country sore-eye) was epidemic amongst the women and children of the depot from 13th July to 29th October. The Medical Officer reports that the disease was general in the station, and that it was influenced by climatic causes, though spreading by contagion.

48. The average strength of the wives of Commissioned, Warrant, and Non-Commissioned Officers and Soldiers was forty, and the deaths two; of children the strength was eighty-two with one death, the per mille proportion of mortality of women being 50.0 and of children 12.2.

49. The deaths of the Civil population within the Cantonment limits were as follows:—

Class.	POPULATION.		DEATHS.			DEATHS TO POPULATION PER MILLE.		
	M.	F.	M.	F.	Total.	M.	F.	Total.
Europeans	132	100	4	1	5	30.3	10	21.5
East Indians	96	161	4	5	9	41.6	31.05	35.01
Natives	1,644	1,615	53	41	94	32.2	25.3	28.8

The Civil European population of Poonamallee consists principally of old pensioners, their wives and widows. Considering their ages the mortality has not been high, and the general salubrity of the station has been as good in the past year as it usually is.

50. The defective drainage of the barracks is complained of by the Medical Officer. As Government have contemplated the abandonment of the site as a depot, and the substitution of a Marine sanitarium at Ennore, no great expenditure has been sanctioned of late for sanitary improvements. Although the barrack accommodation of Poonamallee is in many respects below the standard of sanitary requirements, there can be no doubt that the locality is decidedly salubrious, as is proved through a long series of years, by the absence of cholera outbreaks and severe malarious fevers. The water-supply is good, as it generally is in laterite soils.

The space in barrack per man averaged 83 superficial feet, and in hospital 101. The bazaar is said to have been kept clean, though public latrines are required for the Civil population.

The Section of the Cantonment rules for the registration and medical treatment of prostitutes had not been adopted at the end of the year. Under recent orders, the rules have been made applicable to this station and surrounding villages within a radius of four miles.

Palaveram.

Latitude 12° 58' North. Longitude 80° 15' East

Height above the sea, 40 feet.

Mean temperature, 80°.

51. This station was occupied by a detachment of H. M.'s 45th Regt. (strength 106) for a period of twenty-two weeks only. The detachment was originally sent out of Fort Saint George on account of the appearance of cholera in the barracks occupied by it, and in this detachment there occurred seven cases of cholera and two of choleraic diarrhoea. Five of the former proved fatal, so virulent was the type of the disease. There were twenty admissions altogether in this detachment, but with the exception of the outbreak of cholera, there was no serious disease.

52. The European Veteran Company, strength 206, had 103 admissions and 7 deaths within the year. The causes of death were diarrhoea 2, hepatitis 2, bronchitis 2 and aneurism 1. The company is made up mostly of old and worn out men. Their health, considering their length of residence in India and age, has been fairly good; the proportion of admissions into hospital being 500·0 per mille. The greater part of the men being married are residing in small detached houses, their own private property. These houses are surrounded by small gardens which are kept neat and clean, and the lines of the streets are admirably laid out.

53. From the social condition of the European Veterans at Palaveram there has been no great prevalence of venereal disorders. The station, however, has under the operation of G. O. No. 3152 dated 12th August 1868, been brought under the rules for the examination and registration of public women.

54. The strength of the women and children was 308 and 442 respectively. Four women and three children died during the year, giving ratios of 12·9 and 6·7 per mille respectively. The small mortality among so many children will sufficiently exemplify the fact that Palaveram is ordinarily a healthy place of residence.

55. The Civil population of Palaveram lost twenty-three males and twenty-two females by death, at the rate of 21·2 per mille.

56. The bazaar population, in common with that of the Military, has hitherto been supposed to possess a sort of immunity from cholera; but the arrival of an infected detachment of the 45th Regiment seems to have lit up the disease to a small extent. The first case was of a woman who had been in the camp of the 45th Detachment carrying supplies. The detachment arrived on the evening of the 7th September, and the woman was employed on the 8th in carrying grain to the camp. On the 9th she was seized with cholera, and died in the bazaar. From this date to the 17th of October 24 cases of cholera occurred in the bazaar with seven deaths. Choleraic diarrhoea was largely prevalent at the same time. This is the first outbreak that has occurred in the bazaar within the recollection of the present Medical Officer, whose experience of the station extends to eleven years.

57. The sanitary condition of the Cantonment is very good. Water-supply good and abundant from wells. The bazaar contains many old and unoccupied buildings which become nuisances at times. One or two public latrines require to be built for the people.

58. The following table shows the rate per 1,000 of Sickness, Mortality, and Invaliding amongst European and Native Troops:—

Diseases.	Sickness.	MORTALITY.			Invaliding
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.*</i>					
Average strength 253.					
Fevers	31·6	...	...	...	...
Dysentery	3·9	...	...	...	...
Diarrhoea	27·6	7·8	...	7·8	...
Hepatitis	39·5	7·8	...	7·8	...
Cholera	27·6	19·7	...	19·7	...
All diseases	486·1	47·4	3·9	51·3	...
<i>Native Troops.</i>					
Average strength (Depot) 115.					
Fevers	252·1	...	...	...	...
Dysentery	26·08	8·6	...	8·6	...
Diarrhoea	191·3	26·05	...	26·05	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
All diseases	1930·4	121·7	...	121·7	...

Vizagapatam.

Latitude 17° 41' North. Longitude 83° 21' East.

Height above sea, 12 feet.

Mean temperature, 83°.

Average rain-fall, 43·9 inches.

* Inclusive of the Veterans.

59. The only European Troops at this station consists of a strength of 90 men of the European Veteran Company.

The admissions were 68, daily sick 2.4, and deaths 4.

60. The causes of death were fevers 1, hypertrophy of heart 2, and debility 1.

The men are mostly old and worn out, and a high ratio of mortality amongst them is only normal. The deaths were at the rate of 44.4 per thousand, being higher than the death-rate of the Veterans at Palaveram, which is only 35 per thousand.

Trichinopoly.

Latitude 10° 20' North. Longitude 77° 10' East.

Height above Sea, 250 feet.

* Mean Temperature 85°.

Average rain-fall, inches, 30.6.

Rain-fall in 1869, 40.06 inches.

61. The garrison has consisted of 6-23rd Brigade and B.-20th Brigade Royal Artillery and a detachment of H. M.'s 1st Royals. The average strength was 345. The admissions into Hospital 408, the average daily sick 24.2, and deaths 8, of which 6 were *in* and 2 *out* of Hospital.

62. The proportions of sickness and mortality are contrasted in the margin with the results of three previous years.

Years.	Admissions.	Daily Sick.	Deaths.	
1866...	1,468.1	49.6	22.7	Here again the admissions have been fewer,
1867...	1,445.4	78.0	4.7	but the death rate higher in 1869 than in former
1868...	1,422.7	73.6	4.5	years.
1869...	1,182.6	70.1	23.1	

There was very little disease of a malarious character. The proportion of admissions from ague and dysentery being smaller than usual.

63. The table below gives the composition of the Force at the station during the year and the particulars of specific diseases :—

	CORPS.					RATIO PER 1,000 OF STRENGTH.							
	Detachment 1st Royals.	C.-23rd Brigade, R. A.	B.-20th Brigade, R. A.	Garrison.		Detachment 1st Royals.	C.-23rd Brigade, R. A.	B.-20th Brigade, R. A.	Garrison.				
Number of Weeks resident ...	52	43	9	52									
Strength ...	150	140	140	55									
Total Admissions	215	153	22	18	1,433.3	1,092.8	157.1	327.2					
Daily Sick ...	11.0	12.9	7.4	1.3	73.3	92.1	52.8	23.6					
Deaths in Hospital	2	1	...	3	13.3	7.1	...	54.5					
Do. out of do....	1	1	...	...	6.6	7.1	...	...					
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	
Fevers ...	22	...	16	...	3	...	...	...	146.6	...	114.2	...	21.4
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	10	...	4	...	1	...	2	1	66.6	...	28.5	...	7.1
Diarrhoea ...	9	...	1	...	2	...	1	...	60.0	...	7.1	...	14.2
Hepatitis ...	13	...	1	...	7	...	1	...	86.6	6.6	50.0	7.1	...

* Obtained from the Report of the Royal Commissioners on the Sanitary State of the Army in India.—Volume II.

64. The proportion of venereal admissions, 391.3 per mille of strength, is undoubtedly high. The station has had a Lock-hospital for some years past, but the Cantonment Rules had not been made applicable to the station up to the date of the sanitary report.

The following explanation of the Cantonment Magistrate explains the cause of delay :—

“ Chapter V. of the Rules has been declared applicable to the station and a radius of four miles from the boundaries of the Cantonment; but although introduced, its operations are greatly hindered for want of funds, as by Order of Government, paragraph 13 of Chapter V., has been kept in abeyance, and under paragraph 20, all registered prostitutes are to receive subsistence allowance whilst under treatment, which the Cantonment Committee have no means of giving.

“ A reference has been made to Head-Quarters soliciting instructions as to how the funds for carrying on the provisions of the rules in question are to be raised.”

Only twenty-three prostitutes had been registered up to the end of the year. The average daily number in the Lock-hospital was 9.1. In so large a station the number of unregistered women must be very great.

65. The causes of death in the eight fatal cases were phthisis one; sun-stroke one; dysentery one; hepatitis two; carbuncle one; apoplexy one; and concussion of brain one.

66. No case of cholera occurred in the period amongst British troops though, by the end of the year, the epidemic invading from the North had reached the Native town of Trichinopoly.

67. The average strength of wives of officers and men was forty, with one death, or 20.6 per mille; of children 122 and no casualty.

68. At the end of the year the locality of the Fort was the scene of an outbreak of epidemic cholera. The disease had been prevalent in the district since October, and while the Streerungum festival was going on, cholera occurred amongst the people assembled at it. The first case happened in the Fort on the 16th December and up to the 31st December 126 deaths had been reported.

The following table shows the deaths of the Civil population of the Cantonment :—

	NUMBERS.		DEATHS.	
	Males.	Females.	Males.	Females.
Europeans ...	10	5	...	...
East Indians ...	34	35	2	3
Natives ...	3,455	4,806	122	121

69. The Cantonment Committee bring to notice some defects in the drainage of the town, caused by the filling up of the old Fort ditch by the municipality.

As there would seem to be differences of opinion on the effects of the measures adopted, I shall defer stating my own views on the subject until I have had an opportunity of inspecting the municipality.

70. The following table shows the rate per 1,000 of sickness, mortality, and invaliding amongst European and Native Troops and Prisoners in Jail:—

Year 1869.	Sickness.	MORTALITY.			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average strength 345.					
Fevers	118.7	...	...	...	...
Dysentery	49.2	...	...	...	6.94
Diarrhœa... ..	37.6	...	...	...	...
Hepatitis	57.9	5.79	...	5.79	...
Cholera	...	...	...	...	...
All diseases	1182.6	17.3	5.8	23.1	41.66
<i>Native Troops.</i>					
Average strength 1,388.					
Fevers	74.1	1.4	...	1.4	...
Dysentery	7.2	...	...	...	7.0
Diarrhœa	13.6	0.7	...	0.7	...
Hepatitis	...	...	...	...	...
Cholera	2.1	0.7	...	0.7	...
All diseases	301.1	8.6	1.4	10.0	59.8
<i>Prisoners.</i>					
Average strength 875 (<i>Central and District Jail.</i>)					
Fevers	53.7	1.1	The specific diseases by which out of hospital deaths take place are not given in the Medical returns.	1.1	...
Dysentery	42.2	11.4		11.4	...
Diarrhœa	44.5	13.7		13.7	...
Hepatitis	1.1	...		...	...
Cholera	1.1	1.1		1.1	...
All diseases	316.5	48.0		48.0	...

Wellington.

(Hill Depot and Sanitarium.)

Latitude 11° 25' North—Longitude 77° 5' East.

Height above sea, 6,000 feet.

Mean temperature, 64°.

Average rain-fall, 31 inches.

71. The average strength of the dépôt has been 389; the total admissions 515; average daily sick 34.0; and deaths six, five *in*, and one *out* of hospital.

72. The proportions of sickness and mortality are here contrasted with the results of the three previous years. The rates are low generally, when it is considered that only delicate and sickly men are selected for transfer to this station.

73. The proportion of venereal admissions was low, only 141.3 per mille. The rules in Chapter V. of the Cantonment regulations have been brought into operation within a radius of four miles. Only eight women were registered at the end of the year.

74. The causes of death in the fatal cases of this station were remittent fever two, sunstroke one, brain disease one, and hepatitis two. There was no epidemic.

75. The strength of women was 75, and of children 142. One woman and seven children died, the ratios per mille being 13.3 and 48.3, respectively.

76. The mortality is not separately registered.

77. The sanitary condition of the Cantonment is reported to be generally good. Space in barracks and hospital is ample for the accommodation of the men. The Cantonment Committee are about to insist on the building of latrines in private compounds for the use of servants, &c. With these aids to cleanliness, the latrine accommodation is thought to be ample.

Bangalore.

Latitude 12° 57' North.—Longitude 77° 38' East.

Height above sea, 3,000 feet.

Mean temperature 75.4°.

Average rain-fall, 25 inches.

Rain-fall in 1869, 34.3 inches.

78. The average strength of British Troops at this station was 2,025; the total admissions 1,959; the average daily sick 96.9; and the total deaths 30, 28 of which occurred *in*, and 2 *out* of hospital.

79. The proportion of admissions and deaths is contrasted marginally with the results of three previous years. The Cantonment Committee draw attention to the fact that H. M.'s 16th

Lancers were particularly healthy, and, as regards admissions and average daily sick, there is no doubt that the returns of that corps contrast favourably with other bodies of men, but the death ratio has been higher than in the 2-19th Regiment and A-14th Brigade R. A.

80. The following table illustrates the composition of the force, and the proportions of sickness and mortality amongst each body.

Years.	Admissions.	Daily sick.	Deaths.
1866 ...	803.6	35.9	12.7
1867 ...	751.1	30.6	9.7
1868 ...	1151.1	58.2	15.1
1869 ...	967.4	47.8	14.7

	RATIO PER 1,000 OF STRENGTH.										Corps.									
	219th Regiment.	Det ails Infantry.	16th Lancers.	Head Quarters R. A.	D.23rd Brigade R. A.	A.14th Brigade R. A.	C.14th Brigade R. A.	Details R. A.	Gar- rison.		219th Regiment.	Details Infantry.	16th Lancers.	Head Quarters R. A.	D.23rd Brigade R. A.	A.14th Brigade R. A.	C.14th Brigade R. A.	Details R. A.	Gar- rison.	
Number of weeks, resi- dent ...	50	49	52	52	52	52	43	9	52	52	50	49	52	52	52	43	9	52	52	52
Strength ...	726	120	443	118	142	123	127	17	366		726	120	443	118	142	123	127	17	366	
Admissions ...	612	1 95	430	251	172	144	63	15	77		612	1 95	430	251	172	144	63	15	77	
Daily Sick ...	385	10.1	19.0	11.2	7.7	7.0	11.4	0.6	4.1		385	10.1	19.0	11.2	7.7	7.0	11.4	0.6	4.1	
Deaths in Hospital ...	4	2	9	1	4	2	...	...	6		4	2	9	1	4	2	...	...	6	
Do. out of do. ...	2	...	...	...	...	...	...	...	...		2	...	...	...	...	...	...	...	...	
Fever ...	88	29	1 55	1 37	9	15	14	...	7		88	29	1 55	1 37	9	15	14	...	7	
Cholera ...	4	...	...	...	...	...	...	...	...		4	...	...	...	...	...	...	...	...	
Dysentery ...	33	7	14	11	2	3	1	...	5		33	7	14	11	2	3	1	...	5	
Diarrhoea ...	32	51	27	17	7	1 12	1	...	6		32	51	27	17	7	1 12	1	...	6	
Hepatitis ...	30	1 25	1 37	5 11	1 13	3 3	2	...	4		30	1 25	1 37	5 11	1 13	3 3	2	...	4	

81. The proportion of venereal admissions (109.6 per mille) has been decidedly low. The Committee remark that the prevalence of venereal disease is much less than it used to be, and the severity of the syphilitic virus is much abated.—The Cantonment of Bangalore is worked under the Bengal rules. The number of registered women is 200, and of these about fifty are generally under treatment in the Lock Hospital.

82. The causes of death of British Troops were fevers two, sunstroke one, paralysis two, heart diseases two, bronchitis one, dysentery one, diarrhoea two, hepatitis fourteen, peritonitis one, Bright's disease one, and injuries three. It will be observed that liver diseases have caused by far the largest mortality at Bangalore.

83. The station has not been altogether in a healthy state. Several cases of diphtheria occurred in European children, and a good deal of typhoid fever also, towards the end of the year. The circumstances of these epidemics have been specially reported upon. Ophthalmia prevailed largely amongst the children in June and July. In the beginning of the year a severe epidemic of measles affected the children causing considerable mortality.

Cholera.—A passenger from Tripatty festival by railway was taken out of the compartment in which he travelled on 8th September suffering from cholera. Prompt measures of disinfection were resorted to, and only four deaths occurred in the Cantonment, but in the native town, two miles distant, containing 52,000 inhabitants, 150 deaths occurred, the 1st on 15th September, and the last on 19th October. Cholera prevailed also in some talooks of the Bangalore District about the same time, and, according to the testimony of all the civil officials, was spread by the return of pilgrims from Tripatty.

84. The strength of the wives of Commissioned, Warrant, and Non-Commissioned Officers and Soldiers was 310 (omitting the wives of Commissioned and Warrant Officers of British Troops for whom statistics were not obtained), and the deaths 6, giving a per mille ratio of 19.3. Amongst 512 children there were 24 deaths or 46.8 per mille. The mortality, as previously stated, being considerably raised by a severe epidemic of measles.

85. There has been no overcrowding in barracks. 85 superficial feet per man has been allowed, and the hospital space has been more than ample throughout the year. The dry earth system of conservancy is not yet fully carried out in the latrines.

Latrines are being gradually provided for the whole of the municipality.

The Committee recommend for consideration the subjects of:—

1st.—Draining the Race Course plateau and of the Infantry barracks.

2nd.—Removal of the village lying between the Cavalry and Artillery barracks and of the lines in Ulsoor occupied by milk-men.

3rd.—Completion of the works for supplying the troops with drinking water.

4th.—The introduction of the dry earth system of conservancy.

5th.—More efficient measures for the check of venereal disease.

6th.—Conservancy of private grounds and nullahs.

86. During the year the pavilions of the Race Course Hospital for Cavalry and Artillery were completed and occupied, also plunge-baths, racket and fives courts.

The Municipal Board have effected sanitary improvements and laid down new street drains in Ulsoor and in the Cantonment bazaar.

87. The following table shows the rate per 1,000 of sickness, mortality, and invaliding amongst European and Native Troops:—The Bangalore jail return is not furnished to my office.

Year 1869.	Sickness.	Mortality.			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength 2,025.					
Fevers	125.2	0.9	...	0.9	...
Dysentery	37.5	0.8	...	0.8	4.50
Diarrhœa	58.7	0.4	...	0.4	...
Hepatitis	60.7	6.2	...	6.2	6.76
Cholera	1.9	...	...	1.9	...
All diseases	967.4	13.8	0.9	14.7	42.07
<i>Native Troops.</i>					
Average Strength 1,820.					
Fevers	431.3	2.6	1.6	4.2	1.6
Dysentery	18.1	1.06	1.06	2.12	...
Diarrhœa	25.2	1.06	...	1.06	...
Hepatitis	1.09	...	...	...	...
Cholera	...	...	...	...	...
All diseases	910.9	9.3	4.9	14.2	45.05

Cannanore.

Latitude 11° 52' North. Longitude 75° 30' East.

Height above Sea 15 to 30 feet.

Mean Temperature 82°.

Average Rain-fall 121 inches.

Rain-fall for 1869—125. „

88. The average strength of the British troops in this garrison has been 665; the total admissions into Hospital 629; average daily sick 24.9; and deaths 16,—15 *in* and one *out* of Hospital.

89. The proportions of sickness and mortality in comparison with the three previous years are given marginally. It will be observed that although there has been a satisfactory decline in the admission and constantly-sick rates, yet the mortality has been higher during the past than in any of the preceding years.

Years.	Admissions.	Daily Sick.	Deaths.
1866 ...	1,435.0	72.5	14.4
1867 ...	1,174.8	56.8	8.6
1868 ...	1,293.5	47.5	19.3
1869 ...	945.9	35.9	24.0

Composition of Force.

90. The following table shows the composition of the force:—

	Corps.			Ratio per 1,000 of Strength.								
	H. M.'s 1st Royals.	D-20th Brigade, R. A.	Garrison.	H. M.'s 1st Royals.	D-20th Brigade, R. A.	Garrison.						
Number of Weeks resident	52	52	52									
Strength	520	127	18									
Admissions	511	111	7	982.7	874.0	388.8						
Daily Sick	20.2	3.9	0.8	38.8	30.7	44.4						
Deaths in Hospital ...	12	2	1	23.0	15.7	55.5						
Do. out of do.	1	...	...	1.9	...	...						
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers	47	...	4	...	1	...	90.3	...	31.5	...	55.5	...
Cholera	...	...	...	...	..	...	...	...	...	...	...	...
Dysentery... ..	43	2	..	..	...	...	82.6	3.8	...	...	...	...
Diarrhoea	49	1	12	...	...	...	94.2	1.9	94.5	...	...	...
Hepatitis	25	4	9	1	1	1	48.1	7.7	70.8	7.8	55.5	55.5

91. The proportion of venereal admissions (127.8 per mille) is low. A Lock-hospital on the old system has been for many years established at Cannanore, and the new rules had not been introduced by beginning of the year. For some years past primary syphilis has been a rare disease amongst the troops at Cannanore.

92. The causes of mortality have been phthisis one, syphilitic laryngitis one, heart disease two, dysentery two, diarrhoea one, hepatitis six, delirium tremens two, and drowning one.

No epidemic prevailed in the station.

93. The strength of women was 117, deaths 2, per mille ratio 17.0. Strength of children 241, deaths 9, per mille ratio 37.3.

94. The table below gives the ratio of deaths to strength in the different classes of the civil population.

Classes.	Population.	Deaths.	Ratio per 1,000 of population.
Europeans	53	...	...
Natives	8,800	178	20.2

95. The increased mortality of British troops from hepatic and bowel-complaints would seem to show that the men have not been so healthy as in former years. The space in barracks and hospital is reported to be ample, much more than the regulations allow. The drinking water is good. Dry-earth conservancy is not generally followed in barracks. The contents of latrines are taken to the sea-beach. The Cantonment Committee recommend an increase in the number of public latrines, and the general use of the dry-earth system in barracks and hospitals.

96. The following table shows the rate per 1,000 of sickness, mortality, and invaliding of European and Native troops and Prisoners in Jail:—

Year 1869.						MORTALITY			Invaliding.
Sickness.						In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>									
Average Strength 665.									
Fevers	...	...	...	...	78.08	...	...	...	1.01
Dysentery	...	...	...	...	64.6	3.0	...	3.0	4.07
Diarrhoea	...	...	...	...	91.7	1.5	...	1.5	2.03
Hepatitis	...	...	...	...	52.6	9.02	...	9.02	3.05
Cholera	...	...	...	...	...	...	...	...	...
All diseases	...	...	...	...	945.9	22.5	1.5	24.0	41.78
<i>Native Troops.</i>									
Average Strength 1,298.									
Fevers	...	...	...	...	85.3	...	...	...	10.01
Dysentery	...	...	...	...	16.9	0.7	...	0.7	2.3
Diarrhoea	...	...	...	...	14.6	...	0.7	0.7	3.08
Hepatitis	...	...	...	...	...	...	...	...	0.77
Cholera	...	...	...	...	...	...	...	...	...
All diseases	...	...	...	...	451.4	6.9	5.3	12.2	81.6
<i>Prisoners.</i>									
Average Strength 380 (Central and District Jail.)									
Fevers	...	...	...	...	300.0	...	The specific diseases by which out of hospital deaths take place are not shown in the medical returns.	...	...
Dysentery	...	...	...	...	165.7	21.0		21.0	...
Diarrhoea	...	...	...	...	131.2	7.8		7.8	...
Hepatitis	...	...	...	...	...	...		...	...
Cholera	...	...	...	...	...	...		...	...
All diseases	...	...	...	...	1005.2	63.1	63.1	...	

Calicut.

Latitude 11° 15' North. Longitude 75° 50' East.

97. The European detachment (1st Royals) of this station was withdrawn after nineteen weeks' residence. During this time the strength was eighty; total admissions thirty-five; daily sick 3.7; and no deaths.

98. During the same period the strength of women and children was nine and thirteen respectively. There were no casualties.

99. The troops suffered from no epidemic. The following table shows the rate per 1,000 of sickness, mortality, and invaliding of European troops and Prisoners in Jail:—

Year 1869.	Sickness.	MORTALITY			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength 29.					
Fevers	217.8	...	...	...	...
Dysentery	206.8	...	...	...	...
Diarrhœa	34.4	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
All diseases	1,206.9	...	...	...	...
<i>Prisoners.</i>					
Average Strength 215.					
Fevers	181.3	...	The specific diseases by which out of hospital deaths take place are not given in the medical returns.	...	...
Dysentery	125.5	9.3		9.3	...
Diarrhœa	213.9	27.9		27.9	...
Hepatitis	...	...		...	...
Cholera	...	...		...	...
All diseases	1,204.6	102.3		102.3	...

Malliappoorum.

100. This small station has been garrisoned throughout the year by a detachment of Her Majesty's 1st Royals. The average strength was eighty-one; the total admissions seventy-three; the daily sick 2.7; and death one (out of hospital).

101. The proportion of sickness and mortality is contrasted with that of the previous year. The men appear to have enjoyed good health. The only death that occurred was out of hospital from apoplexy.

Years.	Admissions.	Daily Sick.	Died.
1868 ...	963.4	45.1	36.4
1869 ...	901.2	33.3	12.3

102. No Lock Hospital exists at this station, nor has there been any need for such an institution, as no admission from primary syphilis took place in the detachment during the year. The total admissions under the head venereal disease was in the ratio of 49.3 only per mille of strength. The women of the locality who cohabit with the troops are not prostitutes in the ordinary sense of the term, and they would appear to be remarkably exempt from the ailments peculiar to public women. Since the date to which these figures refer, the occurrence of a case of primary syphilis in a man of the detachment, contracted from a Cannanore woman, has been reported. The local exemption from syphilis of this station appears to be worthy of notice.

103. There was no epidemic in the station.

104. The European women and children numbered three and eight respectively, and there were no casualties.

105. The sanitary condition of the station has been on the whole good.

Bellary.

Latitude 17° North. Longitude 77° East.

Height above Sea 1,500 feet.

Mean Temperature 80°.

Average Rain-fall 24·7 inches.

Rain-fall for 1869 11·62 inches.

106. The average strength of the British troops of the garrison has been 908.

Strength, Sickness, and Mortality.Total admissions 1,109; average daily sick 60·5; deaths 8, of which 6 occurred *in* and two *out* of hospital.**Comparison with previous years.**

Years.	Admitted.	Daily Sick.	Died.
1865 ...	1,792·0	81·8	3·8
1867 ...	1,232·1	60·5	8·7
1868 ...	1,121·5	52·5	17·0
1869 ...	1,221·4	66·6	8·8

107. The proportions of sickness and mortality are contrasted with preceding years in the margin

Composition of Force.

108. The constitution of the force and the sickness and mortality in each branch of it is shown in the following table:—

	CORPS.					RATES PER 1,000 OF STRENGTH.									
	3rd-60th Rifles.	1-20th Brigade, R. A.	R. D. Brigade, R. H. A.	5-23rd Brigade, R. A.	Garrison.	3rd-60th Rifles.	1-20th Brigade, R. A.	R. D. Brigade, R. H. A.	5-23rd Brigade, R. A.	Garrison.	3rd-60th Rifles.	1-20th Brigade, R. A.	R. D. Brigade, R. H. A.	5-23rd Brigade, R. A.	Garrison.
No. of Weeks resident.	52	52	52	1	52	...	...	...	...	...	...	...	...	...	...
Strength ...	603	64	129	72	50	...	...	...	...	...	...	...	...	...	...
Admissions ...	844	45	204	2	14	1,242·8	703·1	1,581·4	27·8	280·0	...	...	...	...	...
Daily Sick ...	48·0	2·6	9·2	2·0	0·6	72·1	40·6	71·3	27·8	12·0	...	...	...	...	...
Deaths in Hospital ...	4	...	1	...	1	6·0	...	7·7	...	20·0	...	...	...	...	...
Do. out of do. ...	1	...	1	...	...	1·5	...	7·7	...	...	...	...	...	...	...
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.
Fevers ...	170	2	7	31	1	3	256·1	3·0	109·3	250·3	13·9	60·0	...	...	...
Cholera ...	2	...	...	...	...	...	3·0	...	...	...	...	...	...	...	...
Dysentery ...	3	...	2	...	...	...	4·5	...	31·2	...	...	60·0	...	...	...
Diarrhoea ...	72	1	...	9	1	...	108·6	1·5	...	69·7	7·7	20·0	...	...	...
Hepatitis ...	58	...	...	8	...	...	87·4	...	...	62·0	...	20·0	...	...	...

109. The proportion of admissions from venereal diseases was much higher than it ought to have been, viz., 213·6 per mille. The new regulations for the registration of women had not been fully acted upon at the end of the year. Only 65 women had been registered. The average number under treatment in Lock-hospital was 10.

Prevalence of Venereal Disease.

110. The causes of death in the fatal cases were, Remittent fever two, Apoplexy one, Epilepsy one, Diarrhoea two, Debility one, and Gun-shot wound one. The fever admissions were rather more numerous than usual.

Causes of Death.

111. The year was on the whole not an unhealthy one in Bellary. The rain-fall altogether was only 11·62 inches, much below the average. Fever and cholera prevailed severely in some parts of the district, but the latter epidemic scarcely touched the troops, though choleraic diarrhoea prevailed for a few days. There was no loss of life from cholera.

Epidemics.

112. The strength of women was 149, and of children 212. The deaths amongst the former amounted to 5, and the latter 16; giving ratios of 33·5 and 75·4 per mille respectively.

113. The following table gives the number of deaths and strength of each class of population in Cantonment:—

Classes.	Population.		Deaths.	
	Males.	Females.	Males.	Females.
Europeans ...	...	...	Not known.	
East Indians ...	...	...	...	
Mahomedans ...	2,728	3,285	20	36
Hindoos ...	7,752	9,146	46	66

114. The troops here have ample space. The general immunity from cholera, which prevailed a good deal in the district, is noticeable.

The sanitary condition of the bazaar is good. The sewage and drainage of Cowle bazaar and Brucepettah is said to be perfect, and “nothing can be cleaner.”

Great care and attention has been paid to wells and reservoirs set apart for the supply of drinking water. Measures are in progress for increasing the supply of water in the large tank, from rain-fall in the neighbourhood.

The attention bestowed upon this station by the Military and Municipal authorities appear to have had a favourable influence in warding off epidemic diseases, or in diminishing their severity.

115. The following table shows the rate per 1,000 of sickness, mortality and invaliding among European and Native troops and Prisoners in Jail:—

Year 1869.	Sickness.	Mortality.			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength 908.					
Fevers	233·3	2·2	...	2·2	...
Dysentery	8·8	...	...	...	0·95
Diarrhoea	90·3	2·2	...	2·2	...
Hepatitis	20·4	...	...	...	14·29
Cholera	2·2	...	...	...	...
All diseases	1221·4	6·6	2·2	8·8	59·10
<i>Native Troops.</i>					
Average Strength 1,787.					
Fevers	150·9	1·6	...	1·6	1·1
Dysentery	17·3	...	...	...	0·5
Diarrhoea	6·1	0·5	...	0·5	...
Hepatitis	...	...	...	...	...
Cholera	2·2	1·1	...	1·1	...
All diseases	490·7	9·5	2·2	11·7	22·9
<i>Prisoners.</i>					
Average Strength 230.					
Fevers	449·8	6·2	The specific diseases by which deaths out of hospital take place are not shown in the medical returns.	6·2	...
Dysentery	21·8	...		...	
Diarrhoea	50·0	3·1		3·1	
Hepatitis	...	...		...	
Cholera	...	...		...	
All diseases	1,637·5	40·6		40·6	

Sanitarium.

Latitude 15°·8' North. Longitude 76° 33' East.

Height above Sea 3,400 feet.

Mean Temperature 73°.

Average Rain-fall 36 inches.

Rain-fall for 1869 39·6 inches.

Strength, sickness,
and mortality.

116. The average strength at the dépôt was 49; the total admissions 46; daily sick 2.1; death 1 (from Heart disease.)

Women and Children.

117. The strength of women and children was eight and four respectively; one child died during the year.

Civil population.

The *Civil population*, said to number 425, had seven deaths during the year.

No epidemic occurred.

It is worthy of notice that the rain-fall at this station was 39·6 inches against 11·62 inches registered in Bellary.

Sanitary Works.

The Medical Officer suggests the construction of a latrine for the use of the villagers.

Secunderabad and Trimulgherry.

Latitude 17° 28' North. Longitude 78° 32' East.

Height above the Sea 1,800 feet.

Mean Temperature 79°.

Average Rain-fall 28 inches.

Rain-fall for 1869, 32·6 inches.

118. The average strength of the European troops at this station was 2,091; the total admissions were 2,916; the daily sick 134.7; deaths 74, and of these 66 were *in* hospital and eight *out* of hospital.

119. The ratios of sickness and mortality for 1869 are contrasted with those of preceding years in the table given in the margin.

Comparison with previous years.

Years.	Admitted.	Daily Sick.	Died.
1866	... 1,541.3	77.9	33.6
1867	... 1,546.0	70.0	35.1
1868	... 1,362.4	62.6	28.5
1869	... 1,394.5	64.4	35.3

It will be observed that for all these years the admission, daily sick, and death-rates have been very high, and that in the last year of the series the deaths have been slightly in excess of any previous year.

Composition of Force.

120. The following table shows the particulars of sickness and mortality in each Corps and Battery:—

Corps.	No. of weeks resident.	Strength.	Total Admissions	Daily Sick.	Died in Hospital.	Died out of Hospital.	RATIO PER 1,000 OF STRENGTH.																										
							Fever.				Cholera.				Dysentery.				Diarrhea.				Hepatitis.										
							A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.											
H. M.'s 2,24th Regt. ...	46	688	821	40.0	...	28	1	157	10	1	1	44	4	122	4	25	8	...	1286.8	62.7	43.9	1.6	246.1	15.6	1.6	1.6	68.9	6.2	191.2	6.2	39.2	12.5	
Do. 2,10th do. ...	52	670	679	28.2	11	...	...	127	1	2	2	85	...	62	...	54	...	...	101.3	42.1	16.4	...	189.5	1.5	3.0	3.0	126.9	...	92.5	...	81.0	...	
Do. 18th Hussars ...	52	384	681	34.0	11	...	...	145	2	...	...	23	...	72	...	62	6	...	1773.4	88.5	28.6	...	377.6	5.2	...	...	59.9	...	187.5	...	161.4	15.6	
Hd. Qrs. 22d Brig. R. A. ...	52	5	4	0.1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	800.0	20.0	...	...	...	...	...	...	...	...	200.0	...	...	...	
5,23rd Brigade R. A. ...	47	69	77	3.3	2	...	...	14	...	...	...	5	...	...	...	2	...	...	1115.9	47.8	29.0	...	202.9	...	...	...	72.4	...	14.5	...	29.0	...	
Details R. A. ...	3	4	...	1.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	325.0	...	...	...	...	...	...	...	...	...	...	...	...	
C. D. Brigade R. H. A. ...	50	128	287	11.1	6	...	...	27	...	...	...	30	2	42	...	18	3	...	2242.2	86.7	46.9	...	210.9	...	...	...	234.3	15.6	325.1	...	140.6	23.4	
C. 20th do. R. A. ...	52	124	177	12.3	4	...	...	30	...	...	...	24	1	16	...	16	2	...	1427.4	99.2	32.2	24.2	80.6	...	...	...	193.5	8.1	129.0	...	129.0	16.1	
B. 14th do. ...	41	123	131	10.6	2	...	...	30	...	...	...	14	...	20	...	6	...	...	1065.0	86.1	16.2	24.3	81.3	...	...	...	113.8	...	162.6	...	48.7	...	
G. 9th do. ...	4	143	11	5.0	...	...	...	1	...	...	...	...	...	4	...	...	...	...	76.9	34.9	...	...	7.0	...	...	...	...	...	28.0	...	...	...	
5,20th do. ...	6	51	4	2.0	...	...	...	...	...	...	...	...	...	...	...	2	...	...	78.4	39.2	...	...	...	...	...	...	...	...	...	39.2	...	...	
D. D. do R. H. A. ...	4	128	13	11.1	1	...	...	3	...	...	...	...	...	1	...	3	...	...	101.5	86.7	7.8	...	23.4	...	...	...	...	...	...	7.8	...	23.4	...
Garrison. ...	52	34	31	0.8	1	...	...	10	...	1	1	2	...	7	...	...	...	...	911.7	23.5	29.4	29.4	224.1	...	29.4	29.4	58.8	...	205.8	...	...	...	

121. It has been an important point to watch from time to time the variations in sickness and mortality in the old Secunderabad barracks and in the new buildings at Trimulgherry.

The particulars are contrasted here in one view for a series of years :—

Ratios per mille of Strength.	SECUNDERABAD.							TRIMULGHERRY.						
	1860-63.	1864.	1865.	1866.	1867.	1868.	1869.	1860-63.	1864.	1865.	1866.	1867.	1868.	1869.
Admissions.	1,837.4	1,573.7	1,605.0	1,981.8	1,777.7	1,157.7	1,478.7	1,259.2	1,549.6	1,419.0	1,353.2	1,395.4	1,431.3	1,098.8
Deaths	23.4	13.7	18.9	43.2	26.0	41.7	25.0	12.0	7.6	23.1	25.8	32.9	24.9	31.05

It will be noticed that the mortality has been highest at Trimulgherry in 1869, while it was highest in Secunderabad in the previous year. These fluctuations from year to year are probably more dependent on the health antecedents of the troops occupying the several localities, than on anything connected with hygiene or the men. Thus in the year under review the Cantonment Committee notice that the Artillery in Secunderabad occupying the old bomb proof barracks, lost only 14 per 1,000 of strength, while the Cavalry in the old Infantry barracks lost 31 per 1,000. The Artillery and Infantry at Trimulgherry lost respectively 32 and 30 per thousand. The two Infantry regiments and two bodies of Artillery at Trimulgherry suffered in different ratios. Thus the 2nd-24th Regiment, which had experienced some years of service in the climate of British Burmah, lost more than double the proportion of men which the 2nd-10th Regiment, whose previous service had been at the Cape and Bangalore, had done.

The C-20th Brigade, R. A., arriving from Burmah in 1868, had also a larger proportion of sickness than any other Battery at the station during the year 1869.

The 2nd-24th Regiment was sickly at Trimulgherry, and so was the 18th Hussars at Secunderabad. In November 1869, the latter corps was moved out into camp at Moul Ali for change, and with benefit to the health of the men. Whatever may be the true explanation it would seem that the new station of Trimulgherry is not maintaining the reputation for salubrity which marked it in the early years of its occupation.

122. The proportion of venereal diseases, 192.2 per mille, has been higher than ^{Prevalence of Venereal Disease.} it should be, but it is hoped that under the operation of the new rules, the registration of all common women will be more effectual. At Secunderabad only eighty-six women were on the register at the end of the year, and with reference to the size of the town and number of European troops, it is very evident that the unregistered females must largely predominate.

123. The causes of death in the fatal cases are as follows:—Fever thirteen, ^{Causes of Death.} Cholera four, Phthisis two, Mania one, Sun-stroke and Heat Apoplexy ten, Paralysis one, Abscess of Brain one, Aneurism three, Respiratory organs two, Dysentery seven, Diarrhoea four, Hepatitis nineteen, Enteritis one, Delirium Tremens four, Opium poisoning one, and Suicide one.

124. *Fever*, commencing in June was very prevalent through the rains, especially in the 2nd-24th Regiment. Seven deaths are registered ^{Epidemics—Enteric Fever and Cholera.} as due to Enteric Fever. *Cholera* which broke out very severely in the bazaar in November 1868, did not finally die out until September 1869. Four cases occurred amongst British Troops, and all proved fatal. Dysentery does not appear to have been so general as it has been in some former years.

Hepatic disease prevailed to a large extent.

125. The strength of wives of Commissioned, Warrant and Non-Commissioned Officers and Soldiers was 415, and the deaths 12 or 28.9 per mille. Among children, strength 670, the deaths were 38 or 56.7 per mille of strength.

126. The strength of the several classes of the Civil population within Cantonment limits and the deaths amongst them are given below. ^{Civil Population} With reference to the large mortality it must be noted that 321 deaths occurred from Epidemic Cholera :—

Classes.	Population.		Deaths.	
	Males.	Females.	Males.	Females.
Europeans	35	67*	27	19
East Indians	155	213	...	2
Mahomedans	4,091	4,181	106	128
Hindoos	16,820	18,496	421	455
Mahomedan families of Native Troops	1,051	1,963	37	42
Hindoo do.	1,619	3,261	23	35

127. Owing to various causes the apparatus for the distribution of water to the new barracks at Trimulgherry has not yet been set up, and it ^{Water-supply.} seems doubtful whether the works will be completed within the present year. The well water of the whole of the native town is brackish and much of it unfit for drinking purposes. The importance of a pure water-supply for the large native town is generally admitted, and a practicable scheme in reference thereto will have to be undertaken when the arrangements have been completed for supplying the European troops at Trimulgherry.

Deputy Inspector-General Balfour calls attention to the number of Arrack Shops (76) in the Bazaar which, he says, is one to every 600 of the population, and one to every 150 houses. The amount of drunkenness amongst the Native population is said to be very great and much beyond Mr. Balfour's experience of other places. The facilities with which liquor is obtainable must not be overlooked in connection with the health state of the European troops.

128. The following table shows the rate per 1,000 of Sickness, Mortality, and Invaliding amongst European and Native Troops :—

* The strength of these classes of the population is not correctly ascertained.

131. The following table will show the composition of the force for the years and the relative rates of sickness and mortality. It will be noticed that the admissions were much higher in the Royal Artillery than in the 90th Regiment, and that the mortality was exceptionally high in the C.-14th, and E.-20th Brigade, Royal Artillery:—

132. As regards venereal diseases the proportion of admissions 312·2 has been higher than in any other large station occupied by British Troops. The registration of women is carried out under the Bengal Cantonment rules. It would seem that up to the end of the year only thirty-four had been registered, nearly one-half of whom were on the average under treatment in the Lock Hospital. With the increased powers given to Cantonment Committees relative to the registration of *all* common prostitutes, it is to be hoped that the future statistics of the station may exhibit more satisfactory results.

133. The causes of death amongst the European Force at Kamptee were remittent fever 3, cholera 5, small-pox 1, syphilis 1, heat apoplexy 8, anæmia 1, bronchitis 1, dysentery 1, diarrhoea 3, and fracture 1.

134. The station of Kamptee experienced two outbreaks of cholera in 1869; one lasting from the middle of April until the end of May, and the second from the end of July to the middle of September. In these two outbreaks 182 deaths in the Kamptee bazaar were reported. The European Troops suffered on both occasions, and out of six cases five were fatal. Some cases of choleraic diarrhoea occurred also, but diarrhoea was not generally prevalent at the time when cholera existed. Cholera was very generally prevalent in the Central Provinces.

135. The table below gives the strength and mortality of women and children. Of fifty women one died, or 20 per mille. Of 114 children six died, or 52·6 per mille:

	Women.		Children.	
	Strength.	Deaths.	Strength.	Deaths.
Commissioned Officers...	9	...	16	1
Warrant do. ...	5	1	15	...
Non-Commissioned and Soldiers...	36	...	83	5

136. The drainage, water-supply and general conservancy are said to be good, though the site of the Kamptee cantonment will probably always be malarious. The space in barracks and hospital has been ample. The general health of the Native community, with the exception of the outbreaks of cholera, has been good.

137. The following table shows the rate per 1,000 of sickness, mortality, and invaliding amongst European and Native Troops. The returns of the Nagpore Jails are not received by me.

Year 1869.	Sickness.	MORTALITY.			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average strength 721.					
Fevers	575·6	4·16	.....	4·16	.....
Dysentery	37·4	1·38	.....	1·38	1·43
Diarrhoea	163·6	4·16	.....	4·16	1·43
Hepatitis	63·8	.....	.....	.....	5·72
Cholera	8·3	8·32	.....	8·32	.....
All diseases	1868·2	31·9	2·7	34·6	28·61
<i>Native Troops.</i>					
Average strength 1,312.					
Fevers	583·0	2·3	.....	2·3	2·2
Dysentery	18·4	.....	.....	.....	.....
Diarrhoea	44·2	0·7	.....	0·7	.....
Hepatitis .....	.....	.....	.....	.....	.....
Cholera	8·3	2·3	.....	2·3	.....
All diseases	1060·9	7·6	.....	7·6	31·2

Seetabuldee.

Latitude 21° 10' North. Longitude 79° 9' East.

Height above sea, 939 feet.

Mean temperature, 82°

Average rain-fall, 46·5 inches.

138. This station was occupied only for thirty-eight weeks of the year by a detachment of the 90th Regiment L. I., and by the C-D. Brigade R. H. A. for one week.

The average annual strength was thirty; the admissions into hospital forty-two; and deaths two, one of these casualties occurred from small-pox, and one from delirium tremens.

No cases of cholera occurred in the detachment of European Troops. The chief admissions were due to malarious fevers.

139. Venereal diseases, which caused a high proportion of admissions in the former year, do not appear to have been so prevalent in 1869. The ratio of admissions was 166·6 against 312·2 at the neighbouring station of Kamptee. A Lock Hospital had not been established at the end of the year, though the measure was about to be sanctioned.

140. In a strength of nine women and fifteen children there were no casualties.

141. The following table shows the rate per 1,000 of sickness, mortality, and invaliding amongst European and Native Troops:—

Year 1869.	Sickness.	MORTALITY			Invaliding
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average strength 30.					
Fevers	366·6	.....	.....	.....	.....
Dysentery	166·6	.....	.....	.....	.....
Diarrhœa ... ..	.....	.....	.....	.....	.....
Hepatitis ... ..	.....	.....	.....	.....	.....
Cholera ... ..	.....	.....	.....	.....	.....
All diseases	1,400	66·6	.....	66·6	.....
<i>Native Troops.</i>					
Average strength 470.					
Fevers	219·1	.....	.....	.....	.....
Dysentery	6·3	.....	.....	.....	.....
Diarrhœa	6·3	.....	.....	.....	.....
Hepatitis ... ..	.....	.....	.....	.....	.....
Cholera	2·1	2·1	.....	2·1	.....
All diseases	604·2	4·2	4·2	8·4	.....

Chindwarrah.

Convalescent Depot.

142. A detachment of thirty-one men of the 90th Regiment occupied this station for twenty-five weeks only of the year, when it was recalled to Head-Quarters, preparatory to the departure of the Regiment from India.

The men appear to have had very good health; no death occurred.

The recommendation of the Sanitary Commissioner to utilize the Chiculda Hills in lieu of this station as a sanitarium for the troops at Kamptee having been referred to the Government of India for approval, is for the present held in abeyance—(see G. O., No. 607 of 28th February 1870.)

Rangoon.

Latitude 26° 48' North. Longitude 96° 10' East.

Height above sea, 80 feet.

Mean temperature, 80°.

Average rain-fall, 80 inches.

Rain-fall for 1869, 97·028 inches.

143. The average strength of British Troops in this station was 834; total admissions 1,331; average daily sick 53·7; deaths 9, 7 *in* and 2 *out* of hospital.

Strength, sickness, and mortality.

Comparison with previous years.			
Years.	Admitted.	Daily sick.	Died.
1866 ...	1935·1	87·3	25·9
1867 ...	1604·7	68·3	10·3
1868 ...	1668·07	70·4	8·4
1869 ...	1595·9	64·3	10·8

with the results of previous years, and it will be observed that the results of 1869 do not contrast unfavourably with those of former years.

145. The following table shows the particulars of the troops composing the garrison. Her Majesty's 2nd Battalion 21st Fusiliers arrived in Burmah in the end of 1868 only, so that this was its first year of experience of the climate of Burmah:—

	CORPS.					RATIO PER 1,000 OF STRENGTH.									
	2-21st Fusiliers.	2-24th Regiment.	1-5th Brigade R. A.	5-5th Brigade R. A.	Garrison.	2-21st Fusiliers.	2-24th Regiment.	1-5th Brigade R. A.	5-5th Brigade R. A.	Garrison.	2-21st Fusiliers.	2-24th Regiment.	1-5th Brigade R. A.	5-5th Brigade R. A.	Garrison.
No. of weeks resident ...	52	1	52	52	52										
Strength ...	620	468	72	76	57										
Total admissions ...	1092	...	71	127	38	1761·3	...	1027·8	1671·1	666·6					
Daily sick ...	43·9	1·0	2·8	5·6	1·3	70·8	2·1	38·9	73·7	22·8					
Died in hospital ...	6	...	...	...	1	9·7	...	...	...	17·5					
Do. out of do. ...	2	...	...	...	...	3·2	...	...	...	...					
	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.
Fevers ...	221	1	...	7	19	3	...	356·4	1·6	97·2	250·0	...	52·6	...	...
Cholera ...	1	1	...	...	...	...	...	1·6	1·6	...	...	...	...	...	...
Dysentery ...	43	1	...	7	8	3	...	69·3	1·6	97·2	105·2	...	52·6	...	...
Diarrhoea ...	20	...	...	...	1	...	...	32·2	...	...	...	...	17·5	...	...
Hepatitis ...	40	1	...	3	6	...	...	64·5	1·6	41·6	78·9	...	...	...	...

146. The ratio of admissions from venereal diseases is still high in Rangoon. A Lock Hospital is in course of construction, but up to the end of the year nothing had been done to introduce rules for the registration and control of public women.

Prevalence of venereal disease.

147. The causes of death in the nine fatal cases were as follows:—fever one, cholera one, dropsy one, epilepsy one, dysentery one, hepatitis one, accidental contusion one, and drowning two.

There appears to have been no epidemic of cholera in Rangoon, though it prevailed extensively in other parts of Burmah; a single case amongst the Europeans and a few cases amongst the bazaar people, was all the cholera of the year.

148. The table below shows the strength of the several classes. Of ninety-five women, three died, or at the rate of 31·5 per mille; of 181 children twenty-two died, or at the rate of 121·5 per mille. The death rate amongst children at this station appears to have been exceptionally heavy:—

	WOMEN.		CHILDREN.		RATIO PER MILLE.	
	Strength.	Deaths.	Strength.	Deaths.	Women.	Children.
Commissioned Officers ...	7	1	10	1	142·85	100
Warrant do. ...	1	...	2	...	.....	.....
Non-Commissioned Officers and Soldiers ...	87	2	169	21	22·98	124·26

No returns have been given showing the health statistics of the Civil inhabitants of Rangoon.

149. No complaints have been made of insanitary conditions affecting the health of troops. The barrack space, drainage, and water supply appear to be satisfactory.

150. The following table shows the rate per 1,000 of sickness, mortality, and invaliding amongst European and Native Troops:—

Year 1869.	Sickness.	MORTALITY			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average strength 834.					
Fevers	300·5	1·19	.....	1 19	.....
Dysentery	73·1	1·19	.....	1·19	15·43
Diarrhœa	25·1	...	.....	.....	.....
Hepatitis	58·7	1·19	.....	1 19	10·28
Cholera	1·1	1·19	.....	1·19	.....
All diseases	1,595·9	8 4	2·4	10·8	78·18
<i>Native Troops.</i>					
Average strength 1,560.					
Fevers	110·2	.....	0 6	0·6	.. ..
Dysentery	46·1	1·2	.....	1·2	.....
Diarrhœa	51·2	1·9	0·6	2·5	.....
Hepatitis	0·6	.....	.....	.....	.....
Cholera ... ..	.....	.....	.....	.....	.....
All diseases	562·1	7·6	4·4	12 0	.....

Thayetmyoo.

Latitude 20° 18' North Longitude 92° 46' East.

Height above sea, 240 feet.

Mean temperature, 80°.

Average rain-fall, 48·3 inches.

151. This station has been occupied by the Head-Quarters of Her Majesty's 76th Regiment and A-23rd Brigade Royal Artillery for the year. The average strength was 461; the admissions into hospital 677; average daily sick 26·2; deaths 13, all in hospital.

Comparison with previous years.

Years.	Admitted.	Daily sick.	Died.
1866	1008·8	48·4	21·2
1867	1191·0	48·0	13·0
1868	1606·2	62·2	14·6
1869	1468·5	56·8	28·1

152. The proportions of sickness and mortality are compared in the margin with the results of previous years.

153. The following table shows the composition of the force, and the sickness and mortality in each branch of it:—

	THAYETMYOO.							
	Corps.				Ratio per 1,000.			
	Head-Qrs. 76th Regt.		A-23rd Brig. Royal Arty.		Head-Qrs. 76th Regt.		A-23rd Brig. Royal Arty.	
Number of weeks resident...	52		52					
Strength ...	33·6		1·25					
Total admissions ...	58·0		9·7		1726·2		776·0	
Daily sick...	20·8		5·4		61·9		42·2	
Died in Hospital ...	8		5		23·8		40·0	
Died out of Hospital ...								
	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	67	2	7	1	199·4	6·0	56·0	8·0
Cholera ...	12	4			35·7	11·9		
Dysentery ...	22		6	1	65·5		48·0	8·0
Diarrhoea ...	26		2		77·3		16·0	
Hepatitis ...	48		4	1	142·8		32·0	8·0

154. The station of Thayetmyoo is liable to occasional and severe outbreaks of epidemic cholera. One of these occurred in the year 1863, when Her Majesty's 3-60th Rifles occupied the station. On this occasion the disease was principally confined to the range of barracks nearest to the river bank and to the European Troops living in those buildings.

The Native Cantonment was not at all affected.

The epidemic of 1869 took almost precisely the same course as the 1863 epidemic. It began in a Native village near the river, and then spread to the European Barracks, which were closest to the river. (See *Special Cholera Report for 1869.*)

As regards date of appearance the time was almost precisely the same in both instances, but there was this peculiarity of the 1869 outbreak, that, although it ceased very suddenly in May, it appeared again in August and September. Of the twelve cases of cholera amongst the British Troops of the station, the

whole occurred in Her Majesty's 76th Regiment, and only four deaths resulted; but amongst the European children of the station the disease was very fatal, every child that was attacked having died.

The Native Troops of the station and the Civil and Military Officers had no cholera, but the disease prevailed to some extent in the bazaar in the month of September.

Another virulent cholera epidemic has attacked the European Troops again this year (1870) beginning in the month of April.

Prevalence of venereal disease.

155. The admissions from venereal diseases were 188·7 per mille, less than the proportion in Rangoon.

No Sanitary report has been received up to date from the Cantonment Committee of this station, so that I am unable to give many particulars.

156. The following table shows the rate per 1,000 of sickness, mortality, and invaliding amongst European and Native Troops:—

Year 1869.	Sickness.	MORTALITY			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average strength 461.					
Fevers	160·3	6·48	.....	6·48	5·90
Dysentery	60·7	2·16	.....	2·16	11·82
Diarrhœa	60·7	.....	.....	.....	1·18
Hepatitis	112·7	2·16	.....	2·16	11·81
Cholera	26·0	8·67	.....	8·67	.. ...
All diseases ...	1468·5	28·19	.....	28·19	94·56
<i>Native Troops.</i>					
Average strength 589.					
Fevers	64·5	1·6	.....	1·6	None.
Dysentery	10·1	.....	.....	.....	
Diarrhœa	16·9	.....	.....	.....	
Hepatitis	1·6	.....	.....	.....	
Cholera ... ..	.....	.....	.....	.....	
All diseases ...	349·7	3·3	3·3	6·6	

Tonghoo.

Latitude 18° 57' North. Longitude 96° 57' East.

Height above sea, 300 feet.

Mean temperature, 79°.

Average rain-fall, 69·4 inches.

Rain-fall for 1869, 46·90 inches.

157. The average strength of British Troops at this station was 320; the total admissions 291; the average daily sick 15·3; and deaths 3, two of the latter occurred in, and one out of hospital.

158. The proportions of sickness and mortality for the year are contrasted in the table marginally given, with the results of previous years. It will be observed that both in admissions and deaths the numbers are below the average.

Comparison with previous years.

Years	Admitted.	Daily sick.	Died.
1866	1400·0	55·2	4·4
1867	1188·4	55·7	27·6
1868	1241·4	58·2	27·7
1869	909·3	47·8	9·3

159. The following table exhibits the composition of the force and the relative rates of sickness and mortality :—

	TONGHOO.							
	Corps.				Ratio per 1,000 of Strength.			
	Left Wing 76th Regt.		3-5th Brigade Royal Arty.		Left Wing 76th Regt.		3-5th Brigade Royal Arty.	
Number of weeks resident...	52	52						
Strength ...	24.3	78						
Total admissions ...	21.2	79	872.4	1,012.8				
Daily sick ...	11.5	3.8	47.3	48.7				
Died in Hospital ...	1	1	4.1	12.8				
Do. out of do. ...	1	.....	4.1	.....				
	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	22	...	11	...	90.5	...	141.0	...
Cholera ...	1	...	...	...	4.1	...	...	...
Dysentery ...	13	...	11	...	53.5	...	141.0	...
Diarrhoea ...	16	...	2	...	65.8	...	25.6	...
Hepatitis ...	5	...	3	...	20.5	...	38.4	...

160. One case of cholera appears in the returns, but the Sanitary report is silent on the subject, and states that no epidemic prevailed in the Cantonment or neighbourhood.

161. The causes of death in the 3 fatal cases were heart disease 1, delirium tremens 1, and accidental suffocation 1.

162. The strength and casualties amongst the families are given in the table below.

	WOMEN.		CHILDREN.		RATIO PER 1,000 OF STRENGTH.	
	Strength.	Deaths.	Strength.	Deaths.	Women.	Children.
Commissioned Officers ...	9	.....	3	1	.....	.....
Warrant do. ...	2	1	9	.....	.....	.....
Non-Commissioned Officers and Soldiers. ...	41	1	83	8	24.4	96.3

163. The condition of the station, in a sanitary point of view, is described as good. Provisions had been abundant, and the water-supply was good.

New latrines for the Cantonment were in progress of construction.

164. The following table shows the rate per 1,000 of sickness, mortality, and invaliding amongst European and Native Troops :—

Year 1869.	Sickness.	MORTALITY			Invaliding.
		In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average strength 320.					
Fevers	103.0	.....	.....	.....	.....
Dysentery	75.0	.....	.....	.....	.....
Diarrhoea	56.2	.....	.....	.....	.....
Hepatitis	25.0	.....	.....	.....	.....
Cholera	3.1	.....	.....	.....	.....
All diseases	909.3	6.2	3.1	9.3	36.58
<i>Native Troops.</i>					
Average strength 557.					
Fevers	260.3	1.7	.....	1.7	.....
Dysentery	113.1	1.7	.....	1.7	.....
Diarrhoea	61.04	.....	.....	.....	.....
Hepatitis	3.5	.....	.....	.....	.....
Cholera ... ..	.....	.....	.....	.....	.....
All diseases	859.9	10.7	.....	10.7	.....

Port Blair.—(Andamans.)

165. The average strength of the detachment of Europeans was 109, the total admissions 109, the average daily sick 3.6, and no deaths.

166. The ratios of admissions and deaths, contrasted with the results of former years are given in the margin. When the island on which the British troops are located was first occupied they were subjected to malarious influences, but the records of the last two years seem to show that the station is really a salubrious one, for although intermittent fevers, &c., are common, there is very little serious disease of any kind. The admission of six cases of delirium tremens out of a strength of 109 men is, however, worthy of note in regard to the habits of the detachment. The Andaman islands are quite free of cholera as an endemic disease. Cholera has been introduced on several occasions by transports, but it finds no home in the soil. Dr. Rean reports that two prisoners at an out-station were reported to him as having had cholera, and in a former year a similar report was made, but no conclusive evidence has been brought to prove to him that the cases were really choleraic in their nature, and from the fact of no other cases occurring, it seems most probable that they were not genuine examples of the disease.

167. The following table shows the composition of the detachments for the year :—

Composition of Force.

	PORT-BLAIR.							
	Corps.				Ratio per 1,000 of Strength.			
	Detacht. 2-21st Regiment.		Detacht. 2-24th Regiment.		Detacht. 2-21st Regiment.		Detacht. 2-24th Regiment.	
No. of weeks resident	50		2					
Strength	109		102					
Total admissions...	101		8		926.6		78.4	
Daily sick	3.4		4.4		31.2		43.1	
Died in Hospital...	...		...		...		...	
Do. out of do.	...		...		...		...	
	A.	D.	A.	D.	A.	D.	A.	D.
Fevers	18	...	1	...	165.1	...	9.8	...
Cholera	...	...	...	...	...	...	...	...
Dysentery	2	...	...	...	18.3	...	...	...
Diarrhoea	3	...	...	...	27.5	...	...	...
Hepatitis	6	...	...	...	55.0	...	...	...

The general health of the convicts in 1869 is stated to have been better than in any former years. The deaths amongst them being only at the rate of 18.4 per mille. This fact would seem to testify to the disappearance of dietic diseases which in former years were such a fertile source of mortality.

No doubt as these islands are brought more under cultivation and become self-supporting in the way of vegetable and other food, they will be healthy places of residence for troops and prisoners. Disorders of the scorbutic type and malarious fevers have hitherto been the chief causes of mortality.

168. The following table shows the rate per 1,000 of sickness, mortality, and invaliding amongst European and Native troops:—

Year 1869.	Sickness.	MORTALITY.			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength 109.					
Fevers	174.2	...	...	...	...
Dysentery	18.3	...	...	...	...
Diarrhœa	27.5	...	...	...	...
Hepatitis	55.0	...	...	...	...
Cholera	...	...	...	...	...
All diseases	1000.0	...	...	...	...
<i>Native Troops.</i>					
Average Strength 194.					
Fevers	360.7	...	...	...	...
Dysentery	36.06	...	...	...	...
Diarrhœa	41.2	10.3	...	10.3	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
All diseases	1051.5	15.4	...	15.4	...

SECTION III.

SICKNESS AND MORTALITY AMONGST NATIVE TROOPS.

169. The strength of the Madras Native Army on the 1st January 1869 was 31,818, and on the 1st January 1870, 31,743, showing a diminution within the year of 75 men.

The strength at the end of the year, according to the Adjutant-General's Return, was made up as follows:—

Sappers and Miners...	1,309
Artillery	646
Cavalry	1,371
Infantry	28,417

170. The native army was increased during the year by recruits 1,331, by transfers 214, joined from desertion 6, other causes 57; total increase 1,608.

171. During the same period the native army lost by invaliding 823, by reduction of establishment 1, by summary dismissal 192, by Courts Martial 47, by desertion 44, by deaths 525, and by other causes

51. The total loss being 1,683 men.

From these figures it will be observed that the total decrement of the native troops by deaths and invaliding was at the ratio per mille of—

25.8	By Invaliding.
16.5	Deaths.
42.3	Total.

172. In the Stational Medical Returns received in this office, the native troops belonging to the Madras Army, but serving in the Bengal or Bombay Presidencies, are not included; such troops, for the time being, form an integral portion of the Armies of the respective Presidencies in which they may be serving, and are accounted for in the Stational Returns of those Presidencies.

The troops included in the Madras Stational returns averaged in strength 25,598. The total admissions were 17,983; the average daily sick was 752.3; deaths, in and out of Hospital 354, of which 261 were in and 93 out of Hospital.

173. The proportions per mille of admissions, daily sick, and deaths to strength according to the Stational Returns received in this office for 1869 are contrasted with the results of the former year as below:—

		1868.	1869.
By Stational Medical Returns.	{ Admissions ...	707.7	702.5
	{ Daily Sick ...	29.0	29.3
Died...	{ in Hospital 8.6 }	10.0	10.1
	{ out of do. 1.4 }	3.6	3.6
By Adjutant-General's Returns	{ Deaths ...	16.12	16.5
	{ Invaliding ...	18.61	25.8

174. The deaths of native troops, which occur while the men are on furlough to their native villages, do not ordinarily appear in the list of out of Hospital deaths. Such casualties therefore, with the deaths occurring in the regiments which are beyond the limits of the Madras Command, go to make up the difference between 13.7 per mille, the mortality ratio of the Stational Returns, and 16.5, the ratio shown in the Adjutant-General's Returns.

175. The proportion of admissions to Hospital has varied greatly in various stations. At Trichinopoly only 301.1 per mille came into hospital, while at Sumbulpore, Luckady, Nicobars and other malarious stations, the proportion was from 3 to 4,000 per mille, or in other words every man composing the detachment in those stations has been three or four times in Hospital during the year.

176. The following table will show the ratios of admissions and deaths from the more important diseases at each station within the several Commands:—

Table showing Sickness and Mortality and Ratio per mille of Mean Strength by principal Diseases in each Division and Station of the Army occupied by Native Troops, compiled from Stational Returns.

Military Divisions.	Stations.	Admitted by all diseases.	Average daily sick.	Died		Fever.		Dysentery.		Diarrhoea.		Hepatitis.		Cholera.	
				In Hospital.	Out of Hospital.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Centre ...	Madras	441.0	22.2	7.4	4.1	77.0	0.4	12.07	...	17.1	0.4	1.3	0.9	1.8	0.4
	Saint Thomas' Mount	701.9	25.9	14.4	14.4	192.2	...	28.8	...	9.6	...	...	...	...	...
	Vellore	722.6	45.5	15.9	15.9	319.7	...	15.9	...	26.5	3.5	1.7	1.7	5.3	3.5
	Arcot	384.6	107.6	...	...	76.9	...	...	...	...	...	...	...	...	...
	Palaveram	1930.4	183.4	121.7	...	252.1	...	26.08	...	191.3	...	...	...	...	...
	Mean...	566.7	33.2	13.7	6.8	136.4	0.3	14.3	0.3	24.8	1.0	1.3	0.9	2.3	0.9
Northern	Waltair	336.2	26.0	15.1	...	881.0	1.2	2.5	...	5.03	...	...	...	...	...
	Vizianagram	105.3	7.2	5.9	...	16.3	1.4	4.4	...	1.4	...	...	...	...	...
	Berhampore	401.0	25.5	17.5	5.0	75.1	2.5	10.04	...	7.5	2.5	...	...	7.5	5.01
	Cuttack	352.1	24.7	5.2	2.6	53.7	...	6.5	...	3.9	...	21.02	...	2.6	2.6
	Sumbulpore	3385.9	55.0	28.0	...	3006.9	14.0	70.1	...	24.5	...	5.5	...	...	...
	Mean...	525.5	24.1	12.0	1.4	346.4	2.4	11.7	...	6.2	0.3	...	...	2.1	1.4
Mysore ...	Bangalore	910.9	34.8	9.3	4.9	432.33	2.6	18.1	1.06	25.2	1.06	1.09	...	...	...
	French Rocks	537.0	24.4	3.7	5.5	266.6	...	12.9	...	3.7	...	3.7	...	...	...
	Mercara	2652.7	100.0	9.8	17.2	1184.7	4.9	270.9	...	49.75	...	...	...	...	...
	Mysore	1288.4	25.0	...	...	730.7	...	...	...	19.2	...	...	...	...	...
	Mean...	1452.1	42.1	8.0	6.7	514.5	2.5	53.2	0.7	89.1	0.7	1.4	...	...	...
Malabar and Cannanore	Cannanore	451.4	20.8	6.9	5.3	85.3	...	16.9	...	14.6	...	...	...	...	...
	Mangalore	549.2	22.0	8.9	1.4	149.2	...	65.6	4.4	11.9	...	7.4	...	...	...
	Luckady	4055.5	86.0	27.7	...	3194.3	...	55.5	13.8	166.5	...	...	...	...	...
	Mean...	610.7	23.5	8.3	4.00	216.1	...	34.3	2.0	19.1	...	2.0	...	...	...
	Mean...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ceded Districts ...	Bellary	490.7	20.2	9.5	2.2	150.9	2.1	17.3	...	6.1	0.5	...	...	2.2	1.1
	Kurnool	620.3	14.6	16.2	...	202.6	1.4	10.3	...	7.3	...	...	...	20.6	8.8
	Mean	526.3	18.7	11.3	1.6	168.0	1.6	15.4	...	6.5	0.4	...	...	7.3	3.2

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Table showing Sickness and Mortality and Ratio per mille of Mean Strength by principal Diseases in each Division and Station of the Army occupied by Native Troops, compiled from Stational Returns.—(Continued.)

Military Divisions.	Stations.	RATIO PER 1,000 OF MEAN STRENGTH.													
		Admitted by all diseases	Average daily sick.	Died		Fever.	Dysentery.		Diarrhoea.		Hepatitis.		Cholera.		
				In Hospital.	Out of Hospital.		A.	D.	A.	D.	A.	D.	A.	D.	
Nagpore Force ...	Kamptee ...	1060.9	37.6	7.6	...	583.0	2.3	18.4	...	44.2	0.7	...	8.3	2.3	
	Seetabuldee ...	604.2	20.6	4.2	4.2	219.1	...	6.3	...	6.3	...	...	2.1	2.1	
	Raepore ...	1407.9	50.0	21.3	3.0	996.9	7.5	...	...	74.5	1.5	...	18.2	6.06	
	Hoosungabad ...	705.09	24.1	8.0	...	490.58	...	8.04	...	18.7	...	...	2.6	2.6	
	Seroncha ...	608.1	20.9	...	...	155.3	...	...	...	...	...	...	...	...	
Hyderabad Sub- sidiary Force.	Chanda ...	1789.4	36.8	...	1.3	368.4	...	...	...	...	...	...	8.4	3.0	
	Mean...	1003.0	35.2	9.7	...	582.7	2.7	10.1	...	39.2	0.7	...	...	...	
	Secunderabad ...	752.3	29.3	8.9	3.3	463.7	1.0	9.6	0.7	19.6	0.3	2.2	7.4	2.6	
	Trichinopoly ...	301.1	12.8	8.6	1.4	74.1	1.4	7.2	...	13.6	0.7	...	2.1	0.7	
	Palancottah ...	343.9	20.8	8.3	5.0	29.9	...	21.7	1.6	10.01	...	1.6	...	...	
Southern	Quilon ...	302.7	14.6	4.1	8.3	6.15	2.05	4.1	...	8.3	...	2.1	...	...	
	Trichoor ...	378.6	18.3	11.8	...	53.2	...	11.8	...	...	...	...	...	...	
	Trevandrum ...	378.3	24.0	12.0	...	60.15	...	48.1	...	36.1	...	...	...	...	
	Mean...	324.1	15.6	8.1	...	50.8	1.1	11.4	0.4	11.8	0.4	0.7	1.1	0.4	
	Rangoon ...	562.1	32.8	7.6	4.4	10.2	...	46.1	1.2	51.2	1.9	0.6	...	...	
Pegu ...	Thayetmyoo ...	349.7	11.7	3.3	3.3	64.5	1.6	10.1	...	16.9	...	1.6	...	...	
	Tonghoo ...	859.9	30.8	10.7	...	260.3	1.7	10.1	1.7	61.04	...	3.5	...	...	
	Shoagheen ...	1491.0	44.8	17.8	...	401.7	...	89.2	8.9	35.7	...	8.9	...	...	
	Moulmein ...	771.6	30.1	20.5	12.3	310.6	6.1	47.3	...	20.5	4.1	...	...	...	
	Port Blair ...	1051.5	50.0	15.4	...	360.7	...	36.06	...	41.2	10.3	...	...	...	
Straits' Settle- ments.	Mean...	656.9	33.2	10.0	4.3	177.5	1.4	51.4	1.2	41.7	2.001	3.7	...	...	
	Singapore ...	1450.8	41.6	12.2	...	655.7	...	80.06	...	117.5	4.1	...	...	...	
	Malacca ...	1030.07	42.8	7.5	...	375.9	...	22.5	...	45.1	...	...	...	...	
	Nicobars ...	4547.6	207.1	47.6	...	3452.3	...	23.8	...	142.8	...	...	...	...	
	Mean...	1627.1	60.4	14.3	...	847.2	2.4	59.6	...	114.5	2.4	...	...	...	
Total...		694.7	29.3	10.2	3.6	30.6	1.5	2.4	0.6	31.1	0.8	1.6	0.1	1.2	

177. The influence of residence on the sea coast, on the plains near the coast, and on the table lands of the interior is shown in the following table:—

Locality.	Stations.	Ratios per mille.	
		Admitted,	Died,
Eastern Coast ...	Madras ...	441.0	11.5
	Vizagapatam ...	336.2	28.0
	Saint Thomas' Mount ...	701.9	28.8
Means...		493.0	22.7
Western Coast ...	Mangalore ...	549.2	10.3
	Quilon ...	302.7	12.4
	Trevandrum ...	378.3	12.0
	Cannanore ...	451.4	12.2
Means...		420.4	11.7
Plains ...	Vizianagram ...	105.3	5.9
	Trichinopoly ...	301.1	10.0
	Berhampore ...	401.0	22.5
	Vellore ...	722.6	31.8
	Palancottah ...	343.9	13.3
	Trichoor ...	378.6	11.8
	Cuttack ...	352.1	7.8
Means...		372.0	14.7
Table Lands ...	Bellary ...	490.7	11.7
	Hoosungabad ...	705.09	8.0
	Raepore ...	1407.9	24.3
	Seroncha ...	608.1	...
	Bangalore ...	910.9	14.2
	Seetabuldee ...	604.2	8.4
	Secunderabad ...	752.3	12.2
	French Rocks ...	537.0	9.2
	Kamptee ...	1060.9	7.6
	Kurnool ...	620.3	16.2
	Chandah ...	1789.4	...
	Luckady ...	4055.5	27.7
	Sumbulpore ...	3385.9	28.0
Means...		1302.1	12.9
Hill Station ...	Mercara ...	2652.7	27.0
Foreign Stations ...	Rangoon ...	562.1	12.0
	Port Blair ...	1051.5	15.4
	Moulmein ...	771.6	32.8
	Shoagheen ...	1491.0	17.8
	Tonghoo ...	859.9	10.7
Straits, &c. ...	Thayetmyoo ...	349.7	6.6
	Means...	847.6	15.8
Straits, &c. ...	Malacca ...	1030.07	7.5
	Singapore ...	1450.8	12.2
Means...		1240.4	9.8

178. The prevalence of cholera in the Presidency has been felt by Native Troops to some extent; cholera appeared in the stations marginally given, and out of seventy-eight attacked, thirty-two died, or forty-one per cent. of treated.

Intermittent fever has been less prevalent than in the former year, although the admissions from this cause at Sumbulpore, Mercara, Mysore, and Nicobars have been very high.

Of small-pox only twenty-six cases occurred, with two deaths.

Madras.

Strength, sickness, and mortality of the Troops.

179. The native force at Madras, was as follows:—

	CORPS.				RATIO PER 1,000 OF STRENGTH.							
	Body Guard.	17th Regiment (Vepery).	35th Regiment (Vepery).	2nd Regiment (Vepery).	Body Guard.	17th Regiment.	35th Regiment.	2nd Regiment.	Body Guard.	17th Regiment.	35th Regiment.	2nd Regiment.
No. of Weeks Resident.	52	51	52	52	...	...	...	...	...	...	...	...
Strength ...	119	669	682	697	...	...	...	...	...	...	...	...
Total Admissions ...	940	181	282	390	789.9	275.0	113.5	559.5	...	...	...	...
Daily Sick ...	3.0	7.1	16.8	20.7	25.2	11.1	21.6	29.7	...	...	...	...
Died in Hospital ...	...	4	8	6	...	6.0	8.8	8.6	...	...	...	...
Do out of do ...	...	3	1	2	...	4.5	5.9	2.9	...	...	...	...
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fever ...	25	48	31	62	1	210.1	71.7	45.1	88.9	14	...	...
Cholera ...	...	1	1	3	...	1.5	1.5	...	4.3	...	...	...
Dysentery ...	...	7	9	8	...	16.8	10.0	13.2	11.4	...	...	...
Diarrhoea ...	...	10	1	16	...	16.8	14.9	1.5	13.2	22.9	...	...
Hepatitis ...	...	2	1	1	...	...	3.0	1.5	...	1.4	14	...

The average strength was 2,154, the total admissions have been 950, the average daily sick 48, and the deaths 25; 16 *in* and 9 *out* of hospital.

Years.	Comparison with former years.		
	Admissions.	Daily Sick.	Deaths.
1866 ...	55.7	1.1	2.6
1867 ...	58.0	26.52	1.99
1868 ...	55.9	2.92	5.3
1869 ...	44.0	22.2	11.5

180. The proportions of admissions, daily sick, and mortality are contrasted in the margin with the results of three previous years.

181. The Madras Native Troops suffered but little from cholera, though the disease was prevalent in the town in July and August. The 35th Regiment, in Vepery, and the Body Guard had no cases. Madras appears to be a fairly healthy station for natives.

Saint Thomas' Mount.

182. The average strength of Native Troops at this station was 208. The total admissions 116, average daily sick 5.4; deaths 6—3 *in* and 3 *out* of hospital.

Strength, sickness, and mortality of the Native Troops.

Corps.	No of weeks resident.	Strength.	Ratio per 1,000 of strength.			
			Admissions.	Daily Sick.	Deaths.	
					In Hospital.	Out of Hospital.
Detachment 28th Regiment ...	26	167	371.2	28.7	6.0	16.1
Native details ...	52	124	677.4	24.2	...	24.2

The strength is made up of a detachment and details as in the margin. No cases of cholera occurred in the native troops at this station.

Causes of Death.

183. The causes of death were Anæmia one, Abscess one, Pneumonia one, Dysentery one, Diarrhoea one, and unknown one.

Health of Troops and Prisoners compared.

184. The following table shows the ratio per 1,000 of strength of the sickness and mortality amongst the Native Troops and Prisoners:—

Diseases.	RATIO PER MILE OF STRENGTH.			
	Troops.		Prisoners.	
	Admitted.	Died.	Admitted.	Died.
Fever ...	192.2	...	499.9	13.5
Dysentery ...	28.8	...	67.5	...
Diarrhoea ...	9.6	...	162.1	...
Cholera ...	...	...	...	...
Hepatitis ...	...	...	...	...
All diseases ...	701.9	14.4	1932.4	27.0

Palaveram.

185. The only troops at this station consist of men returning from, or going on, foreign service and temporarily attached to the Native Infantry Depot.

The average strength was 115, the total admissions 222, the average daily sick 21.1, and the deaths *in* hospital 14.

The large proportion of admissions and deaths is the result chiefly of chronic diseases contracted on service in Burmah and the Straits.

186. The causes of death were Rheumatism two, Phthisis two, Bronchitis two, Dysentery and Diarrhoea four, Splenitis one, Diabetes one, Dropsy one, and Debility one.

187. No cases of cholera occurred at the Native Infantry Depot, although the disease was introduced into the station by a detachment of H. M.'s 45th Regiment.

Vellore.

188. The average strength of the Native troops at this station was 566, the admissions into hospital 409, the average daily sick 25.8, deaths *in* and *out* of hospital eighteen,—nine *in* hospital and nine *out*.

Strength, sickness, and mortality.

Comparison with former years.

Years.	Admissions.	Daily Sick.	Deaths.
1866 ...	486·6	20·7	12·3
1867 ...	452·03	17·74	24·9
1868 ...	394·7	21·8	15·2
1869 ...	722·6	45·5	31·8

189. The proportions of sickness and mortality are contrasted with the results of previous years in the table marginally given.

190. Of the nine deaths *in* hospital the following diseases were the causes of Causes of Death. mortality, Cholera 2, Phthisis 1, Dropsy 1, Pneumonia 1, Diarrhœa 2, Hepatitis 1, and Bright's disease 1; of the nine deaths *out* of hospital, Intermittent Fever 2, Asthma 1, Hæmoptysis 1, Diarrhœa 2, Secondary Syphilis 1, and unknown two.

Health of Troops and Prisoners Compared.

191. The following Table shows the ratios per 1,000 of sickness and mortality amongst Troops and Prisoners.

						RATIO PER MILLE OF STRENGTH.			
						Troops.		Prisoners.	
						Admitted.	Died.	Admitted.	Died.
Fevers	...	...	...	...	...	319.7	...	103.9	7.8
Dysentery	...	...	...	...	...	15.9	...	51.9	7.8
Diarrhoea	...	...	...	...	...	26.5	3.5	47.2	4.7
Cholera	...	...	...	...	...	5.3	3.5	9.4	3.1
Hepatitis	...	...	...	...	...	1.7	1.7	16.3	13.1
All diseases	...	...	...	...	...	722.6	15.9	411.02	40.91

192. This station was garrisoned during the year 1869 by the 33rd Regiment N. I. The strength was 674, the total admissions 71; the ^{Strength, sickness, and mortality.} daily sick 4.9, and deaths 4, giving a per mille ratio of 105.3, 7.2 and 5.9 respectively.

(Comparison with former years.

Years.	Admissions.	Daily Sick.	Deaths.
1866 ...	438.1	17.7	14.1
1867 ...	286.5	16.7	2.8
1868 ...	245.5	12.0	11.7
1869 ...	105.3	7.2	5.9

193. The proportions are contrasted marginally with the results of three former years.

194. The causes of death were fever 1, dropsy 1, extravasation of urine 1 and debility 1.

195. Cholera broke out in the station on the 26th July, eight cases occurred
Cholera, in the Cantonment bazaar, and four in the Regimental lines,
but no sepoys were attacked.

Sanitary works.

196. No sanitary works were executed within the year.

Vizagapatam.

197. The Native Troops composing the force are given in the following
Composition of Force. table:—

[illegible]

Strength, sickness,
and mortality.

The average strength was 794, the admissions 267, average daily sick 20·7, and deaths 12.

Comparison with former years.

Years.	Admitted.	Daily Sick.	Died.
1866	570.7	28.2	13.0
1867	544.6	36.5	8.8
1868	419.0	36.9	15.6
1869	336.2	26.0	15.1

198. The proportions of sickness and mortality compared with former years are shown marginally. The contrast in the ratio of admissions from this station on the sea-coast, and from Sumbulpore, a jungle tract in the interior is very remarkable.

199. The causes of death in the fatal cases were Fever one, Phthisis three, Dropsy one, Sun-stroke one, Heart disease one, Bronchitis one, Ulcer one, Debility one, Paralysis one, and Stricture of Urethra one.

Health of Troops and Prisoners compared.

200. The following table exhibits the prevalence of particular diseases amongst Sepoys and Prisoners at this station:—

				RATIO PER MILE OF STRENGTH.			
				Troops.		Prisoners.	
				Admitted.	Died.	Admitted.	Died.
Fevers ..	...	...	...	88.0	1.2	101.6	13.1
Dysentery ..	...	...	...	2.5	...	49.1	...
Diarrhœa ..	...	...	...	5.03	...	28.8	6.5
Cholera ...	...	...	...	...	...	...	...
Hepatitis ..	...	...	...	...	...	3.2	...
All diseases	...	...	...	336.2	15.1	465.6	36.0

Berhampore.

201. This station was occupied for the whole year by the right wing of the
 Strength, sickness, and mortality. 31st Regiment Native Infantry. The average strength was
 399 the admissions 160, the average daily sick 10·2, deaths
 nine; seven *in* and two *out* of hospital.

Comparison with former years.

Years.	Admitted.	Daily Sick.	Died.
1866	505.9	31.6	15.8
1867	183.5	15.7	11.4
1868	355.9	16.5	13.5
1869	401.0	25.5	22.5

202. The proportions of sickness and mortality are noted in the margin in comparison with the results of former years.

Causes of Death.

203. The causes of death were cholera two, fevers two, disease of the heart one, diarrhoea one, tonsillitis one, and beri-beri two.

Sanitary Works.

204. No public latrines have been built at this station for the bazaar or native troops. They are said to be "much required."

Health of Troops and Prisoners compared.

205. The following Table shows the rate per 1,000 of the sickness and mortality amongst Troops and Prisoners.

	RATIO PER MILE OF STRENGTH.			
	Troops.		Prisoners.	
	Admitted.	Died.	Admitted.	Died.
Fevers ...	75.1	2.5	118.9	...
Dysentery ...	10.04	...	145.9	21.6
Diarrhoea ...	7.5	2.5	367.5	48.6
Cholera ...	7.5	5.01	102.7	70.2
Hepatitis ...	...	...	...	...
All diseases ...	401.0	22.5	1,075.6	162.1

Cuttack.

Strength, sickness, and mortality..

Corps.	No. of Weeks.	RATIO PER 1,000.			
		Strength.	Admissions.	Daily Sick.	Deaths.
A. & Battery N. A.	52	92	337.0	23.9	10.9
41st Regt. N. I.	52	669	354.2	24.8	6.0

206. The Native Troops occupying this station are named in the margin.

The average strength was 761, the total admissions 268, average daily sick 18.8, deaths 6; 4 *in* hospital and 2 *out*.

Comparison with former years.

Years.	Admitted.	Daily Sick.	Died.
1866	993.4	24.7	8.8
1867	1,350.0	32.8	13.05
1868	1,368.8	32.3	19.6
1869	352.1	24.7	7.8

207. The proportions of sickness and mortality are indicated in the table marginally given, and the results of previous years compared therewith.

208. The causes of death were cholera two, phthisis one, disease of heart one, constipation one, and accident one.

209. This station is said in the Sanitary Report to be very badly drained, and to require latrines for the civil population, and new drainage for the Regimental lines.

There has been very slight prevalence of malarious disorders at the station.

210. When cholera appeared, pilgrims to and from Juggernaut were not permitted to pass through the station.

Cholera.

Sumbulpore.

211. This station was occupied for the whole year by the left wing of the 31st Regiment Native Infantry. The average strength was 285, the hospital admissions reached the enormous total of 965; the average daily sick was 15.7, and deaths 8.

212. The proportions of sickness and mortality are contrasted with previous years in the margin.

Comparison with former years.

Years.	Admitted.	Daily Sick.	Died.
1866	3,342.2	89.1	59.4
1867	1,086.4	31.7	15.3
1868	2,683.5	39.2	28.4
1869	3,385.9	55.0	28.0

The unhealthiness of Sumbulpore is due to the prevalence of malarious fevers. In the year 1869, out of a total of 965 admissions, 874 were due to fevers, intermittent and remittent.

The causes of death were fevers four, phthisis two, and heart diseases two.

It is remarked of the fever of this station that at certain seasons of the year it prevails as an epidemic. During the year 1869 there were two great accessions of fever, one commencing in March and ending in May; the second beginning in September and continuing high until December.

213. No cholera occurred amongst the troops, though the Civil population suffered slightly.

Cholera.

Bangalore.

The regiments composing the strength of the Native force at this station are detailed in the following table:—

	CORPS.				RATIO PER 1,000 OF STRENGTH.							
	Garrison.	27th Regt. ment.	39th Regt. ment.	Sappers and Miners.	Garrison.	27th Regt. ment.	39th Regt. ment.	Sappers and Miners.				
No. of Weeks resident	52	52	52	52								
Strength	51	637	671	461	1,980.4	1,097.3	649.8	915.4				
Total Admissions	101	699	436	422	90.2	33.9	26.6	41.8				
Daily Sick	4.6	21.6	17.9	19.3	...	4.7	10.4	15.2				
Died in Hospital	...	3	7	7	...	...	4.5	13.0				
Do. out of do.	...	...	3	6	...	...	...	...				
	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.
Fevers	32	328	1266	4161	627.4	514.9	1.6	396.4	6.0	349.2	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	3	16	4	10	58.9	25.1	6.0	1.5	21.7	2.2	...	...
Diarrhoea	7	21	8	10	137.2	32.9	1.6	11.9	...	21.7	2.2	...
Hepatitis	...	2	...	...	...	3.1	...	...	...	...	...	...

The strength of the force was 1,820; the total admissions 1,658; average daily sick 63.4; deaths 26; of which 17 were *in* and 9 *out* of hospital.

Strength, sickness, and mortality.

Comparison with former years.			
Years.	Admitted.	Daily Sick.	Died.
1866 ...	573.0	26.6	16.2
1867 ...	915.4	31.1	7.4
1868 ...	924.8	34.4	8.3
1869 ...	910.9	34.8	14.2

214. The proportions of sickness and mortality are contrasted marginally with the results of previous years.

215. The causes of death were fevers 8; measles one; rheumatism one; phthisis one; anæmia 3; apoplexy one; bronchitis one; pneumonia one; dysentery four; diarrhoea two; debility one; and unknown two.

216. The station of Bangalore was not quite healthy either for Europeans or Natives in 1869. The Jail statistics are not available for comparison with those of Native troops; but the European and Native statistics are contrasted at page 28.

French Rocks.

217. The station has been occupied by troops named in the following table:—

		CORPS.				RATIO PER 1,000 OF STRENGTH.			
		Detachment 27th Regiment		Detachment 30th Regiment		Detachment 27th Regiment		Detachment 30th Regiment	
No. of weeks resident	...	5	...	47	...	...	...	...	...
Strength	...	88	...	588	...	...	...	...	...
Total admissions	...	5	...	285	...	568	...	484.6	...
Daily sick	...	1.7	...	14.4	...	11.3	...	24.4	...
Deaths in Hospital	...	...	...	2	...	...	...	3.4	...
Do. out of do.	...	...	...	3	...	...	...	5.1	...
		A.	D.	A.	D.	A.	D.	A.	D.
Fevers	...	2	...	142	...	22.7	...	241.5	...
Cholera	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	7	...	...	...	11.9	...
Diarrhoea	...	...	...	2	...	...	...	3.4	...
Hepatitis	...	...	...	2	...	...	...	3.4	...

218. The average strength was 540; the admissions 290; average daily sick 13.2; and deaths 5; 2 *in* and 3 *out* of Hospital.

219. The proportions are contrasted marginally with the results of previous years.

Comparison with former years.			
Years.	Admitted.	Daily sick.	Died.
1867 ...	1290.3	39.4	25.0
1868 ...	1049.6	46.9	...
1869 ...	537.0	24.4	9.2

220. This station, so far as the Mysore plateau is concerned, would appear to be a fairly salubrious site; the malarious fevers, which led to the abandonment of the neighbouring stations of Seringapatam and Mysore, not predominating in this locality.

221. The causes of death in the fatal cases were bronchitis 2, diarrhoea 1, carbuncle 1, and unknown 1.

There are no prisoners at the station.

Cannanore.

222. The Native Troops at Cannanore are shown in the following table:—

		CORPS.			RATIO PER 1,000 OF STRENGTH.					
		Garrison.	13th Regiment.	25th Regiment.	Garrison.	13th Regiment.	25th Regiment.			
No. of weeks resident	...	52	52	46	...	...	...			
Strength	...	4	769	595	...	...	...			
Total admissions	...	11	269	356	2,750.0	284.7	598.3			
Daily sick	...	1.8	8.8	16.4	450.0	11.4	27.5			
Died in Hospital	...	1	4	4	250.0	5.2	6.7			
Do. out of do.	...	...	2	5	...	2.6	8.4			
		A.	D.	A.	D.	A.	D.	A.	D.	A.
Fevers	...	3	...	19	...	59	...	750.0	...	13.7
Cholera	...	...	...	...	...	...	...	...	...	...
Dysentery	...	1	...	7	...	14	...	250.0	...	9.1
Diarrhoea	...	...	...	7	...	12	...	...	...	9.1
Hepatitis	...	...	...	...	...	...	...	...	...	...

223. The average strength was 1,298; the total admissions 586; the average daily sick 27.0; deaths 16; 9 *in* and 7 *out* of hospital.

Comparison with previous years.

Years.	Admitted.	Daily sick.	Died.
1866 ...	315.6	13.6	10.6
1867 ...	377.1	17.0	7.2
1868 ...	355.7	17.2	1.2
1869 ...	451.4	22.0	12.2

224. The proportions which these figures bear to the results of former years may be gleaned from the table given in the margin.

The causes of death were rheumatism 1, heart disease 1, dysentery 1, diarrhoea and dyspepsia 2, laryngitis 1, syphilis 2, boil 1, wounds 2, drowning 1, debility 3, and epilepsy 1.

The prisoners in the Central Jail at Cannanore were much less healthy than the sepoys in 1869. The proportion of admissions being 1096.3 per mille, and the deaths 69.7.

Mangalore.

225. This station was occupied, during the year, by the 14th Regiment Native Infantry.

The average strength of the corps was 670; the total admissions 368; the daily sick 14.8; deaths 7; of which 6 occurred *in* hospital and 1 *out*.

Comparison with former years.

Years.	Admitted.	Daily sick.	Died.
1866 ...	438.6	14.0	20.0
1867 ...	402.5	18.1	8.8
1868 ...	368.9	16.0	11.7
1869 ...	549.2	22.0	10.3

226. The proportions of sickness and mortality are given in the marginal table.

227. The causes of death were dropsies 1, bronchitis 1, dysentery 3, debility 1, and concussion of brain 1.

228. There was no cholera at the station during the year. Intermittent fever prevailed severely in the district, but not to an unusual degree in the station.

229. The proportions of sickness and mortality amongst the prisoners in jail at this station were much higher; thus the admissions were 1062.9 per mille, daily sick 55.9, and deaths 97.9.

The following table shows the ratio per 1,000 of sickness and mortality amongst troops and prisoners:—

Diseases.	RATIO PER MILE OF STRENGTH.			
	Troops.		Prisoners.	
	Admitted.	Died.	Admitted.	Died.
Fevers	149.2	...	195.7	6.9
Dysentery	65.6	4.4	363.6	34.9
Diarrhoea	11.9	...	41.9	69.0
Cholera	...	...	...	...
Hepatitis	7.1	...	...	...
All diseases	549.2	8.9	1062.9	97.9

Mercara. (Hill Station.)

230. The station of Mercara was occupied by a Detachment of the 14th Regiment Native Infantry for eight weeks, and of the Right Wing of 8th Regiment Native Infantry for forty-four weeks.

231. The average strength was 106; the admissions 1,077; the average daily sick 40.6; deaths 11; 4 *in* and 7 *out* of Hospital.

Comparison with former years.			
Years.	Admitted.	Daily sick.	Died.
1866	592.7	18.8	12.1
1867	640.1	23.9	12.4
1868	504.3	18.2	5.7
1869	260.27	100.0	27.0

233. The large proportion of admissions appears to be due to the recent arrival of the corps from the Straits, and to the change from a coast to a hill climate.

234. The causes of death in the fatal cases were intermittent fever 2, rheumatism 1, dropsy 1, and unknown (dying out of Hospital) 7.

Luckady.

235. This station, notorious for the prevalence of malarious fevers, was occupied by eighteen weeks of the year by a Detachment of Sappers and Miners, strength 208.

In this time the admissions ran up to 292, or in the proportion of 4055.5 per mille.

The chief disease was malarious fever.

Bellary.

236. The Native Troops, occupying the Garrison are specified in the following table:—

	CORPS.					RATIO PER 1,000 OF STRENGTH									
	Garrison.	16th Regiment.	34th Regiment.	Sappers and Miners.	2nd Light Cavalry.	Garrison.	16th Regiment.	34th Regiment.	Sappers and Miners.	2nd Light Cavalry.	Garrison.	16th Regiment.	34th Regiment.	Sappers and Miners.	2nd Light Cavalry.
No. of weeks resident	52	46	52	52	52										
Strength	260	559	649	108	275										
Total admissions	71	300	291	99	116	273.1	536.7	448.3	916.6	421.8					
Daily sick	4.4	12.4	13.6	4.2	3.4	16.9	21.6	20.9	38.9	12.4					
Died in hospital	5	8	12	2	2	19.2	14.3	3.1	...	7.3					
Do. out of do.	...	1	12	...	1	...	1.8	3.1	...	3.6					
	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.
Fevers	15.2	11.1	8.6	25.1	31.1	37.7	7.6	193.2	...	153.8	...	231.5	...	120.9	3.6
Cholera	1.1	3.9	...	...	...	3.8	3.8	5.4	1.8	...	...	...	...	...	...
Dysentery	1	15	15	1	1	3.8	...	26.8	...	20.0	...	9.2	...	3.6	...
Diarrhoea	1	8.1	...	...	1	3.8	...	14.3	1.8	1.5	...	...	...	3.6	...
Hepatitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

237. The average strength was 1,787; the admissions 877; average daily sick 36.2; deaths 21; 17 *in* and 4 *out* of Hospital.

Comparison with former years.			
Years.	Admitted.	Daily sick.	Died.
1866	1058.7	39.0	13.7
1867	1141.1	21.1	7.6
1868	3320.0	11.8	6.3
1869	490.7	20.2	11.7

238. The proportions of admissions and deaths are contrasted marginally with the figures of the three preceding years.

239. The causes of death were small-pox 1, fevers 3, cholera 2, phthisis 3, dropsies 2, pneumonia 2, diarrhoea 1, abscess 1, debility 2, paralysis 2, snake-bite 1, and leprosy 1.

The Native troops enjoyed, on the whole, better health than prisoners in jail.

The admissions of the latter were 1,637 per mille, and deaths 40.6. A few cases of cholera occurred amongst the troops, but the prisoners had none.

Kurnool.

240. The station was occupied by the 19th Regiment Native Infantry for the whole year.

The strength was 677; the total admissions 420; the daily sick 9.9; and deaths 11.

Comparison with former years.			
Years.	Admitted.	Daily sick.	Died.
1866	2305.0	54.2	13.9
1867	1698.3	72.0	18.6
1868	1229.7	65.6	3.4
1869	620.3	11.6	16.2

241. The proportions of sickness and mortality are contrasted marginally with the results of former years.

242. From 1866 to 1868 this station was affected by the general outbreak of malarious fever which prevailed throughout the district. In the past year the fever had in a measure died out, though the station suffered two visitations of epidemic cholera.

243. The causes of death were cholera 6, fevers 1, sunstroke 1, abscess 1, hernia 1, and pulmonary disease 1.

Health of troops and
prisoners compared.

The prisoners in jail were more unhealthy than the sepoys. The admissions were 1236·3 per mille, the daily sick 54·8, and deaths 32·2.

The contrast of the specified diseases is shown in the subjoined table:—

Table showing the rate per 1,000 of Sickness and Mortality amongst Troops and Prisoners.

Disease.	RATIO PER MILE OF STRENGTH.			
	Troops.		Prisoners.	
	Admitted.	Died.	Admitted.	Died.
Fevers	212·6	1·4	345·7	...
Cholera	20·6	8·8	154·2	58·5
Dysentery	10·7	...	58·5	...
Diarrhoea	7·3	...	85·1	5·3
Hepatitis	...	...	...	...
All Diseases	620·3	16·2	1281·9	63·8

Mysore.

244. A small detachment of 58 men of the 30th Regiment occupied the station of Mysore for a period of forty-six weeks of the year. The chief admissions were from the malarious fevers for which this station is noted. No death occurred.

Trichinopoly.

245. The Native Corps composing the Garrison of this station, are specified in the following table:—

	CORPS.			RATIO PER 1,000 OF STRENGTH.					
				26th Regiment.		9th Regiment.		Garrison.	
	No. of weeks resident	52	52	52	...	...	...	...	...
Strength	...	669	667	52	324·4	283·2	230·8	...	...
Total admissions	...	217	189	12	14·3	11·4	13·5	...	...
Daily sick	...	9·6	7·6	0·7	...	...	...	...	...
Died in hospital	...	4	4	4	6·0	6·0	76·9	...	...
Do. out of do.	...	1	1	...	1·5	1·5	...	...	...
		A.	D.	A.	D.	A.	D.	A.	D.
Fevers	...	48	1	55	1	...	...	71·7	1·5
Cholera	...	3	1	...	...	...	...	4·5	1·5
Dysentery	...	4	...	6	...	...	...	6·0	...
Diarrhoea	...	11	...	8	1	...	...	16·4	...
Hepatitis	...	...	...	...	...	...	...	...	...

246. The average strength was 1,388; the admissions into hospital 418; the average daily sick 17·9; and deaths 14; 12 in and 2 out of Hospital.

Strength, sickness, and mortality.
Comparison with former years.

Years.	Admitted.	Daily sick.	Died.
1866 ...	295·2	14·8	14·0
1867 ...	194·5	13·4	7·8
1868 ...	261·2	11·3	10·6
1869 ...	301·1	12·8	10·0

247. The proportions of sickness and mortality are shown in the margin, contrasted with the results of previous years.

248. Epidemic cholera appeared in the station in the end of December, and was spreading at the end of the year.

249. The causes of death were fevers 2, cholera 1, phthisis 2, disease of heart 1, pneumonia 4, diarrhoea 1, carbuncle 1, debility 1, and tetanus 1.

There are two jails in Trichinopoly. In the Central Jail the ratio of admissions per mille was 321·6, the daily sick 17·3, and deaths 53·3. In the District Jail the admissions were 301·3, the daily sick 11·8, the death ratio 31·3. No cholera had attacked the prisoners in jail.

Quilon.

250. This station has been occupied for the whole year by the 23rd Regiment Native Infantry.

The average strength was 479; the total admissions 145; the daily sick 7·0; deaths 6; 2 of which occurred in and 4 out of hospital.

Comparison with former years.			
Years.	Admitted.	Daily sick.	Died.
1866 ...	407·4	22·3	9·2
1867 ...	345·5	18·9	8·1
1868 ...	354·5	22·5	6·5
1869 ...	302·7	14·6	12·4

251. The proportions of sickness and mortality are contrasted in the margin with the results of previous years.

No epidemic prevailed.

252. The causes of death were fever 1, debility 3, enteritis 1, and scrofula 1.

There is no Jail at Quilon.

253. The Officer signing the Sanitary Report records that latrines are required for the bazaar and station, and that in so damp a climate the Sepoys' lines should be raised and tiled.

Trichoor.

254. This station was occupied by a detachment of the 23rd Regiment for the whole of the year.

The average strength was 169 the total admissions 64; daily sick 3·1; and deaths 2.

The proportions of sickness and mortality are noted in the margin contrasted with the results of the three previous years.

Years.	Admitted.	Daily Sick.	Died.
1866 ...	519·8	16·8	...
1867 ...	502·9	18·0	11·6
1868 ...	485·0	20·3	5·9
1869 ...	378·6	18·3	11·8

Causes of death.

255. The causes of death in the two fatal cases were gastritis 1 and paralysis 1.

No epidemic prevailed.

Trevandrum.

256. A small detachment (83 men) of the 22nd Regiment Native Infantry occupied this station. The admissions into hospital were 48; the daily sick 2, and deaths 1.

The proportion of admissions, daily sick, and deaths being 378.3, 24.0, and 12 per mille respectively.

The fatal case was due to aneurism of the aorta.

Palamecottah.

257. This station has been occupied, for the whole of the year, by the 22nd Regiment M. N. I.

The average strength of the troops has been 599; the admissions into Hospital 206; the average daily sick 12.5; deaths 8, five of the latter, occurring in, and three out of Hospital.

258. The proportions of sickness and mortality are contrasted with former years in the table marginally given.

Comparison with former years.			
Years.	Admitted.	Daily Sick.	Died.
1866 ...	432.0	9.6	7.4
1867 ...	281.1	9.3	5.3
1868 ...	463.3	16.2	8.8
1869 ...	343.9	20.8	13.3

Causes of death. The death rate has been higher than usual, but there has been no epidemic. The causes of death in the fatal cases were Phthisis (1) Heart disease (2) Dysentery (1) Diarrhœa (1) Paralysis (2) and Tetanus (1).

259. The prisoners at this station were admitted into Hospital at the rate of 383.5 per mille of strength. The daily sick 21.6; and the deaths 83.6. The death rate has been particularly high. The old jail building has been condemned as unsuitable for the maintenance of health, and a new jail is in course of construction.

The following Table shows the rate, per 1,000, of sickness and mortality amongst Native Troops and Prisoners.

	RATIOS PER MILLE.			
	Troops.		Prisoners.	
	Admitted.	Died.	Admitted.	Died.
Fevers...	29.9	...	13.8	...
Dysentery ...	21.7	1.6	94.1	20.9
Diarrhœa ...	10.01	...	45.2	20.9
Hepatitis ...	1.6	...	...	...
Cholera ...	...	...	...	...
All diseases...	343.9	8.3	383.5	83.6

Secunderabad.

260. The Native Corps, occupying this station, are shown in the following Table.

	RATIO PER 1,000 OF STRENGTH.									
	Corps.					Sappers and Miners.				
	Cantonment.	4th L. C.	24th Regiment.	5th Regiment.	4th Regiment.	Cantonment.	4th L. C.	24th Regiment.	5th Regiment.	4th Regiment.
Number of Weeks resident.	52	52	52	52	52	52	52	52	52	52
Strength ...	10	333	670	685	696	800.0	321.3	1277.6	778.1	469.8
Total admissions	8	107	856	533	317	200.0	29.4	56.7	16.1	18.1
Daily Sick ...	2.0	9.8	38.0	11.0	12.6	...	15.0	10.4	4.4	7.1
Died in Hospital	...	5	7	3	5	...	...	1.5	8.8	1.4
Do. out of...	...	...	1	6	1	...	...	...	...	...
Fevers ...	1	...	670	2	...	100.0	60.0	1000.0	518.2	186.7
Cholera ...	...	3	...	...	1	...	15.0	...	...	4.3
Dysentery ...	...	3	4	6	...	...	9.0	6.0	8.8	4.3
Diarrhœa ...	...	15	20	6	6	...	45.0	30.0	8.8	8.6
Hepatitis ...	...	4	1	1	...	...	12.0	3.0	1.4	...

261. The average strength of the Force was 2,693; the admissions into Hospital 2,026, the average daily sick 79.0, and deaths 33,—twenty-four of the latter occurring *in*, and nine *out* of Hospital.

Strength, sickness, and mortality.
Comparison with former years.

Years.	Admitted	Daily Sick.	Died.
1866 ...	983.5	43.7	10.6
1867 ...	989.2	34.7	7.4
1868 ...	1015.8	35.7	10.3
1869 ...	752.3	29.3	12.2

262. The ratios of sickness and mortality are contrasted with previous years in the margin.

263. The admissions from intermittent fever have been high in the 5th and 24th Regiments, N. I. Cholera broke out epidemically in the Station Bazaar in November 1868, and subsequently extended to the Sappers and Miners who had recently joined the station. In July a second outbreak occurred.

264. The causes of death in the Native Force were Small-pox 1, Fevers 2, Cholera 7, Rheumatism 1, Atrophy 1, Anæmia 1, Dropsy 1, Apoplexy 1, Heart disease 1, Pneumonia 2, Dysentery 2, Diarrhœa 1, Injury 1, Suicide 1, Diabetes 1, Tetanus 1, Hemiplegia 1, Cancer 1, Aneurism of Aorta 1, Urinary Abscess 1, Obstruction of Bowels 1, and Unknown 3.

The Table, contrasting the sickness and mortality of the Native and European Troops will be found at page 38.

Kamptee.

265. The Native Troops at Kamptee in 1869, are shown in the following Table.

	CORPS.			RATIO PER 1,000 OF STRENGTH.					
	1st L. C.	1st Regt.	Rt. W. 32nd Regiment.	1st L. C.	1st Regt.	Rt. W. 32nd Regiment.			
Number of Weeks resident ...	52	52	52						
Strength ...	288	701	323						
Total Admissions ...	272	783	337	944.4	1116.8	1043.3			
Daily Sick ...	7.8	29.0	12.6	27.1	41.4	39.0			
Deaths in Hospital ...	2	5	3	6.9	7.1	9.3			
Do. out of do. ...	...	...	...	...	...	...			
	A.	D.	A.	D.	A.	D.	A.	D.	A.
Fevers ...	191	...	380	2	194	1	663.2	...	542.1
Cholera ...	4	2	3	...	4	1	1.8	6.9	4.2
Dysentery ...	2	...	14	...	8	...	6.9	...	20.0
Diarrhœa ...	10	...	40	1	8	...	34.7	...	57.1
Hepatitis ...	...	...	...	...	...	...	...	...	...

Strength, sickness, and mortality.
Comparison with former years.

Years.	Admitted.	Daily sick.	Died.
1866 ...	991.7	29.5	9.6
1867 ...	855.1	24.8	4.5
1868 ...	1056.7	32.9	17.8
1869 ...	1060.9	37.6	7.6

266. The average strength of the Force was 1,312, the total admissions 1,392, the average daily sick 49.4 and the deaths 10.

267. The ratios of sickness and mortality, are shown in the table, in the margin, with the results of the three previous years.

268. The admissions and deaths have been more numerous in the last two years. Cholera epidemics prevailed in both years, and malarious fevers have been prevalent.

269. The causes of death were Fevers 3, Cholera 3, Diarrhœa 1, Debility 1, Enteritis 1, and Unknown 1.

Causes of death.

The table, contrasting the mortality of the European and Native Troops at Kamptee, will be found at page 40. The Returns of the Central Prison at Nagpore are not furnished to this office.

Seetabulde.

270. The Native Troops at this station have been made up of detachments of Composition of force. 36th and 20th Regiments Native Infantry.

	CORPS.		RATIO PER 1,000 OF STRENGTH.			
	36th Regiment.	20th Regiment.	36th Regiment.	20th Regiment.		
Number of Weeks resident ...	3	49				
Strength ...	594	462	...	...		
Total Admissions ...	24	260	40.4	562.7		
Daily Sick ...	11.4	9.6	19.2	20.7		
Died in Hospital ...	...	2	...	4.3		
Do. out of do. ...	1	1	1.7	2.1		
	A.	D.	A.	D.	A.	D.
Fevers ...	9	...	94	...	15.2	203.4
Cholera ...	...	...	1	1	...	2.1
Dysentery ...	...	...	3	...	...	6.4
Diarrhœa ...	...	...	3	...	...	6.4
Hepatitis ...	...	...	...	...	...	...

271. The average strength was 470, the admissions into Hospital 284, the daily sick 9.7, and deaths 4 (two *in* Hospital and two *out*).

272. The ratios of sickness and mortality are exhibited in the marginal table.

273. The causes of death were Cholera 1, Jaundice 1, Heart disease 1, and Unknown 1.

Hooshungabad.

274. This station was occupied by the 32nd Regiment, Native Infantry, during the year. The average strength was 373; the total admissions 263; daily sick 9.0; and deaths 3.

The causes of death were cholera 1, Hernia 1, and Diuresis 1.
The Jail Returns of the station are not available for comparison.

275. This station was occupied by the 11th Regiment Native Infantry. The average strength was 657; the total admissions 925; the average daily sick was 32.9; and deaths 16 (14 *in* and 2 *out* of Hospital.)

Years.	Admitted.	Daily Sick.	Died.
1866 ...	1006.7	33.5	2.8
1867 ...	1350.1	51.1	2.8
1868 ...	796.7	31.3	22.7
1869 ...	1407.9	50.0	24.3

276. The ratios of admissions and deaths are contrasted marginally with the results of former years.

It will be observed that there has been considerable variations in the ratios both of sickness and mortality. During 1869, these were both abnormally raised by epidemics of cholera and malarious fevers.

277. The causes of death were Fevers 5, Cholera 5, Phthisis 2, Heart
Causes of Death. disease 1, Bronchitis 1, Diarrhœa 1, and Unknown 1.

The Jail Returns of the station are not available for comparison.

278. A detachment of 148 men of the 20th Regiment, Native Infantry, occupied this station during the year.

The total admissions were 90, and the daily sick 3.1. No deaths occurred.

279. For a period of 13 weeks a small detachment of 76 men occupied the station of Chandah. The total admissions were 34, with no deaths.

280. The Native Corps, composing the strength of the Garrison, are shown in the following Table:—

[illegible]

**Strength, sickness, and mortality.
Comparison with former years.**

Years.	Admitted.	Daily sick.	Died.
1866 ...	840.8	49.9	9.4
1867 ...	392	25.1	7.1
1868 ...	635.7	25.3	4.6
1869 ...	562.1	32.8	12.9

It will be seen that the health of the Native Troops has been fairly good. There has been an entire absence of cholera from the station. The chief deaths occurred in the 38th Regiment Native Infantry.

Causes of death. 283. The causes of death were Fever 1, Rheumatism 1, Anæmia 1, Bronchitis 1, Diarrhoea 4, Dysentery 4, Delirium Tremens 1, Suicide 1, Aneurism of Aorta 2, Debility 2, and Tetanus 1. The fatal diseases it will be seen were chiefly diseases of debility, such as sepoys on foreign service are so liable to.

The comparison of the sickness amongst Europeans and Natives will be found at page 43.

The statistics of the Jail at Rangoon are not furnished to this office, the institution being subjected to the Civil Administration of British Burmah.

Thayetmyoo.

284. The Native Troops included in the Stational Statistics are shown in the following table:—

	CORPS.				RATIO PER 1,000 OF STRENGTH.			
	30th Regiment.		36th Regiment.		30th Regiment.		36th Regiment.	
	A.	D.	A.	D.	A.	D.	A.	D.
No. of weeks resident ...	6	44						
Strength ...	324	652						
Total admissions ...	7	199	21.6	205.2				
Daily sick ...	5.1	7.7	15.7	11.8				
Died in Hospital ...	1	1	3.1	1.5				
Do. out of do. ...	...	2	...	3.1				
Fevers ...	...	...	38	1	...	...	58.2	1.5
Cholera ...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	6	...	...	...	9.2	...
Diarrhoea ...	...	...	10	...	...	...	15.3	...
Hepatitis ...	...	...	1	...	...	...	1.5	...

**Strength, sickness, and mortality.
Comparison with former years.**

Years.	Admitted.	Daily sick.	Died.
1866 ...	490.3	22.8	8.8
1867 ...	475.3	33.3	11.8
1868 ...	207.6	16.5	11.2
1869 ...	349.7	11.7	6.6

285. The average strength was 589, the total admissions 206, the daily sick 6.9, and deaths 4; two in and two out of hospital.

286. The ratios of sickness and mortality are contrasted in the margin with those of former years.

287. The admissions at this station are low on the average, and the station is a healthy one for Native troops. But the European troops have suffered several severe outbreaks of cholera. Curiously enough not a single case of cholera occurred during the year amongst the Native troops, while H. M.'s 76th Regiment suffered severely.

Admissions. 288. The causes of death were fever 1, apoplexy 1, asthma 1, and homicide 1.

Causes of death. The table, contrasting the sickness of the European and Native troops, will be found at page 45.

Moulmein.

289. The strength and composition of the force are given in the following table:—

	CORPS.		RATIO PER 1,000 OF STRENGTH.			
	25th Regiment.	37th Regiment.	25th Regiment.	37th Regiment.		
No. of weeks resident ...	4	49				
Strength ...	529	471				
Total admissions ...	29	346	54.8	734.6		
Daily sick ...	24.2	15.7	45.7	33.3		
Died in Hospital ...	...	10	...	21.2		
Do. out of do. ...	1	5	1.9	10.6		
	A.	D.	A.	D.	A.	D.
Fevers ...	7	...	144	3	13.2	305.7
Cholera ...	...	...	...	...	...	...
Dysentery ...	3	...	20	...	5.6	42.4
Diarrhoea ...	2	...	8	2	3.7	17.0
Hepatitis ...	...	...	...	...	...	...

290. The mean strength for the year was 486, the total admissions 375, the daily sick 16.6, and the deaths 16; 10 in and 6 out of hospital.

**Strength, sickness, and mortality.
Comparison with former years.** The ratios of sickness and mortality are compared in the margin with the results of previous years.

291. The admissions are largely due to malarious fevers and bowel complaints. There was no cholera at the station.

Admissions. 292. The causes of death were fevers 4, anæmia 3, apoplexy 1, pneumonia 1, diarrhoea 4, accident 1, dyspepsia 1, and diuresis 1.

Causes of death. 293. In a sanitary point of view it is thought that the station suffers from too great luxuriance of vegetation, and the Committee suggest that the prisoners might be employed, at the end of the rains, in removing undergrowth.

Sanitary condition of station.

Tonghoo.

294. The station was occupied, for the period, by the troops shown in following table:—

	CORPS.		RATIO PER 1,000 OF STRENGTH.			
	12th Regiment.	16th Regiment.	12th Regiment.	16th Regiment.		
No. of weeks resident...	49	3				
Strength ...	574	281				
Total admissions ...	456	23	794.4	81.8		
Daily sick ...	22.9	11.4	39.9	40.5		
Died in Hospital ...	6	...	10.4	...		
Do. out of do. ...	...	...	...	...		
	A.	D.	A.	D.	A.	D.
Fevers ...	137	1	8	...	238.6	1.7
Cholera ...	...	...	...	...	...	...
Dysentery ...	63	1	...	...	109.7	1.7
Diarrhoea ...	34	...	...	...	59.2	...
Hepatitis ...	2	...	...	...	3.5	...

Strength, sickness, and mortality.
Comparison with former years.

Years.	Admitted.	Daily sick.	Died.
1866 ...	698.7	29.5	13.9
1867 ...	1,583.8	74.3	13.8
1868 ...	1,187.5	67.8	11.1
1869 ...	859.9	39.8	10.7

295. The average strength was 557; the total admissions 479; the daily sick 22.2; and deaths 6.

296. The ratios of sickness and mortality are contrasted marginally with the results of previous years.

297. There was no cholera, at the station, the chief disease being fevers and bowel complaints, with anaemia and beri-beri.

298. The causes of death were fever 1, phthisis 1, dysentery 1, debility 1, and beri-beri 2.

The sickness and mortality of the European and Native troops of the station will be found contrasted at page 47.

Shoaygheen.

299. This station was occupied by detachments of the 12th and 16th Regiments Native Infantry as below:—

	CORPS.		RATIO PER 1,000 OF STRENGTH.			
	Detachment 12th Regiment.	Detachment 16th Regiment.	Detachment 12th Regiment.	Detachment 16th Regiment.		
No. of weeks resident...	5	47				
Strength ...	112	113				
Total admissions ...	19	148	169.6	1309.7		
Daily sick ...	9.2	9.5	82.1	84.1		
Died in Hospital ...	...	2	...	17.7		
Do. out of do. ...	...	...	...	...		
	A.	D.	A.	D.	A.	D.
Fevers ...	5	...	40	...	44.6	...
Cholera ...	...	...	...	...	...	...
Dysentery ...	...	10	1	...	88.5	8.8
Diarrhoea ...	...	4	...	...	35.4	...
Hepatitis ...	...	1	...	...	8.8	...

Strength, sickness, and mortality.

Comparison with former years.

Years.	Admitted.	Daily sick.	Died.
1866 ...	1,905.5	54.9	7.8
1867 ...	3,351.5	115.0	7.8
1868 ...	1,708.3	68.3	33.3
1869 ...	1,491.0	84.8	17.8

300. The average strength was 112; the admissions into hospital 167; the daily sick 9.5; and the deaths 2.

301. The proportions of sickness and mortality are contrasted in the margin with the results of previous years.

It will be observed that the rate of admissions has been persistently high, chiefly owing to the prevalence of malarious fevers.

Causes of death. 302. The causes of death were bronchitis 1, and dysentery 1.

303. Some marshy land in the neighbourhood of the station it is proposed to drain by digging tanks and it is thought that the measure may be of use. There was no cholera in the station or district.

Sanitary works.

Singapore.

304. This station, under the Government of the Straits Settlements, was occupied by the 7th and 8th Regiments, Native Infantry, as below:—

	CORPS.		RATIO PER 1,000 OF STRENGTH.			
	7th Regiment.	8th Regiment.	7th Regiment.	8th Regiment.		
Number of Weeks resident ...	33	8				
Strength ...	295	372				
Total Admissions ...	313	41	1061.0	110.2		
Daily Sick ...	14.9	9.7	50.5	26.1		
Died in Hospital ...	2	1	6.8	2.7		
Do. out do. ...	...	...	...	...		
	A.	D.	A.	D.	A.	D.
Fevers ...	147	13	498.3	34.9	...	...
Cholera ...	...	...	...	...	...	...
Dysentery ...	17	4	57.6	10.7	...	...
Diarrhoea ...	32	4	108.4	10.7	2.7	...
Hepatitis ...	...	...	...	...	...	...

Strength, sickness, and mortality.
Comparison with former years.

Years.	Admitted.	Daily Sick.	Died.
1866 ...	1,353.2	31.2	5.3
1867 ...	1,285.4	36.1	11.9
1868 ...	745.1	40.5	10.5
1869 ...	1,450.8	41.6	12.2

305. The average strength was 244, the total admissions 354, the daily sick 10.9, and the deaths 3.

306. The ratios of sickness and mortality are given in the margin contrasted with the results of previous years.

307. The causes of death were Diarrhoea 1, Bright's Disease 1, and Concussion of Brain 1.

Malacca.

308. This station was occupied, for the whole of the year, by a detachment of the 7th Regiment, Native Infantry.

Strength, sickness, and mortality.

Comparison with former years.

Years.	Admitted.	Daily Sick.	Died.
1866	639.3	28.4	5.4
1867	526.3	21.6	5.2
1868	1119.4	35.8	6.2
1869	1030.0	42.8	7.5

309. The average strength was 133; the total admissions 137; the daily sick 5.7; and deaths 1.

310. The ratios of admissions and deaths are contrasted in the margin with the results of former years.

311. The admissions, in the last two years, have been largely due to intermittent fevers.

Admissions.

Deaths.

312. The only fatal case was due to Bright's Disease.

Port Blair.

Composition of force.

313. The Native Troops at this station were as follows:—

	Corps.				Ratio per 1,000 of Strength.			
	Sappers and Miners.		37th Regiment.		Sappers and Miners.		37th Regiment.	
Number of Weeks resident ...	52		44					
Strength ...	122		85		...		...	
Total Admissions ...	134		70		1098.3		823.5	
Daily Sick ...	6.2		4.2		50.8		49.4	
Died in Hospital ...	1		2		8.2		23.5	
Do. out do. ...	...		...		...		...	
	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	44	...	26	...	360.6	...	305.9	...
Cholera ...	...	...	...	...	...	...	...	...
Dysentery ...	1	...	6	...	8.2	...	70.6	...
Diarrhoea ...	5	...	3	2	40.9	...	35.3	23.5
Hepatitis ...	...	...	...	...	...	...	...	...

Strength, sickness, and mortality.

Comparison with former years.

Years.	Admitted.	Daily Sick.	Died.
1866	1497.3	46.5	5.2
1867	1871.4	67.2	23.8
1868	1231.7	53.0	32.8
1869	1051.5	50.0	15.4

314. The average strength for the year was 194; the total admissions 204; the daily sick 9.7; and deaths 3.

315. The proportion of sickness and mortality, are shown in the margin, contrasted with the results of previous years.

316. The detachments are said to have suffered much from fever in India before arriving at Port Blair, and some men also contracted fever at the Nicobars.

The mortality of prisoners on the Settlement, out of a strength of 1,419, was at the rate of 18.4 per mille.

The contrast of the European and Native Troops will be found at page 48.

317. During the year an important sanitary work, the reclamation of an extensive swamp in the mainland was begun.

Nicobars.

318. A detachment of the 37th Regiment, Native Infantry, occupied this station for 39 weeks of the year. As usual, on the first occupation of strange places, the men suffered severely from malarious fevers, each man of the detachment having been on the average about 3 times in hospital from fever.

Strength, sickness, and mortality.

319. The strength was 42, total admissions 191, daily sick 11.6, deaths in hospital 2.

320. The following Table will illustrate the reliefs effected in the Native Army during the year. The returns of sickness and mortality have not in all cases been received so as to show the admissions and deaths complete. It is satisfactory, however, to know that cholera only broke out in one Regiment, the 15th Native Infantry, in moving from Mercara to Banda *via* Calcutta. In two detachments of the Regiment the disease appeared amongst the camp followers after quitting the standing camp in Calcutta.

The mortality was principally confined to the followers of the corps.

Corps.	From.	To.	Date of	
			Departure.	Arrival.
3rd Regiment M. L. C.	Kamptee.	Saugor.	10th Dec. 1868.	9th Jan. 1869.
8rd do. Right Wing.	Do.	Jubbulpore.	13th do. do...	29th Dec. 1868.
6th do. M. N. I.	Vellore.	Nagode.	24th Nov. do...	25th do. do.
12th do.	Poona.	Tonghoo.	21st Dec. do...	10th Feb. 1869.
15th do. H.Q. & Rt.W.	Mercara.	Banda.	23rd do. do...	6th do. do.
15th do. Left Wing.	Calcutta.	Nowgong.	17th do. do...	16th Jan. do.
20th do. M. N. I.	Bellary.	Seetabuldee.	15th do. do...	24th do. do.
20th do. Detachment.	Secunderabad.	Chandah.	30th Nov. do...	27th Dec. 1868.
28th do. M. N. I.	Kurnool.	Vellore.	12th do. do...	23rd Nov. do.
30th do. do.	Thayetmyoo.	French Rocks.	18th Feb. 1869.	20th March 1869.
37th do. H.Q. & Rt.W.	Cuttack.	Talundah.	8th Jan. do...	11th Jan. do.
37th do. Left Wing.	Do.	Do.	11th do. do...	14th do. do.
40th do. M. N. I.	Nagpore.	Saugor.	22nd Dec. 1868.	29th do. do.
F. Company Sappers and Miners.	Secunderabad.	Bangalore.	14th Jan. 1869.	4th Feb. do.

PART II.
CIVIL.

SECTION I.

SANITARY CONDITION OF JAILS.

321. The statistics of disease and mortality in Jails are rendered in the forms adopted in previous reports, with the exception that the classification has been arranged in accordance with that laid down in the revised nomenclature of diseases.

Introduction.

The Central Jails at Vellore, Cannanore, and Trichinopoly are not yet completed. The suitability of the old buildings in the fort of Arnee, for conversion into a Central Jail, was the subject of a special report by Captain Tulloch, R.E., while officiating as Sanitary Commissioner during Dr. Ranking's absence on leave. The Central Jails inspected by the Sanitary Commissioner during the year were those of Cannanore and Vellore.

322. In the Appendix, page 24, will be found a table, kindly furnished by the Inspector-General of Jails, showing the increase and decrease of the Jail population.

Increase and decrease of Jail population.

From this table may be gathered the following particulars:

Remained on the 31st December 1868 10,146

Increase.

Imprisoned during 1869, and transferred from other Jails 18,153
Other sources of increase

Total increase 18,153

Decrease.

Liberated during 1869 14,175
Escaped 31
Transferred to other Jails 3,823
Do. beyond sea 26
Died { In Hospital* 419 } 424
 { Out of do. 5 }
Executed 74

Total decrease 18,553

Remaining on 31st December 1869 9,764

323. The average strength of prisoners in all Jails during the year 1869 was 9,833; of this number 7,913 were admitted into hospital, and 412 died within the period. The average number of daily sick was 307.6.

Strength, sickness, and mortality.

* Inclusive of seven deaths that occurred in the Jails at Dodabetta and Noddivurtum, which were abolished.

Reducing these figures to proportions per one thousand of strength we get:—

Admissions ... 804.7 per mille.
Daily sick ... 31.2 do.
Died ... 41.8 do.

324. Although the sick ratio has been lower in the past than in the previous years, it is noticeable that the death ratio has again increased. This is due in some degree to the occurrence of epidemic cholera in a few Jails in 1869, whereas the Jails, in common with the whole civil population of the Presidency, enjoyed a remarkable immunity from cholera in 1868. In some of the District Jails mortality has been high, independently of cholera.

The following table gives the results of sickness and mortality in Madras Jails from 1861 to the end of 1869:—

Years.	Admissions.	Deaths.
1861-62	1502.6	93.0
1862-63	1319.0	89.4
1863-64	1373.6	107.6
1864-65	1491.1	101.5
1865	1290.6	126.3
1866	1249.7	124.5
1867	1012.4	53.9
1868	869.15	33.8
1869	804.7	41.8

325. As a rule the Central Jails have been healthy. Not a single case of cholera occurred in either of them, although the disease prevailed in Salem, Trichinopoly, and in a village quite close to the Vellore Central Jail.

326. The following table shows the relative sickness and mortality in the Central and District Jails:—

	Strength.	RATIO PER 1,000 OF STRENGTH.		Died.
		Admitted.	Daily Sick.	
Central Jails	3,779	560.2	20.9	30.4
District do.	6,054	957.3	37.7	49.05

These figures point very clearly to the inference that the causes of sickness and mortality in the old District Jails are to be looked for, in some instances, in circumstances connected with the buildings or locality, rather than in the normal condition of Jail life under good management.

327. The District Jails in the towns, where the Central Jails are located, have, although showing higher ratio of admissions, had rather a smaller proportion of deaths and daily sick.

328. Some of the District Jails in the year under review have had a notably high death-rate, such as Cuddalore 115.3, Palamcottah 83.6, Calicut 102.3, Berhampore 162.1, Mangalore 97.9, Tranquebar 83.9. These excessive death-rates, except in the case of Berhampore, were not in any way attributable to cholera. Cholera occurred

Excessive death-rate in some of the District Jails.

District Jails—Health of.

in nine of the District Jails, but not severely except in Kurnool, Berhampore, and Nellore. In the Vellore District Jail, Tanjore, Cuddapah, Trichinopoly, Cuddalore, and the Madras Penitentiary it prevailed in a less degree. As compared with 1868, the mortality of the District Jails is high, but not so high as in 1867 as the following figures show.

Years.	Deaths to Strength per mille.
1867	54.4
1868	34.7
1869	49.05

District Jails classified according to locality.

329. Classifying the District Jails as in former reports according to locality, the following results are obtained:—

Locality.	District Jails.	Died per mille of Strength.
HILL STATIONS.	Lawrence Asylum ...	33.5
	Ootacamund ...	50.2
	Mean Mortality...	41.8
SEA COAST.	Cuddalore ...	115.3
	Madras Penitentiary ...	10.7
	Vizagapatam ...	36.0
	Tranquebar ...	83.9
	Paumben ...	19.0
EAST COAST.	Masulipatam ...	...
	Guindy ...	27.0
	Her Majesty's Jail, Madras ...	...
	Mean Mortality...	36.5
WEST COAST.	Calicut ...	102.3
	Mangalore ...	97.9
	Tellicherry ...	121.9
	Cannanore ...	37.9
	Cochin ...	...
	Mean Mortality...	72.0
PLAINS elevated and remote from the sea.	Bellary ...	40.6
	Cuddapah ...	73.8
	Kurnool ...	63.8
	Coimbatore ...	24.2
	Mean Mortality...	50.6
PLAINS of less elevation and on the coast line though not on the sea.	Madura ...	15.8
	Chittoor ...	3.1
	Vellore ...	42.1
	Berhampore ...	162.1
	Palamcottah ...	83.6
	Nellore ...	68.1
	Trichinopoly ...	53.3
	Guntoor ...	...
	Chingleput ...	32.2
	Tanjore ...	40.8
	Russelcondah... ..	44.4
	Rajahmundry... ..	15.6
	Mean Mortality...	38.3

330. As to the general causes of sickness and mortality in the Madras Jails, it may be said that diarrhoea and dysentery, and the class of scorbutic maladies (included in anæmia, atrophy, dropsy, and scurvy,) have been more prevalent, and more generally fatal than in the two former years, nearly one-half of the deaths have been due to these causes.

331. Epidemic cholera caused forty-three deaths against five in 1868; but there was no death from small-pox, while five occurred in 1868. Fevers were more fatal in 1869 than in 1868.

332. The jail population, while it enjoyed the immunity from serious diseases of 1868, which characterised that particular season, has in 1869 suffered, in some degree, from the same general causes which have affected the free population. The large mortality from diseases of impaired nutrition shows that the health of the criminal classes, before their confinement in jail, must necessarily have been low.

333. The jail diets as recently modified, leave nothing to be desired on the score of efficiency or economy; but the results show that a nutritious diet in jail will not in all cases counteract the tendency to diseases which irregular living in a former period of life may have caused. The death-rates of jails are undoubtedly influenced by the feeble health-state of many of the prisoners before their incarceration.

Coimbatore (Central Jail).

334. The strength of the Jail population was 969, the total admissions 569, the daily sick 16.1, and deaths 22.

335. The proportions of sickness and mortality are compared with the results of former years in the table given in the margin.

336. There was an outbreak of chicken-pox in the hot months of the year; but the sickness and mortality generally have been very low throughout the year. No cholera appeared in the jail, nor any serious epidemic.

337. Arrangements are being made for the filtration of the drinking water, the supply of which is plentiful, but, like all the Coimbatore water, somewhat hard and impregnated with nitrates. Conservancy is satisfactorily performed on the dry earth system.

Trichinopoly (Central Jail).

338. The strength of the jail population was 656, the admissions 211, the average daily sick 11.4, and the deaths 35.

339. The proportions of sickness and mortality are compared in the margin with the results of previous years.

The buildings are not yet quite completed, and the prisoners have been engaged in the construction of the jail buildings, as well as in extramural labour.

340. During the year, on the recommendation of a Committee, Government sanctioned the more general substitution of dry cereals for rice in all the jails, as well as a reduction of one-fifth of the quantity of food for non-labouring prisoners. These changes, the Medical Officer reports, have been in no way prejudicial to the health of the men.

Central and District Jail compared.

341. The health of the prisoners in the District Jail of this station was rather better than in the Central Jail.

	Admissions.	Deaths per mille.
Central Jail	321.6	53.3
District do.	301.3	31.9

The mortality was principally due to bowel complaints and anæmia. No epidemic prevailed.

Salem.

Strength, sickness, and mortality.

342. The average strength of prisoners was 596, the admissions 346, the daily sick 14.3, and the deaths 1.

Years.	Admitted.	Daily sick.	Died.
1867 ...	660.0	39.5	27.6
1868 ...	573.1	26.4	19.1
1869 ...	683.7	28.2	7.9

343. The proportions of sickness and mortality as compared with the results of previous years are shown in the margin.

344. The general health of the prisoners was good during the year. There was no mortality from those usually fatal jail diseases—dysentery and diarrhoea. Twenty-six cases of scurvy were admitted into hospital. No case of cholera occurred, though the disease prevailed to some extent in the native town.

The prevalence of scurvy does not appear to have been the consequence of the jail diet, but of a feeble health-state before imprisonment.

Land scurvy in many districts of Southern India is not an uncommon disease in certain seasons, and the variations in the rate of mortality from year to year in the jail population are often, no doubt, affected by the prevalence of disorders of this class.

Cannanore (Central Jail).

Strength, sickness, and mortality.

345. The average strength of prisoners was 301, the total admissions were 330, the daily sick 13.4, and deaths 21.

Years.	Admitted.	Daily sick.	Died.
1867 ...	1136.0	69.6	94.4
1868 ...	1150.6	42.4	42.4
1869 ...	1096.3	41.1	69.7

346. The proportions of sickness and mortality for the year are contrasted in the margin with the results of former years.

It will be noticed that these proportions are all very high, as compared with the results of other Central Jails.

The mortality during the past year was much in excess of what it was in 1868. Dropsies and bowel complaints were the chief causes of mortality. There was no cholera or other epidemic to account for it. The jail is still unfinished.

Vellore (Central Jail).

Strength, sickness, and mortality.

347. The average strength of prisoners was 451, the total admissions 185, the daily sick 8.9, and deaths 19.

Comparison with former years.

Years.	Admitted.	Daily sick.	Died.
1867 ...	607.6	26.9	3.8
1868 ...	844.3	41.2	20.1
1869 ...	410.1	19.7	42.1

348. The ratios of sickness and mortality are contrasted marginally with the results of previous years.

The ratios of admissions and deaths in the Vellore District Jail were 413.0 and 38.0 per mille respectively.

349. The buildings of the new Central Jail are rapidly approaching completion, and all the prisoners are accommodated in the new barracks. There was no cholera in the Central Jail, though a few cases, occurred amongst the prisoners located in the Fort. The sanitary arrangements of this jail are, on the whole, very good.

Rajahmundry (Central Jail).

Strength, sickness, and mortality.

350. The average strength of prisoners was 896; the total admissions 476; the daily sick 15.0; and deaths 14.

Comparison with former years.

Years.	Admitted.	Daily Sick.	Died.
1867 ...	1136.9	37.4	19.1
1868 ...	958.3	20.8	6.5
1869 ...	531.2	16.7	15.6

351. The proportions of sickness and mortality are compared in the margin with the results of previous years:—

The proportion of admissions and deaths in the District Jail for 1869 was 1136.3 and 11.3 respectively.

352. The mortality was due to fevers three, rheumatism three, dropsies three, respiratory disease one, venereal one, and diarrhoea three. The general health of the prisoners on the whole has been very good.

Not having been favoured with sanitary reports of the individual Jails, which might help to explain the variations in sickness and mortality, I am unable to offer any remarks on the special features of each Jail, beyond what may be found in the tabular statements.

POLICE.

353. For the particulars of the constitution of the Police Force and of the casualties therein, I am indebted to Major Hearn, the Inspector-General of the Force :—

Strength on 31st March 1869...	24,607
Increase by enlistment	2,237
<i>Decrease during 1869—</i>	
By dismissal	1,409
Resigned and deserted	1,520
Discharged on Medical grounds	470
Died	300
Total	3,699
<i>Strength on 31st March 1870—</i>	32,135
Mean annual strength	23,871
Admitted into hospital	11,751
Died	300
<i>Ratio per mille.</i>	
Admitted sick	492.2
Died	12.5

The following table shows the strength, sickness, and mortality for each "range" of the Force :—

Ranges.	Strength on 31st March 1869.	Strength on 31st March 1870.	Mean Annual Strength.	Total Treated.	Total Died.	Ratio per 1,000 of Strength.	
						Treated.	Died.
Madras Town ...	1,023	1,085	1,054	419	12	397.5	11.3
Northern Range.	6,208	5,827	6,018	3,897	112	647.5	18.6
Central " ...	6,979	6,373	6,676	2,845	64	426.1	9.6
Southern " ...	5,794	5,590	5,692	1,937	47	340.3	8.2
Western " ...	4,603	4,260	4,437	2,653	65	597.9	14.6
Total...	24,607	23,135	23,871	11,751	300	492.2	12.5

SECTION II.

GENERAL POPULATION.

354. The new forms of death register ordered by the Government of India, and recorded in Proceedings of Government, No. 209, dated 19th February 1870, will only come into effect from the 1st July 1870.

355. The returns for 1870 have been drawn up according to the form hitherto in use.

356. The population for which returns of death have been received is 24,633,127. The total population of the Presidency is said to be 26,097,021. It has not been found practicable at present to obtain returns from some of the Zemindary tracts and remote villages.

357. The total deaths reported in the year was 4,51,981, being in the proportion of 18.3 per thousand of the population for which the returns are available. A death-rate of 18.3 per thousand cannot be considered a high ratio of mortality. The returns probably understate the true mortality, though not to any very great extent.

358. Registration of deaths having been established in this Presidency for four years, it is of some interest to observe in what way the fluctuations in the causes of mortality occur. The following table will show the general results of the four years :—

	1866.	1867.	1868.	1869.
Population furnishing death registers	22,294,604	22,347,713	25,017,323	24,633,127
Total deaths	609,106	372,026	390,959	451,981
From cholera	260,961	33,205	8,036	21,034
Do. small-pox	23,106	27,907	34,330	17,448
Do. fevers	110,102	112,511	105,692	132,346
Ratio of deaths per thousand of population	26.9	16.6	15.6	18.3

The year 1866 was a period of unusual cholera prevalence in Southern India. In 1867 it prevailed to a less extent and in fewer localities; 1868 was a minimum year of cholera, but small-pox then attained its maximum.

The year 1869 was characterized by a considerable addition to the mortality from fevers. Small-pox had declined to a lower point than in any of the three previous years, while cholera sprang up epidemically in a few districts only, causing a rise in the mortality from 8,036 in 1868 to 21,034 in 1869.

359. From the table it would appear that it is to cholera epidemics that the main fluctuations in the annual death ratios are due. In the four years under observation we have observed a maximum of 2,00,961 cholera deaths (1866) and a minimum of 8,036 (1868). In the former year the general death ratio was 26.9 per mille, and in the latter only 15.6. The yearly fluctuations in fever deaths or small-pox, though considerable, do not affect the general ratios in the same way that cholera deaths do.

But the variations in the yearly death-rates from fevers and from small-pox are deserving of patient and attentive study, just as much as are the variations in cholera mortality.

360. In regard to malarious fevers, they one year with another cause greater loss to the population than any other disease or class of diseases. It is not only the number of persons who die of fevers, but the serious deprivation of health and labour power to those who recover of the attack, that requires thought

and consideration. For every fatal case of fever, there must be fifty or perhaps one hundred that recover after various periods of suffering and incapacity for labour.

361. The year 1869 has been remarkable for a considerable increase in the fever mortality of the population of the Madras Presidency.

362. Fever has been specially fatal in the districts of Godavery, Kurnool, Vizagapatam, Cuddapah, Ganjam, Malabar, and South Canara.

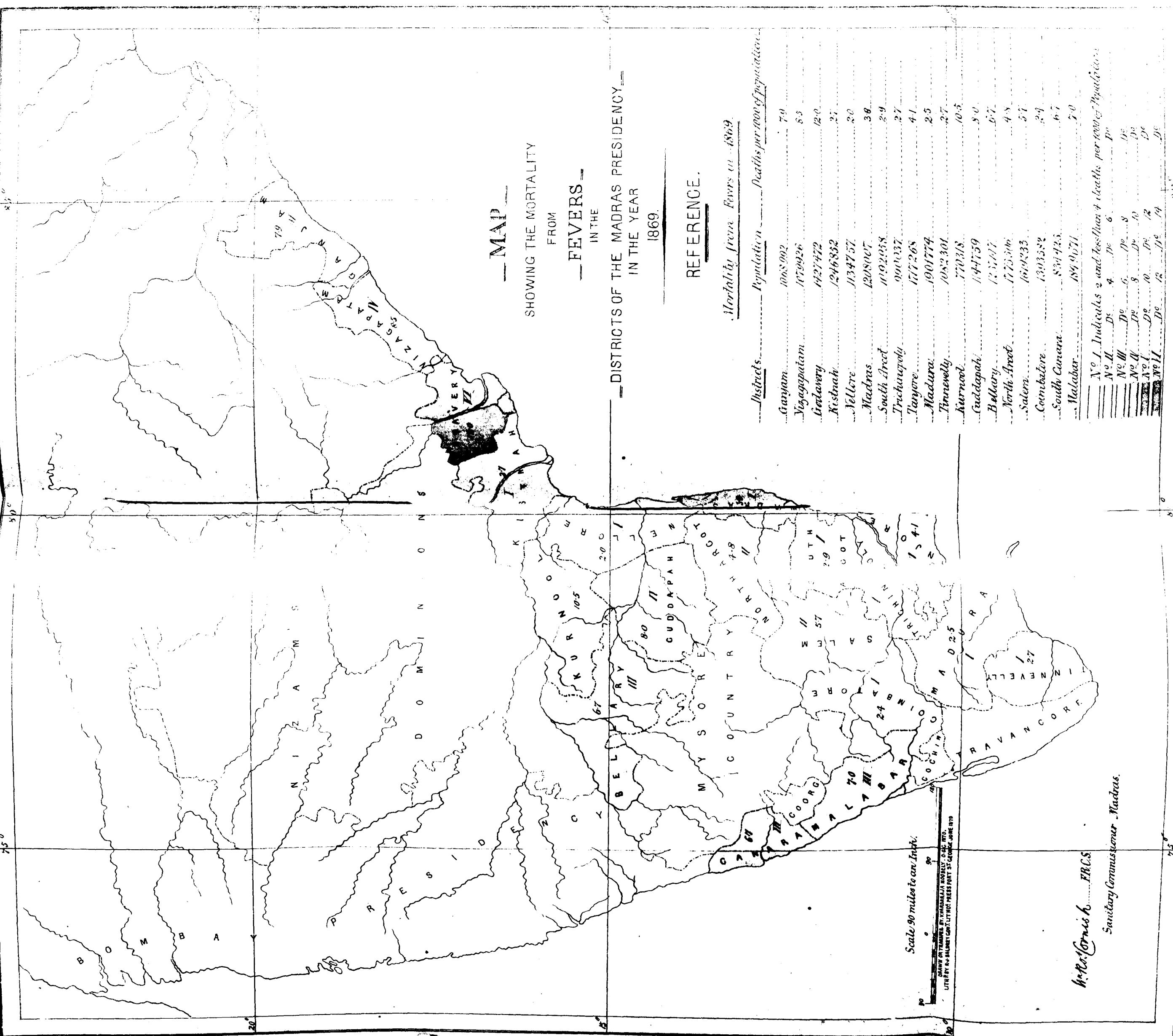
Prevalence of fever in certain districts. The small population on the Neilgherry Hills too has suffered unduly.

The highest mortality of all has occurred in the Godavery District (12·0 per mille), where a large tract of country is under canal irrigation. If a similar mortality had occurred in the adjoining irrigation district (Kistna) or in the delta of the Cauvery, (Trichinopoly and Tanjore) where irrigation has been practised for many years, it would have become a question whether some connection might not have been traced between the accession of fever and the influence of canal irrigation, but, as a matter of fact, fever has been more prevalent and fatal in the districts of Bellary, Kurnool, and Cuddapah for the past four years, where there are no irrigation works to speak of, than in the Godavery District for the same time, while the irrigated districts of Kistna, Tanjore, and Trichinopoly have had a fever mortality of *fifty per cent.* below that of the dry districts just mentioned.

The fluctuations in fever mortality in the several districts deserve to be carefully studied from year to year. So far as the figures of the four years enable one to come to any conclusion, the causes producing fever would appear to be operative over widely extended tracts of country at the same time, and to be in action for long periods together. It is noticeable that a high fever rate in Ganjam and Godavery has been co-existent with a similar high fever range in Lower Bengal, in Kurnool, and South Canara, places which are very wide apart.

363. The conditions of these districts, in regard to their meteorological peculiarities, will have to be studied in the endeavour to estimate rightly the causes contributing to the production of fever. The Meteorological Superintendent has not yet reduced and published the stational observations that are calculated to aid this branch of inquiry. No attempt therefore can be made to trace out the variations in the rates of fever mortality. A map is appended illustrative of the diffusion of fever in the year 1869.

364. An attentive consideration of the deaths from small-pox, in the four years ending 1869, will show the normal rise and fall of an epidemic spread over these years. The mortality increased from 23,106 in 1866 to 34,330 in 1868, when there was a sudden fall to 17,448 in 1869, thus exhibiting one of the marked features of small-pox, viz., its rapid declension in virulence, when the epidemic has attained its full height. In a considerable number of the districts small-pox attained its greatest prevalence in the year 1868, a year remarkable for the general absence of cholera. But it must not be concluded from this that cholera and small-pox alternate with each other in the periods of their maximum intensity. It is perhaps often so, but not always. In some districts small-pox and cholera are known to prevail badly in the same year. Generally speaking the small-pox months precede the cholera months in each year, that is, small-pox is seasonally active from November to April or May; while cholera, especially in the districts affected by the southwest monsoon, is most frequent in July, August, September, and October.



Districts	Population	Deaths per 1000 of population
Gyanam	1068002	7.9
Vizagapatnam	1079926	8.5
Guntur	1427472	12.0
Kistnah	1246832	2.7
Nellore	1134757	2.0
Madras	1208007	3.8
South Arcot	1102258	2.9
Trichinopoly	990137	2.7
Tanjore	1717268	4.1
Madurai	1901774	2.5
Tinnevely	1082301	2.7
Kurnool	770318	10.5
Cuddapah	1144759	8.0
Bellary	123417	6.7
North Arcot	1715306	4.8
Salem	1619233	5.7
Coimbatore	1393522	3.4
South Canara	834423	6.7
Malabar	1890671	5.0

W. P. G. S.
Sanitary Commissioner Madras.

Scale 90 miles to an Inch.

PRINTED BY THE GOVERNMENT PRESS, MADRAS, IN THE YEAR 1870.

365. The most remarkable thing about small-pox diffusion is the effect of seasonal causes in repressing it. Even when an epidemic in the second year of its rise is culminating to a maximum, some seasonal peculiarities of the months of May, June, July, August, and September tend to keep it back, as it were by force, so that it can only begin to advance again in the colder months of November, December, January, and February. This seasonal repression is common to every district, though the months in which it occurs vary slightly, owing possibly to local meteorological peculiarities. As a rule, the small-pox of the Malabar Coast may be regarded as typical of small-pox in all other districts.

Here from climatic or other causes, the disease is accustomed to rage with a virulence uncommon in other parts of India, and the maximum and minimum of prevalence are particularly distinct. The months of rapid rise are November, December, January, February, and March, while after March the fall is equally rapid to July, at which period of the year the disease remains stationary until the period arrives for another advance. The rise and fall of small-pox in the town of Bombay corresponds entirely with the rise and fall in our Western Coast Districts. On the Coramandel Coast Districts the period of greatest intensity is generally a little later than on the Western Coast, viz., April instead of March.

366. The use of vaccination in Southern India is now nearly seventy years old. Introduced in the year 1802 as a substitute for inoculation, it has been practised ever since with varying success, but up to this date, notwithstanding the substantial encouragement it receives from Government and Government officials, it has practically failed to moderate or control small-pox epidemics. The normal tendency of a small-pox epidemic in India is to rise gradually through three successive years to a maximum, and then to decline rapidly, remaining at a minimum for one, two, or more years.

367. It has been a subject of inquiry to trace from the wave lines of epidemic progress of small-pox in the last four years, whether any influence, justly due to the preventive powers of vaccination, could be shown in any particular districts. While it is possible that vaccination may in a few districts have exercised a controlling influence, the regular rise and fall of a general epidemic would seem to show that in the greater portion of the area of the Madras Presidency, vaccination has not up to this time had the repressive influence expected of it.

The explanation is undoubtedly due to the fact that the Public Vaccine Establishment, though large, is not able to spread itself out, so as to vaccinate even one-tenth part of the people.

368. The examination of prisoners admitted into the Jails throughout the country, prove that between seventy to eighty per cent. of those admitted bear marks of small-pox. It will be obvious, from this simple fact, that small-pox is a very prevalent, though not necessarily a very fatal disease, and that the efforts to substitute vaccination in its place have not yet been appreciated by the great mass of the people. It is difficult to form a conception of the ratio of mortality to attacks from small-pox in the natives of India. In the seasons of epidemic accession the virulence of the poison doubtless increases in power, so that the proportion of deaths to attacks would be higher in the acme of an epidemic than at other times, but there are at present no trustworthy figures to show what is the actual condition of the civil population in this respect.

369. The natural laws, which regulate the rise and fall of small-pox epidemics, however, when thoroughly understood, will, it is hoped, afford the data for a more efficient and economical employment of the labours of the officers of the Vaccine Department.

370. Thus to lessen the natural tendency which small-pox has to prevail every few years with intensity, the years of non-epidemic prevalence should be specially chosen for increased exertions of the Vaccination Department. Again, as small-pox is invariably repressed in its epidemic progress by seasonal influences, which begin generally in April or May, and end in October, the months between April and October should be a period of active work in a district, whenever the increased prevalence of small-pox showed that an epidemic was imminent.

371. In some very moist climates, vaccination does not succeed well in the months when the south-west monsoon prevails, but this applies only to a few of the districts of the Madras Presidency. In each district the seasonal prevalence of small-pox will be affected by the geographical position of the district, and the main point to be remembered is that the season of the year when small-pox is normally repressed should be utilized as fully as possible by officers of the Vaccine Department in protecting the young, so that when the time arrived for the return of the activity of small-pox, the pestilence should find fewer victims to prey upon.

372. If small-pox is ever to be stamped out in India, the study of the seasonal and cyclical influences, which repress and hasten the extension of the disease, can alone give force and certainty to the measures used. A colored map showing the relative proportion of small-pox mortality in each revenue district is appended.

373. The deaths from accidents, suicides, and murders, as in all other countries, show surprisingly little variation from year to year. The results for the four years are given below:—

	1866.	1867.	1868.	1869.
<i>Accidents.</i>				
Drowning ...	4,080	4,140	4,102	4,212
Snake-bite ...	1,895	1,811	2,345	2,817
Wild beasts ...	313	334	288	242
Other accidents ...	2,136	1,713	1,905	1,845
Total...	8,424	7,998	8,640	8,616
<i>Suicides.</i>				
Hanging ...	229	194	217	318
Drowning ...	313	309	255	313
Poison ...	28	40	41	51
Other suicides ...	53	72	89	113
Total...	623	615	602	694
Murders...	147	139	167	135

MUNICIPAL TOWNS.

Forty-five towns in the Madras Presidency have up to the end of 1869 been brought under the operation of the Towns' Improvement Act No. X. of 1865. These Municipalities vary greatly as to their populations and means of furnishing funds for local improvements, sanitary and other useful works.

The following table exhibits in alphabetical order the several Municipal institutions, with their assumed or ascertained populations and estimated income and expenditure for the current year:—

Statement showing the population, Death-rate, and the Ex

Name of Town.	Popula- tion.	General Death- rate per 1,000 of popu- lation.	ESTIMATE								
			Rates on Houses, Buildings and Lands.		Tax on Arts, Professions, and Trades.		Tolls.		Tax on Car- riages and Animals.		Registr- of Ca.
			RS.	A. P.	RS.	A. P.	RS.	A. P.	RS.	A. P.	RS.
Adoni ...	17,828	21.8	4,000	0 0	...	...	6,000	0 0	2,000	0 0	300
Anantapore ...	4,426	19.2	650	0 0	...	...	3,800	0 0	500	0 0	100
Bellary ...	37,015	11.4	19,000	0 0	...	...	15,000	0 0	8,500	0 0	1,000
Berhampore ...	20,570	14.5	2,500	0 0	2,000	0 0	4,700	0 0	900	0 0	550
Bimlipatam ...	5,192	10.7	800	0 0	2,000	0 0	5,400	0 0	326	0 0	30
Calicut ...	36,602	28.3	12,300	0 0	7,000	0 0	4,000	0 0	2,000	0 0	500
Cannanore...	Not received.		2,700	0 0	160	0 0	...	...	1,820	0 0	70
Chicacole ...	14,686	18.8	1,800	0 0	...	...	4,500	0 0	400	0 0	250
Cocanada ...	16,167	18.1	4,600	0 0	6,200	0 0	4,000	0 0	500	0 0	85
Cochin ...	9,940	26.5	4,375	0 0	3,150	0 0	...	...	92	0 0	45
Coimbatore ...	25,324	13.9	4,494	0 0	...	...	10,000	0 0	1,700	0 0	900
Combacorum ...	23,283	23.0	13,400	0 0	...	...	15,250	0 0	1,600	0 0	...
Conjeveram ...	31,939	14.7	8,000	0 0	3,000	0 0	5,100	0 0	1,100	0 0	500
Coonoor ...	Not received.		2,300	0 0	1,200	0 0	...	...	1,000	0 0	50
Cuddalore ...	27,424	12.3	7,400	0 0	...	...	9,000	0 0	3,100	0 0	900
Cuddapah ...	14,685	11.8	5,500	0 0	5,800	0 0	7,000	0 0	1,284	0 0	690
Cumbum ...	7,983	21.1	1,450	0 0	1,100	0 0	1,330	0 0	450	0 0	300
Dindigul ...	8,951	21.1	900	0 0	...	...	2,200	0 0	400	0 0	300
Ellore ...	19,940	23.8	2,300	0 0	2,700	0 0	4,000	0 0	800	0 0	400
Ghooty ...	4,097	21.4	1,500	0 0	...	...	5,000	0 0	400	0 0	200
Guntoor ...	15,184	13.2	1,500	0 0	4,000	0 0	5,500	0 0	1,100	0 0	600
Kurnool ...	23,816	32.0	5,000	0 0	...	...	7,000	0 0	1,600	0 0	450
Madras ...	450,000	25.0	226,535	13 8	76,472	15 1	45,240	10 10	44,074	8 0	13,008
Madura ...	Not received.		9,000	0 0	15,000	0 0	20,000	0 0	2,000	0 0	900
Mangalore...	23,668	22.1	6,500	0 0	5,500	0 0	950	0 0	950	0 0	230
Mannargoody ...	19,447	28.3	2,000	0 0	5,500	0 0	7,000	0 0	250	0 0	...
Masulipatam ...	27,510	11.7	4,200	0 0	4,000	0 0	7,500	0 0	1,300	0 0	275
Mayaveram ...	17,025	30.7	3,300	0 0	4,500	0 0	6,000	0 0	600	0 0	250
Negapatam ...	33,095	22.9	8,000	0 0	12,000	0 0	11,640	0 0	1,900	0 0	...
Nellore ...	22,851	11.7	6,340	0 0	...	...	5,000	0 0	2,000	0 0	800
Ootacamund ...	Not received.		12,350	0 0	3,600	0 0	...	...	2,500	0 0	250
Palamcottah ...	13,315	19.4	4,450	0 0	1,500	0 0	6,000	0 0	1,200	0 0	500
Palcondah ...	8,335	15.4	1,000	0 0	1,000	0 0	6,000	0 0	40	0 0	300
Palghaut ...	27,533	15.6	2,800	0 0	1,900	0 0	9,000	0 0	...	...	...
Rajahmundry ...	17,498	19.9	3,290	3 10	3,000	0 0	3,000	0 0	400	0 0	150
Salem ...	33,072	7.4	7,794	0 0	4,372	0 0	9,800	0 0	1,360	0 0	450
Tanjore ...	36,941	28.9	11,500	0 0	15,000	0 0	15,000	0 0	1,500	0 0	...
Tellicherry ...	17,726	25.8	6,000	0 0	2,000	0 0	...	...	534	0 0	24
Tinnevely...	21,553	18.0	4,841	0 0	4,085	0 0	7,500	0 0	1,200	0 0	800
Trichinopoly ...	53,623	18.3	14,000	0 0	14,000	0 0	22,000	0 0	6,000	0 0	1,600
Tuticorin ...	9,544	25.8	1,125	0 0	2,500	0 0	7,000	0 0	150	0 0	100
Vellore ...	30,529	15.8	5,700	0 0	6,200	0 0	8,600	0 0	1,200	0 0	900
Vizagapatam ...	16,867	36.6	3,000	0 0	7,000	0 0	10,400	0 0	2,500	0 0	150
Vigianagram ...	14,046	26.0	500	0 0	2,050	0 0	5,000	0 0	2,140	0 0	404
Wallajapett ...	10,993	15.1	1,700	0 0	3,000	0 0	4,500	0 0	30	0 0	500
...	...	...	226,535	13 8	76,472	15 1	45,240	10 10	44,074	8 0	13,008

Government has sanctioned a proposal made by the Sanitary Commissioner that he should, as other duties permit, make a tour of the several Municipal towns in the Presidency with the view of noting :—

1st.—What has been done since their establishment for the amelioration of the public health.

2nd.—The effects on public health of the measures adopted.

3rd.—How far the means at the disposal of the Municipalities are adequate to the introduction of further needful reforms.

4th.—To advise the local authorities and Government concerning measures of primary importance for the protection of the public health.

This duty will be accomplished, so far as is practicable, in the current year.

374. Contemplated changes in the Towns' Improvement Act of 1865, now under the consideration of the Legislative Council, will, if carried out, have an important influence on the future of the Municipal towns in this Presidency.

Review of the Municipal Act of 1865.

375. In a sanitary point of view, a grave defect of the present system of administration is that the tabulation of birth and death returns of Municipalities is carried on in the Revenue Department independently of the Municipalities, so that the local authorities, most interested in the healthy state of these towns, have no exact knowledge from week to week of the sanitary state of the population. Under the contemplated changes in the Act, this defect will be remedied, and the Municipalities will be responsible for the record of the vital statistics of the several town populations.

Defect in the present Act.

376. As the system of registration was only introduced late in the year it is not considered desirable to publish the results of a broken period.

Registration of Births and Deaths in Military Cantonments.

377. The registration of births and deaths in Jails, hospitals, and other public institutions has been in operation for the whole year, but the results when tested are not found to be particularly accurate.

Registration of Births and Deaths in Public Institutions.

The tables in the Appendix, pages lx—lxv, show the principal diseases causing mortality in the year 1869, and are useful in showing the stations where epidemic diseases have mostly obtained.

378. By the kindness of Dr. Mackenzie, C.B., C.S.I., Inspector-General, Indian Medical Department, I am enabled to give the following table, showing the number of persons treated in the Civil Hospitals and Dispensaries during the year :—

Civil Hospitals and Dispensaries.

These amount :—Europeans and East Indians, to		19,331
Do.	Natives	270,661
Total ...		289,992
Of the treated there died—		
Europeans and East Indians		106
Natives		1,736
Total ...		1,842

The particulars regarding each Civil Hospital and Dispensary form the subject of a special report from the Inspector-General, Indian Medical Department.

Table showing the number of Sick treated and Deaths in the Civil Hospitals and Dispensaries of the Madras Presidency during the year 1869.

Collectorates, &c.	Civil Hospitals and Dispensaries.	IN-PATIENTS.		OUT-PATIENTS.	
		Total Treated.	Total Died.	Total Treated.	Total Died.
Bellary	Adoni	52	3	...	...
	Anantapur	...	...	562	7
	Bellary	192	19	5,895	4
	Ghootty	197	12	1,633	13
	Hospett	45	1	1,139	1
	Total...	396	35	9,229	25
Gajjan	Berhampore	157	19	1,884	4
	Chicacole	139	5	3,165	1
	Kinney	85	8	3,622	4
	Total...	381	32	8,671	9
Malaba	Calicut	133	64	6,394	4
	Do. Leper and Small pox Hosp.	76	3	...	...
	Cochin	789	32	8,325	...
	Mercara	267	30	1,922	11
	Munjeri	264	11	1,192	6
	Pallipert Lazaretto	47	12	...	...
	Padghat	180	20	1,546	1
	Ponani	18	8	1,401	...
	Tellichery	159	13	3,127	2
	Goodalore	277	27	4,182	5
	Total...	2,370	200	31,389	29
Madras	Chingput	63	2	2,431	...
	Conjeveram	88	5	2,664	53
	Black Town, North Side	...	...	6,176	2
	Lying-in Hospital	1,732	51	7,657	...
	Triplicane	134	56	13,565	12
	Vepery	336	33	5,995	10
	Ive Infirmary	257	1	2,347	...
	Female Asylum	249	...	119	...
	General Hospital	2,773	132	6,639	2
	Leper Hospital	214	19	...	...
	Lunatic Asylum	189	18	...	...
	Male Asylum	179	...	...	...
	Native Infirmary	1,593	24	...	...
	Sydapett	...	...	2,397	14
	Total...	8,297	618	50,011	93
North Arcot	Chittoor	333	24	8,920	18
	Raipur	...	...	Return not received.	...
	Velore	227	18	5,140	1
	Total...	560	42	14,060	19
Karnool	Cumbum	14	3	2,339	5
	Kurnool	183	21	8,211	29
	Total...	197	24	10,520	34
Nellore	Nellore	351	25	5,051	5
	Do. Branch	...	...	6,229	...
	Ongole	...	...	Return not received.	...
	Total...	351	25	11,280	5
Godavery	Cocanda	229	14	2,515	4
	Do. Seaman's Hospital	45	...	...	...
	Rajahmundry	187	9	1,925	...
	Total...	461	23	7,440	4

Table showing the number of Sick treated and Deaths in the Civil Hospitals and Dispensaries of the Madras Presidency during the year 1869.

Collectorates, &c.	Civil Hospitals and Dispensaries.	IN-PATIENTS.		OUT-PATIENTS.	
		Total Treated.	Total Died.	Total Treated.	Total Died.
Coimbatore	Coimbatore	157	17	5,671	...
	Pollachy	241	12	2,753	4
	Total...	398	29	8,424	4
South Arcot	Chellumbrum	...	...	4,028	5
	Cuddalore	183	7	9,376	...
	Do. Old Town	78	4	5,308	12
	Total...	261	11	18,712	17
Kistna	Guntoor	74	10	2,466	3
	Masulipatam	71	5	2,615	2
	Total...	145	15	5,081	5
Tanjore	Cumbacorum	196	9	4,999	1
	Mamargoody	224	9	8,571	7
	Mayavaram	...	...	2,468	6
	Negapatam	150	13	6,257	5
	Sheally	...	...	2,891	3
	Tranquebar	138	10	2,158	5
	Tritrapundi	...	...	893	...
	Total...	708	41	28,147	27
Tinnevely	Palanecottah	366	24	2,000	...
	Tinnevely	21	1	2,787	...
	Total...	387	25	4,787	...
Trichinopoly	Trichinopoly	228	31	7,923	1
Madura	Dindigul	...	...	Return not received.	...
	Madera	347	13	10,916	4
	Raunacal	351	13	4,756	2
	Total...	698	26	15,672	6
Cuddapah	Cuddapah	395	17	7,543	...
	Maduapulli	...	...	997	5
	Total...	395	17	8,450	5
Mangalore	Mangalore	172	23	3,362	10
Vizagapatam	Vizagapatam	216	23	7,893	2
Salem	Salem	184	19	4,470	19
Neilgherries	Coonoor	185	19	1,367	7
	Kotagherry	...	...	2,728	8
	Ootacamund	252	24	45,65	...
	Total...	437	43	8,600	15
	Edyangoody	7	1	401	...
	Palcondah	...	...	Return not received.	...
	Secunderabad	...	...	Return not received.	...
	Kamptee	345	139	5,768	16
	General Total...	19,331	106	2,70,661	1,736

PART III.

MISCELLANEOUS.

GENERAL.

379. Surgeon H. B. Montgomery, Secretary to the Commissioner, who had been connected with the Sanitary Commission from the date of its formation in 1864, died on the 11th July 1869, after a brief illness. His long acquaintance with the duties of the office and his ripe knowledge of preventive medicine, were of great value to the public service. As a teacher of Hygiene in the Medical College, Dr. Montgomery's practical experience in the Sanitary Department was of peculiar benefit to all who had the advantage of listening to his carefully prepared, and thoroughly practical, lectures. The loss of such a public servant may truly be regarded as a public calamity.

380. Owing to the decision of the Government of India that a Medical Officer as Secretary was unnecessary when the Sanitary Commissioner was a member of the medical profession, the appointment of Secretary to the Sanitary Commissioner lapsed on Dr. Montgomery's death.

381. A proposal was made by the Sanitary Commissioner, after the loss of his Secretary, to re-arrange the Office Establishment, and the proposal was approved of by the local Government in G. O., No. 796, dated 12th June; but after some correspondence with the Government of India, the Commissioner was directed to reduce his establishment of clerks, &c., so that it might not cost more than the office establishment of the Bombay Sanitary Commissioner, who is still permitted the services of a Medical secretary.

Reductions as per margin have accordingly been effected, and the question of further reduction has been specially left open by the Madras Government for future consideration, after an experience of the working of the reduced establishment.

382. The Sanitary Commissioner, Dr. Ranking, having obtained privilege leave from 7th August to 22nd September 1869, Captain Hector Tulloch, R.E., was appointed to officiate in the office during Dr. Ranking's absence.

383. From the 1st April 1869 the Sanitary Commissioner and his establishment were transferred from the Military to the Civil Department, in accordance with G. O., No. 397, dated 27th January 1869.

384. The Sanitary Commissioner at the end of the year 1868 was engaged in inspecting the Military Station of Kamptee. During 1869 he inspected Bangalore twice, on account of outbreaks of diptheria and typhoid fever, regarding which separate reports were submitted; also the Military Stations on the Malabar Coast, the Lunatic Asylum at Trichinopoly, and Ootacamund, were inspected during the year.

By order of Government, the Officiating Sanitary Commissioner visited the old fort of Arnee, and reported on the practicability of converting the disused European barracks there to the purposes of a Central Jail.

385. The revised Nomenclature of diseases drawn up by the Royal College of Physicians, having been ordered to be used from 1st January 1869 in all Military and Civil Hospitals, has been adopted from that date for all the Stational and Statistical Returns received by the Sanitary Commissioner.

The Statistical Returns, therefore, do not, in some important respects, correspond or admit of comparison with the tables appended to former reports.

386. A most important despatch and code of instructions, drawn up by the Army Sanitary Commission, was received from the Secretary of State for India, in reference to a systematic investigation being conducted as to the origin and progress of cholera epidemics.

Hon. R. S. Ellis, C.B., Chief Secretary.
S. M. Hadaway, Inspector-General, British Medical Service.
W. Mackenzie, M.D., F.R.S., Inspector-General, Indian Medical Service.
Surgeon-Major J. L. Ranking, Sanitary Commissioner Madras.
Surgeon H. B. Montgomery, Secretary Sanitary Commissioner.

On receipt of the despatch and instructions, the Madras Government appointed a Committee, as per margin, to report on the best means of giving effect to the wishes of the Secretary of State for India in the Madras Presidency.

The Committee adopted the following resolutions:—

RESOLUTION 1. "The Committee resolve to recommend that authority be granted to the Inspector-General of the Indian Medical Department to print in the Government Press sufficient copies of the Register for recording cholera cases," and of the "Instructions for conducting an inquiry into cholera in India for issue to all Commissioned Medical Officers, and that the Register do constitute one of the official records of every Military and Civil Hospital."

RESOLUTION 2. "Resolved that Mr. Ranking be requested to communicate with the Board of Revenue, as to the practicability of adding 'bowel-complaints' to the diseases by which mortality is now tabulated in the Provinces, in view to giving effect to the suggestions at page 4, (Section II., Statistics of Cholera and Diarrhoea,) of the 'Instructions,' regarding a daily record of any evident increase of bowel-complaints and fevers."

RESOLUTION 3. "That separate daily returns of deaths by cholera be rendered by competent authority for all towns and villages at which cholera may prevail, such daily returns to be continued throughout the prevalence of the epidemic."

Return of Cholera Deaths for the day of 1869.

Name of Town.	POPULATION.		CHOLERA DEATHS.			Date of first Death.
	Males.	Females.	Males.	Females.	Total.	

RESOLUTION 4.—“That provision be made in the Municipal Act (X. of 1865) now undergoing revision, for a census being taken of all Municipal towns, and an accurate registration of all deaths by cholera, diarrhoea, dysentery, and fevers.”

RESOLUTION 5.—“That a Medical Officer be selected and appointed for the special inquiry contemplated in Section 5 of the ‘Instructions.’”

RESOLUTION 6.—“That a selected Medical Officer be attached to the Cholera Hospital sanctioned in G. O. G., No. 720 of 31st May 1869, to carry out the special investigations referred to in Section 6 of the said ‘Instructions.’”

387. The Madras Government sanctioned the employment of the Officer named for making the special investigations contemplated in Section V. of the instructions; but, owing to financial difficulties in India about that time, the operation of the order was suspended. Subsequently (Mr. Cornish having meanwhile succeeded to the office of Sanitary Commissioner for Madras) Government has been pleased to express approval of his carrying on these special investigations of particular stations in conjunction with his other duties, as opportunities may offer.

388. From the beginning of 1870, the system of daily reports of cholera deaths in large towns by the Police has been in operation. Daily progress of cholera reported by the Police. With care and attention it is calculated to throw much light on the movements of epidemics of cholera. The Sanitary Commissioner is now kept informed of the *daily* progress of cholera in each important town or village, and at the end of the year will be enabled to compile a tolerably correct history of such movements. Copies of these daily records are tabulated and furnished to the heads of the British and Indian Medical Departments for their guidance.

389. In order to give the earliest intimation of the advance of cholera it is highly essential that the dates of first cases should be accurately ascertained and reported. There is at present great difficulty in supplying this desideratum.

What with the apathy of the people in remote districts, their superstitious horror of cholera, and the difficulty of getting them to admit its presence amongst them, when the facts are sufficiently patent to others, it will probably take a long time before accuracy can be obtained in regard to remote villages.

390. The daily Police reports, so far as they go, are reliable, and when the system is further extended to rural populations they promise to be of great value hereafter in tracing the chief land-marks of cholera epidemics.

391. The detailed instructions for the observation of the movements of cholera were received too late in 1869, for any general action to be taken on them during the year, but copies of the instructions have been incorporated in the new Code of Medical Regulations, and will, in future, be followed by Sanitary and Medical Officers as far as practicable.

392. In respect of this cholera inquiry a narrative of the progress of the epidemic of 1869, as it affected the Madras Presidency, has Cholera report for 1869. been drawn up, illustrated by a map as suggested by Dr. Goodeve. A more suitable form of map will I hope, be designed to illustrate the progress of cholera for the present year. The present form is too cumbersome and the stational diagrams occupy too much space. A small map, showing

MAP

SHOWING THE MORTALITY

FROM
CHOLERA

IN THE

DISTRICTS OF THE MADRAS PRESIDENCY IN THE YEAR 1869.



No. I Indicates 0.1 and less than 1 death per 1000 of Population.

No. II do 1 do 2 do

No. III do 2 do 3 do

No. IV do 3 do 4 do

W. P. G. S.

Sanitary Commissioner for Madras.

401. As regards the utility of Lock Hospitals under the imperfect system lately in force, whereby only women known to be visited by European Soldiers were put on the Police register, it may be said that these institutions have effected less good than was expected of them, because, although the type of venereal disease has been favourably modified in the class of registered women, no check to the virulence of disease in the more numerous body of unregistered women could be attempted. At the Military station of Cannanore syphilis has, on several occasions, been quite stamped out, as regards the military; but being a sea port, new importations of the disease have, from time to time, occurred. The control of syphilitic disease by the old agency in this station has been on the whole very satisfactory.

Rules for Cholera
Camps.

402. The following modifications for the moving of cholera camps, &c., have been made during the year:—

G. O. C. C., No. 121, dated 4th September 1869.

Para. 481. "All, therefore, that need be laid down as an invariable rule is that the particular body of men, among whom cholera has appeared in an epidemic form, must be removed from the cantonments. If, for example, this body consists only of the inmates of some one building, the measures need only be applied to them; if some particular company or troop be attacked, it will be similarly dealt with. A whole regiment, or the whole of the troops at the station, need only be sent into camp, when it is found that measures already adopted have not stopped the progress of the disease, or there is reason to fear that they will be insufficient."

"With the sanction of Government, His Excellency the Commander-in-Chief begs General Officers and the Chief Administrative Medical Officers to adopt in practice the principle contained in the foregoing paragraph, and on no account, during the hot and rainy seasons, to vacate whole suits of barracks, because one or two, or even more have been infected with cholera. It is necessary only to evacuate such buildings as have actually presented cases. During the hot and rainy seasons, if other buildings are available, they should be used in preference to placing the men in camp. In short, at such seasons of the year, the camps must be held to be the last resource.

"This is more especially necessary when the ground is either covered with water, or when it is drying up in the months of August and September."

CIVIL.

403. The Municipal towns have, on the whole, done very fairly, considering the means at their disposal, in improving the sanitary condition of the people. Government having approved of an inspection of the Municipalities by the Sanitary Commissioner, it will be practicable in future reports to offer suggestions on the position and prospects of the several Municipalities in regard to public health.

404. Important Bills have been introduced into the Local Legislative Council for the raising of funds for, amongst other purposes, the expenses of a Medical and Sanitary Service for the country. As these measures are still *sub judice*, their scope and utility will fall to be noticed in a future report.

405. The greater part of the religious fairs and festivals held in 1869 passed off without any appearance of cholera; but an outbreak of cholera took place at sacred Triputti in August and September, from whence it was carried by pilgrims to Conjeveram, to Salem, and Coimbatore, and to Bangalore and the eastern portion of the Mysore Province.

406. Both upper and lower Triputti are destitute of municipal organizations, and there would appear to be special difficulties in the sanitary administration of these places during their temporary occupation by pilgrims. As Triputti appears to have been a centre of cholera diffusion again this year, (1870), it would seem to be very desirable that it should be brought compulsorily under the operations of the Towns' Improvement Act.

407. Cholera occurred also at Sreerungum near Trichinopoly at the festival in December to some extent. The disease had been prevailing for some weeks in the neighbourhood before it was reported to the authorities. I have remarked before on the difficulty of getting exact information in regard to dates of first appearance of cholera. Until immediate reports are insisted on, the district authorities will always experience a difficulty in knowing exactly what steps to take for the prevention of outbreaks of the disease at festivals. The general rules, drawn up for their guidance, can of course be carried out; but in cases where cholera is actually present at the place of the festival or immediate vicinity, it may, in many cases, be most advisable to dissuade as many persons as possible from exposing themselves to the risk, and in certain cases to prohibit the holding of feasts in cholera seasons.

408. The question of the drainage of a section of the Presidency Town has again come up for discussion, owing to the unsavoury condition of the Cooum river, the emanations from which were said to be injurious to the patients in the General Hospital in July and August. Government, in Order as per margin,* directed the assembly of a Committee, of which the Sanitary Commissioner was a member, to report on the best means of diminishing the offensiveness of the river.

The practical measures agreed to by the Committee consisted chiefly in a recommendation for the interception of the sewage falling into the river, and keeping the level of the water high enough to cover the mud-banks.

As these recommendations opened up the question of the drainage of a portion of the town on scientific principles, it was referred to the Municipality, and, as the Municipality has no money at present available for such works, they will probably be postponed *sine die*.

409. The experimental use of Madras sewage in irrigation has been a marked feature of the year. The experiment, though begun on a piece of heavy, salt clay soil, promised very well indeed so long as the rainy season lasted, but since the dry hot weather of 1870 has set in, the grasses have not thriven well under sewage. Madras sewage, unfortunately, has a basis of brackish water, and such water alone has an injurious effect on guinea grass, and when mixed with organic matter, the sewage does not lose its saltiness. This difficulty will, it is feared, in some degree mar the success of sewage irrigation, but when the fresh-water supply is brought into use and distributed over the

town, the fertilising properties of the town sewage will be much greater than they are now, and it is hoped that much of the sewage may then be successfully utilized, by its application to land, even in the dry season of the year. Madras "sewage" is merely the decomposing liquid of houses, "street drains," &c. It does not, theoretically at least, profess to contain the excrementitious matters of the population, and is consequently of but low value as a fertilizer.

410. There seems to be no reason to doubt that the reservoirs of the Red Hills and Cholavaram lakes will hold a sufficient amount of water to supply the population of Madras, even allowing for the contingencies of adverse seasons and deficient rain-fall.

The earth-works of the channel for bringing the water into the town are in a forward state, and the Municipal Commissioners have entered into a contract for laying the pipes of distribution, which work is to be completed and ready for use by the 31st December 1871 when it is hoped Madras will be reaping the benefits of its improved water-supply. I entertain, however, the gravest doubts as to the practicability of keeping an open channel of water, running through populous suburbs of the town, free from faecal and other objectionable sources of contamination. The natives of India have such dangerous prejudices regarding the power of water to purify everything it touches, without being itself rendered impure, that I cannot but feel that the large population of the Presidency town runs a great risk by the use of water that has travelled by the dubious course of an open channel. I entertain no doubt that hereafter it will be considered essential to the health of the people to bring the water from the reservoir at the Red Hills in closed pipes, and that the present expense of an open channel will have been incurred in vain.

411. On the 25th October 1869 the Sanitary Commissioner brought to the special notice of Government the danger which might be expected to attend the use of open channels for the conveyance of the drinking water of the inhabitants of Ootacamund from the reservoir near Major Morgan's property to the station, and suggested:—

1st.—That any further extension of cultivation upon the sides and slopes of the lands constituting the gathering grounds of the reservoir be prevented, and the grounds themselves strictly conserved.

2nd.—That a filter or filters be made for filtration of a limited supply of water for drinking and culinary purposes, that from these filters the water be made to pass into a closed reservoir or reservoirs.

3rd.—And thence be distributed by pipes to fountains placed at sites to be determined by the Municipal Commissioners and Executive Engineer.

These suggestions having met with the approval of the Government, the Executive Engineer was directed, in communication with the Municipal Commissioners, to prepare plans and estimates for the proposed scheme.

412. The subject of the water-supply to the Lawrence Asylum at Lovedale near Ootacamund, also formed the subject of a special report to Government, and the Government in approving of the several suggestions of the Sanitary Commissioner resolved to call for approximate estimates of the cost of giving effect to Dr. Ranking's proposal.

413. The census of the city of Madras has been postponed, so that the period may agree with the general census of all India, which is to be made in 1871. Much preliminary work, however, has been got through by the Census Committee.

414. The Sanitary Commissioner was appointed a member of a Committee to report upon the scales of diet in use in the Madras Jails, with the view of noting whether any reduction in cost might be effected, without interfering with the nutriment of the prisoners. The Committee came to the conclusion that this object might be best effected by the more general use of dry cereals in lieu of rice, as experience had shown that the use of the coarser food grains had been attended with the best results to the health of the prisoners. Government approved generally of the recommendation, and directed it to be carried out, as also a general reduction of one-fifth of the quantities in the scale (as originally intended) for non-labouring prisoners.

415. A correspondence having arisen on the subject of moving persons suffering from contagious diseases by rail, it was ordered by Government, in G. O., No. 1,816 of the 3rd June 1869, that when Medical Officers had occasion to send such cases by rail, timely intimation should be given to Station Masters, so that the necessary precautions for segregation and disinfection might be taken. The subject of the disinfection and purification of railway carriages in which cholera-stricken persons have been conveyed also came up for discussion during the year, and the requisite sanitary measures are in future to be taken by the railway authorities.

416. In obedience to the orders of the Government of India, No. 321 of 21st July 1869, arrangements were made to test the theory of Professor Pottenkofer, as to the relation between the level of subsoil water and cholera.

A well was sunk in the grounds of the Sanitary Commissioner's Office, and the requisite apparatus set up, and observations made daily for some months, of the level of subsoil water. The results of these observations, so far as they went, were nugatory. It was pointed out that the situation, from geological peculiarities, was not a good one for estimating the rise and fall of subsoil water, and accordingly Government have resolved to re-establish the experiment in one of the large river deltas, so soon as funds for any objects not absolutely emergent are available.

417. The forms of returns of vaccination have, for the sake of uniformity, been assimilated with those sanctioned by the Government of India, in No. 5,303 of 3rd December 1869, and the new forms will be used for the current year.

From a return with which I have been favoured by the Superintendent-General of Vaccination, it would appear that 2,55,685 persons have been vaccinated during the year in the several districts of the Madras Presidency, and that of these operations 2,30,207 or 90.03 per cent. were successful.

The numbers vaccinated under one year of age, however, are so few in comparison with the estimated number of births, that it is evident much has yet to be done, before the general population is efficiently protected from the dangers of small-pox.

418. The Health Officer entrusted with the duty of supervising the working of this Act in the town of Madras submitted a report to Government, embracing the results of his first six months' experience of the office.

During this time 826 registrations had been effected, and of the number of females examined, seventy-seven per cent. had been transferred to hospital for treatment. Much difficulty had been found in bringing certain classes of public women under the operation of the rules framed under the Act, and the numerous class of dancing girls attached to pagodas, &c., estimated at upwards of 1,200, had escaped registration altogether. The Health Officer was of opinion that many of these women would be glad to avail themselves of the advantages of medical treatment when ill, but for the dread of association with women of low caste.

419. For the purposes of the Act, the town was divided into five districts, coinciding with the Municipal assessment divisions, and an office for registry and examination of women established in each district. Seven "Goomastahs" were attached to each district: their duties being to seek out brothels and other places resorted to by prostitutes, and to warn all common women in their districts of the necessity of registering themselves, and to bring to the notice of the Health Officer all cases of unregistered public prostitution.

In the first six months there had been twenty-one prosecutions for non-registry and refusing to attend regularly, and nineteen convictions.

Although care was taken to entertain as Goomastahs men past the meridian of life, and who possessed testimonials of character, some had to be summarily dismissed for corruption.

"No female is subjected to an examination until it has been satisfactorily proved that she is a common prostitute. It is only after this has been established, or after a female has declared herself to be a common prostitute, that the personal examination is proceeded with."

420. In paragraph 30 of the report under notice, the Health Officer remarks on the frequency with which sailors, belonging to country vessels and steamers, spread venereal diseases amongst the women of the town. In the six months 132 vessels had anchored in the Madras Roads, carrying 3,118 Europeans and 5,764 Native Sailors, or a migratory population of 8,882, exclusive of those employed in the navigation of Native Dhonies (country crafts). The arrival of ships, with European crews especially, was found to have the effect of sending most of the European and East Indian prostitutes into the Lock Hospital, "although the stay of such ships was very short in the Madras Roads." It would appear doubtful whether the provisions of the Merchant Shipping Act of 1867 are sufficient to cope with this mode of dissemination of venereal disease, and whether some additional guarantee from masters of ships should not be demanded to prevent men going ashore, when labouring under venereal disorders.

421. In passing orders on this report of the Health Officer, the Madras Government remarked that dancing girls, against whom evidence of common prostitution would lie, were not exempted from the operation of the Act, and that it was the duty of the Health Officer to enforce the law as required on all such women.

422. It was anticipated that in consequence of this determination to enforce the law against the numerous women attached to temples, the accommodation afforded by the Lock Hospitals would hardly suffice for the number to be received, but practically the number of women found diseased on examination has not increased, and for some months past the admissions into the Lock Hospitals have been decreasing. As already noticed in the Military section of this report, the type of disease, both amongst men and women, has undergone most favourable changes consequent on the measures adopted under sanction of the Contagious Diseases Act.

W. H. C. [Signature], M.B., Surgeon,
Sanitary Commissioner for Madras.

APPENDIX A.

ANALYSES OF WATERS.

Tabular Statement of Analyses of Waters from different Stations of the Madras Presidency,

Station.	TANK OR WELL, &c.	SENSIBLE PROPERTIES.			CHEMICAL PROPERTIES.					OXYGEN ORGANIC MATTER (DR. AUGUS SMITH'S METHOD).			HARDNESS TO SOAP TEST.		
		Appearance.	Taste.	Odour.	Test paper reaction.	SOLID MATTER IN ONE IMPERIAL GALLON.			Oxidizable matter by permanganate solution.	Putrid.	Decaying rapid.	After 24 hours.	Temporary.	Permanent.	Total.
						Organic and other Volatile matters.	Inorganic.	Total.							
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Amree.	A. (1.) Well near the Pensioners' quarters in the Fort.	Clear.	Somewhat earthy.	None.	Alkaline.	2	100	102	1.178	...	...	...	15°5	2°5	18°
	B. (2.) Well near the Sub-sidiary Jail in do.	do.	Agreeable.	do.	Faintly alkaline.	...	...	97	0.072	...	...	...	12°	2°	14°
	C. (3.) Well near the Pagoda in do.	do.	do.	do.	do.	...	...	48	0.448	...	...	...	15°	2°	17°
	D. (4.) River well.	do.	do.	do.	Alkaline.	2	40	42	0.560	...	...	...	15°5	1°5	17°
Bangalore.	E. (1.) Horse Artillery Well, near N. E. corner of Dumloor Tank.	do.	Agreeable.	do.	Neutral.	2.4	6.6	9	0.4300	...	...	...	0°5	5°0	5°5
	F. (2.) Ulsoor Tank.	Milky, with sediment.	Earthy.	Earthy.	Faintly alkaline.	3.0	18.8	21.8	0.5824	...	...	...	6°	4°	10°
	G. (3.) Used by the Field Battery in the Race Course Barracks.	Clear.	Agreeable.	None.	Neutral.	Traces.	9	9	...	0.08750	0.14000	0.16343	...	...	...
	H. (4.) Do. do.	do.	do.	do.	Faintly acid.	2	6	8	...	0.0700	0.1225	0.06425	...	...	...
Bellary.	I. (6.) Received from Deputy Inspector-General.	Clear, transparent, no deposit.	Not unpleasant.	do.	Neutral.	3.0	11.3	14.3	0.1680	...	...	...	21°	5°	71°
	J. (6.) Received from Deputy Inspector-General.	Clear, transparent.	Agreeable.	do.	do.	3.6	16.0	19.6	0.1680	...	...	...	21°	31°	6°
	K. (7.) Do. do.	Opalescent, small reddish deposit, probably iron.	Very agreeable.	do.	Faint acid.	2.6	12.4	15.0	0.1680	...	...	...	14°	31°	5°
	L. (8.) Do. do.	Transparent, pale yellow straw colour.	Not disagreeable.	do.	Neutral.	4.2	10.6	14.8	0.1340	...	...	...	21°	51°	8°
Cannanore.	M. (1.) Upper Reservoir of the Bellary Citadel.	Clear.	Agreeable.	do.	Faintly alkaline.	Traces.	7	7	0.0960	...	...	...	4°	3°	7°
	N. (2.) Lower Reservoir of do.	Clear, if filtered.	do.	do.	do.	5	4	9	2.2480	...	...	...	2°	4°	6°
	O. (1.) Well in the Central Jail.	Clear.	Agreeable.	do.	Neutral.	0.5	5.5	6	0.4480	...	...	...	...	...	...
	P. (2.) Do. do.	do.	do.	do.	do.	1	8	9	0.8960	...	...	...	...	...	...
	Q. (3.) Do. do.	do.	do.	do.	do.	1	8	7	0.2200	...	...	...	...	...	...
	R. (4.) Do. do.	do.	do.	Unpleasant.	Acid.	1.5	3.5	5.0	0.4480	...	...	...	...	...	...
	S. (5.) Do. do.	do.	do.	None.	Neutral.	1	4	5	0.3260	...	...	...	...	...	...

by the Chemical Examiner, Madras, during the year 1869.

HARDNESS, CLARK'S SCALE 1° = 1 GR. OF CARBONATE OF LIME IN GAL.			Chlorides.	Carbonate of Lime.	Carbonate of Magnesia.	Carbonate of Iron.	IN SOLUTION AFTER BOILING.						AFTER SEPARATION OF CARBONATES.						REMARKS.
Temporary.	Permanent.	Total.					Lime.	Magnesia.	Sulphates.	Nitrates.	Ammonia.	Nitrites.	Lime.	Magnesia.	Sulphuric Acid.	Nitric Acid.	Nitrous Acid.	Ammonia.	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
...	...	...	40°9220	Much above average.	Much above average.	None.	Above average.	Traces.	Above average.	Present.	None.	None.	...	...	...	...	...	...	Of these waters No. 1 (A) is unfit for use, oxidizable matter and chlorides being excessive. Nos. 2, 3, and 4 are hard waters, containing carbonate of lime and magnesia in abundance. They are in consequence disadvantageous for culinary purposes, but not, I believe, injurious to health. (E) is a good water for domestic use. Filtration would probably remove great part of the organic matter. (F.) The solid matters were determined after subsidence. The amount of organic and volatile and oxidizable matters were still considerable.
...	...	...	11°4580	Above average.	Above average.	do.	Average.	None.	do.	do.	do.	do.	...	...	...	...	...	...	
...	...	...	9°4128	do.	do.	do.	do.	do.	do.	do.	do.	do.	...	...	...	...	...	...	
...	...	...	8°1944	Much above average.	do.	do.	Traces.	do.	do.	None.	do.	do.	...	...	...	...	...	...	
...	...	...	4°42	Above average.	Faint traces.	Distinct traces.	Slightly above average.	do.	Average.	Faint traces.	do.	do.	...	...	...	...	...	...	
...	...	...	6°097	do.	Traces.	Above average.	Average.	do.	do.	None.	do.	do.	...	...	...	...	...	...	Both these waters appear to be essentially good and wholesome. The second (H) requires attention, the presence of ammonia in the sample being very distinct. Both are soft waters. Both these waters are good for drinking and cooking purposes. The former of these waters (K.) is good. The latter (L.) is unfit for drinking or cooking purposes, being probably contaminated by putrescent organic matters. The Upper Reservoir is pure and good, and fit for any use. The Lower Reservoir is foul. The water contains much floating and suspended matters, and, in its present condition, is not fit for human use.
1°75	1°40	3°15	2°4553	Below average.	None.	Traces.	...	...	...	...	...	...	Average.	None.	Below average.	Traces only.	None.	None.	
1°7	2°8	4°5	1°8368	do.	do.	do.	...	...	...	...	...	...	do.	do.	do.	do.	do.	More than traces.	
...	...	...	40°512	Average.	Traces.	Average.	Average.	Average.	do.	None.	do.	do.	...	...	...	...	...	...	
...	...	...	6°7521	do.	do.	do.	Above average.	More than traces.	do.	do.	do.	do.	...	...	...	...	...	...	
...	...	...	2°4670	do.	do.	do.	do.	Average.	Small.	do.	do.	do.	...	...	...	...	...	...	The former of these waters (K.) is good. The latter (L.) is unfit for drinking or cooking purposes, being probably contaminated by putrescent organic matters. The Upper Reservoir is pure and good, and fit for any use. The Lower Reservoir is foul. The water contains much floating and suspended matters, and, in its present condition, is not fit for human use.
...	...	...	5°8400	Very little above average.	Average.	do.	do.	do.	Average.	do.	Traces.	Present.	...	...	...	...	...	...	
...	...	...	1°6370	Below average.	None.	None.	Below average.	None.	Very small quantity.	do.	None.	None.	...	...	...	...	...	...	
...	...	...	1°4000	do.	do.	Present.	Average.	do.	Below average.	do.	do.	Present.	...	...	...	...	...	...	
0°7	2°8	3°5	1°6350	do.	do.	Above average.	Below average.	do.	do.	do.	do.	None.	...	...	...	...	...	...	
0°7	3°5	4°2	2°4520	do.	do.	Present.	do.	do.	do.	do.	do.	do.	...	...	...	...	...	...	
0°7	4°2	4°9	2°4520	do.	do.	Traces.	do.	do.	do.	do.	do.	do.	...	...	...	...	...	...	
1°0	3°5	4°5	3°068	do.	do.	Faint traces.	do.	do.	do.	do.	do.	do.	...	...	...	...	...	...	
1°8	4°5	6°3	2°452	do.	do.	Traces.	do.	do.	do.	do.	do.	do.	...	...	...	...	...	...	

Tabular Statement of Analyses of Waters from different Stations of the Madras Presidency

Station.	TANK OR WELL, &c.	SENSIBLE PROPERTIES.			CHEMICAL PROPERTIES.								HARDNESS TO SOAP TEST.		
		Appearance.	Taste.	Odour.	Test paper reaction.	SOLID MATTER IN ONE IMPERIAL GALLON.			OXYGEN ORGANIC MATTER (DR. ANGUS SMITH'S METHOD.)			After 24 hours.	Temporary.	Permanent.	Total.
1	2	3	4	5	6	Organic and other Volatile	Inorganic.	Total.	Oxidizable matter by permanganate soly.	Putrid.	Decaying rapidly.		14	15	16
French Rocks.	T. (1.) Well in the Cholera Camp.	Clear.	Agreeable.	None.	Alkaline.	4	31	34	1.3400				13°	2°	15°
	U. (2.) Well in the Cholera Camping Ground.	do.	do.	Offensive.		2.5	16.5	19.0	2.6880				9°	3°	12°
	V. (3.) Well in the Cholera Encamping Ground.	do.	do.	do.	Faintly acid soon becoming alkaline.	2.5	16.5	19.0	2.6880				9°	3°	12°
	W. (4.) Do. do.	Clear, yellowish.	do.	None.	do.	2	17	19	2.4640				10°	2°	12°
	X. (5.) Do. do.	do.	do.	do.	do.	3	65	68	4.0320				5°	2°	7°
	Y. (6.) Do. do.	Yellow, much suspended matter and gas bubbles.	Nauseous.	Offensive.	do.	3	43	46	4.9280				6°-0	2°-5	8°-5
Madras.	Z. (1.) Well near Commisariat Bakery.	Clear.	Agreeable, somewhat unpleasant after remaining in bottle some days.	Alkaline.		1	17	20	1.7120				6°-5	3°-5	10°-0
	a. (2.) Sydapet.				Neutral.	6.720									
	b. (3.) Do.				Faintly alkaline.	2.016									
	c. (4.) Do.				Alkaline.	1.668									
	d. (5.) Do.				Alkaline decided.	1.232									
	e. (6.) Do.				do.	1.120									
	f. (7.) Do.				do.	7.168									
	g. (8.) Do.				Neutral.	.672									
	h. (9.) Do.				Faintly alkaline.	2.880									

by the Chemical Examiner, Madras, during the year 1869.

HARDNESS, CLARK'S SCALE 1° = 1 GR. OF CARBONATE OF LIME IN GAL.			Chloride	Carbonate of Lime.	Carbonate of Magnesia.	Carbonate of Iron.	IN SOLUTION AFTER BOILING.						AFTER SEPARATION OF CARBONATES.						REMARKS.
Temporary.	Permanent.	Total.					Lime.	Magnesia.	Sulphates.	Nitrates.	Ammonia.	Nitrites.	Lime.	Magnesia.	Sulphuric Acid.	Nitric Acid.	Nitrous Acid.	Ammonia.	
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
...	...	...	32.7000	Much above average.	Much above average.	Above average.	None detected.	None.	Below average.	None.	None.	None.	...	...	...	...	...	...	The amount of carbonates in this water is unusually large and the quantity of magnesium carbonate excessive. This renders it unfit for cooking and for drinking without previous boiling. Boiling will probably leave some magnesium chloride in solution, of which it is likely a large proportion of the "Chlorides" consists.
...	...	...	4.9106	do.	Above average.	Traces.	Below average.	None.	Average.	Present.	do.	More than traces.	...	...	...	...	...	...	
...	...	...	4.9106	do.	do.	do.	do.	do.	do.	do.	do.	None.	...	...	...	...	...	...	
...	...	...	4.0922	do.	do.	do.	do.	do.	Below average.	do.	do.	More than traces.	...	...	...	...	...	...	
...	...	...	8.1840	Above average.	Little above average.	Above average.	do.	Faint traces.	do.	do.	do.	do.	...	...	...	...	...	...	
...	...	...	8.1840	do.	Little.	Traces.	do.	do.	do.	do.	do.	do.	...	...	...	...	...	...	
...	...	...	4.6030	Below average.	Average.	Above average.	Average.	None.	Very small amount.	None.	do.	None.	...	...	...	...	...	...	
...	...	...	13.095	...	...	...	...	...	...	...	...	do.	...	...	...	...	...	...	
...	...	...	13.095	...	...	...	...	...	...	...	...	Traces.	...	...	...	...	...	...	
...	...	...	11.448	...	...	...	...	...	...	...	...	None.	...	...	...	...	...	...	
...	...	...	8.1840	...	...	...	...	...	...	...	...	Traces.	...	...	...	...	...	...	
...	...	...	75.296	...	...	...	...	...	...	...	...	None.	...	...	...	...	...	...	
...	...	...	50.740	...	...	...	...	...	...	...	...	Abundant.	...	...	...	...	...	...	
...	...	...	4.9106	...	...	...	...	...	...	...	...	None.	...	...	...	...	...	...	
...	...	...	52.380	...	...	...	...	...	...	...	...	do.	...	...	...	...	...	...	
The bottles containing V varied in their sensible properties, some being offensive, and others not.																			
W and X contain organic and oxidizable matters in excess, and are unfit for use.																			
V and W are hard waters, and also contain more oxidizable and organic matter than is desirable.																			
The odour of this water shows the presence of sulphuretted hydrogen. The amount of oxidizable matter shows the presence of putrescent organic material. Clearing out the well and putting a layer of clean sand at the bottom might render the water fit for the purposes intended for which it is at present unsuited.																			
(a, b, c, d, and f) All these waters are excellent, with the exception of No. 5 (e), which is slightly contaminated with organic matter.																			

by the Chemical Examiner, Madras, during the year 1869.

Station.	TANK OR WELL, &c.	SENSIBLE PROPERTIES.			CHEMICAL PROPERTIES.					OXYGEN-ORGANIC MATTER (DR. ANGUS SMITH'S METHOD).			HARDNESS TO SOAP TEST.			HARDNESS, CLARK'S SCALE 1° = 1 GR. OF CARBONATE OF LIME IN GAL.										REMARKS.									
		Appearance.	Taste.	Odour.	Test paper reaction.	SOLID MATTER IN ONE IMPERIAL GALLON.			Oxidizable matter by permanganate solution.	Putrid.	Decaying rapidly.	After 24 hours.	Temporary.	Permanent.	Total.	Chlorides.	Carbonate of Lime.	Carbonate of Magnesia.	Carbonate of Iron.	IN SOLUTION AFTER BOILING.							AFTER SEPARATION OF CARBONATES.								
						Organic and other Volatile.	Inorganic.	Total.												Lime.	Magnesia.	Sulphates.	Nitrates.	Ammonia.	Nitrites.		Lime.	Magnesia.	Sulphuric Acid.	Nitric Acid.	Nitrous Acid.	Ammonia.			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
Salem.	i. (1.) Well in Central Jail	Clear.	Agreeable.	None.	Slightly alkaline.	1	27	28	0.1344	...	...	...	10°	5°	15°	...	...	...	15.755	Much above average.	Much above average.	Above average.	Above average.	Above average.	Average	Traces.	None.	...	...	...	...	...	...	...	This appears to be a good specimen of water, although the amount of carbonates of lime and magnesia is high, rendering it comparatively unsuitable for cooking. Organic matter is very small in quantity.
	j. (2.) Do.	do.	do.	do.	Alkaline.	3	45	48	0.3360	...	...	...	10°	11°	21°	...	...	...	10.6397	Above average.	Some-what above average.	Faint traces.	do.	Faint traces.	do.	do.	do.	None.	...	...	...	...	...	...	This water is hard and not adapted to cooking purposes, but it will probably be found wholesome for drinking.
	k. (1.) Well near Barracks of the 2-21st Fusiliers.	do.	Good.	do.	do.	6	14	20	0.0720	...	...	...	8°	10°	18°	...	...	...	5.8520	Much above average.	Traces.	Average	do.	Traces.	Above average.	None.	do.	do.	...	...	...	...	...	...	The amount of organic matter in this water is considerable; but as neither ammonia nor nitrates were detected, it is probable that the contamination is accidental and remediable by cleaning out the well; with this exception the water is not objectionable.
Secunderabad.	l. (2.) Well behind Arsenal near Hajicareem's Shop.	do.	Agreeable.	do.	do.	5	14	19	1.1200	...	...	...	11° 05	4° 00	15° 05	...	...	...	4.8700	do.	Much above average.	Traces.	Average.	Above average.	Average.	Traces.	do.	do.	...	...	...	...	...	(1.) One bottle contained much suspended organic matter, (n) contains a disproportionate amount of chlorides, (l, m, and n) contain a considerable amount of organic matter, and the nitrates in (m.) were in excess.	
	m. (3.) Well in Lunkarkhana Lines.	do.	do.	do.	do.	5	36	41	0.5000	...	...	...	8° 00	7° 00	12° 00	...	...	...	9.1700	Average.	Above average.	do.	do.	Average.	do.	do.	do.	...	...	...	...	...	...		
	n. (4.) Well in Lines of D. Company, Sappers and Miners.	do.	do.	do.	Faintly alkaline.	4	52	56	0.4500	...	...	...	4°	10°	14°	...	...	...	27.0000	do.	Average.	do.	Above average.	Above average.	Above average.	do.	do.	do.	...	...	...	...	...		...
	o. (5.) Well in Lines of F. Company, Sappers and Miners.	do.	do.	do.	Alkaline.	1	33	34	0.3900	...	...	...	7°	8°	15°	...	...	...	11.8700	Above average.	Above average.	do.	Average.	Average.	do.	Traces.	do.	do.	...	...	...	...	...		...
	p. (6.) Nullagoontah Well.	do.	do.	do.	Faintly alkaline.	...	46	...	0.2520	...	...	...	8° 00	3° 05	11° 05	...	...	...	14.7310	Much above average.	Much above average.	None.	do.	Above average.	Average.	None.	do.	do.	...	...	...	...	...		...
Thayetnyo.	q. (1.) Well near the Canteen.	do.	do.	do.	Alkaline.	4	50	54	0.3360	...	...	...	17° 05	2° 05	19° 00	...	...	...	6.5470	do.	Above average.	do.	Scarcely any.	None.	Above average.	Present	do.	do.	...	...	...	...	...	...	This is a very hard water, but does not appear to be otherwise objectionable. The presence of nitrates seems to show some slight sewage contamination; but the nitrogen has probably been completely oxydized, and I do not consider the water unfit for use. Chemistry does not profess to detect cholera germs.

By the Chemical Examiner, Madras, during the year 1869.

APPENDIX B.

ABSTRACT OF CANTONMENT
SANITARY REPORTS.

**ABSTRACT OF REPLIES TO QUESTIONS SUBMITTED IN THE ANNUAL SANITARY REPORTS
FOR CANTONMENTS AND STATIONS.**

QUESTION 1.—What has been the state of the drainage of the station?

Bangalore	... Good— <i>vide</i> remarks of last year.
Bellary	... Very indifferent in british lines.
Berhampore	... Small passages open from each house and the refuse matter flows into the chief drain, which is generally very clean, emitting no bad smell.
Calicut	... The natural drainage is very good. The artificial drains are clean and in good order.
Cannanore	... Generally good. The civil division called Barnacherry requires some small additional drains at the sides of the streets. There is an offensive drain at the back of the married men's quarters at the Artillery Barrack. It has been reported on by the Medical Officer of the Corps, and something will soon be done to improve it.
Cuttack	... Very bad.
Fort Saint George	... Good.
French Rocks	... Good.
Hooshungabad	... The gradients within Cantonment limits are all favourable; but at the back of the station a nullah exists in which water stagnates. Owing to the special natural difficulties it is almost impossible to remedy the evil.
Kamptee	... The drainage of that part of the cantonment occupied by Native Troops is good. The drainage of the Lines and Barracks is good. There is no made-drainage for the portion of the town in military limits. The rain-fall passes off in rivulets according to the lie of the ground.
Malliapooram.	... The drainage (surface) has been satisfactory.
Mangalore	... Good.
Mercara	... Drainage good from natural configuration of ground.
Moulmein	... Good.
Palamcottah	... Satisfactory.
Palaveram	... Surface drainage in fair order.
Poonamallee	... Barrack drainage defective and insufficient. The east wing and S. E. corner of barracks damp in consequence; the refuse water soaks into subsoil outside the building, and this may be said of every building in Cantonment.
Port Blair	... The state of the drainage has been good. The Islands of Ross and Viper, on which the troops are stationed, would, on section, present somewhat of a triangular form, and the barracks are on the apex, so that the natural position for effective drainage is very good.
Quilon	... There has been no change since last year; many parts of the Cantonment are not drained at all.
Raepore	... The Military Cantonment of Raepore is situated upon an elevated piece of ground. "Surface drainage is good."
Ramandroog	... Good.
St. Thomas' Mount	... The state of the drainage, which has been surface only, has been satisfactory.
Seetabuldee	... The state of the drainage of the station has been good.
Secunderabad	... The drainage of the Civil Town has been very bad, but a commencement to remedy it has been made. The country over which Trimulgherry is built is granite and undulating, and some of its natural drainage lines are trimmed. The Native Infantry Lines are fairly drained, but all over the Cantonment there the natural water courses are dammed up to form small tanks.
Shoaygheen	... Good, water never lies, and the ground dries up quickly and thoroughly after the heaviest fall of rain.

Sumbulpore	... The drainage of the station is satisfactory, and is effected by natural means.
Trichinopoly	... The state of the drainage has generally been satisfactory.
Tonghoo	... A well-raised piece of ground having been selected for the Cantonment, drainage, which is for the most part natural, is good.
Vellore	... Indifferent.
Vizianagram	... Good.
Wellington	... Generally good.

QUESTION 2.—If still requiring improvement, are there any special natural difficulties to be encountered?

Bangalore	... There are no natural difficulties to be encountered. The drainage of the town is being proceeded with by the Municipal Commission. The drainage of the Race Course plateau is in abeyance, the scheme not having yet received the sanction of Government and allotment of funds.
Bellary	... The flat nature of surrounding country the only natural obstacle to efficient drainage.
Berhampore	... Stone-covered drains would answer best. No natural difficulties to be encountered.
Calicut	... One of the drains in Hospital requires repair. Its condition has been reported.
Cannanore	... No natural difficulties.
Cuttack	... No.
Fort Saint George	... Not susceptible of improvement at any reasonable cost.
French Rocks	... No.
Hooshungabad	... <i>Vide</i> remarks under last year's Report.
Kamptee	... I think some improvement might be made, but I cannot well judge of this until next monsoon.
Kurnool	... None.
Malliapooram	... No.
Mangalore	... No.
Mercara	... None.
Moulmein	... None.
Palamcottah	... Nothing particular.
Palaveram	... The street drains in the Parcherry of the European Infantry Company would require improvement. I am not aware of any special natural difficulties to be encountered.
Poonamallee	... No natural difficulties to improvement which is greatly needed, but would necessitate a great outlay: the soil is sandy, the climate dry, and during the rains the water which floods the plain for a time is quickly absorbed.
Port Blair	... No answer.
Quilon	... There are no natural difficulties to be encountered.
Raepore	... There is under construction a newly-made drain which runs directly round the outside limits of the Cantonment; when completed, it will carry off all surplus water, and will no doubt act beneficial upon the health of this Corp.
Rangoon	... The drainage of the European Infantry Barracks is excellent, as the locality is high. That in the Artillery Lines is not so good, the ground being level. No special interference is considered necessary. The drainage around the Native Infantry Hospital is good and satisfactory, that around Native Detail Hospital indifferent from its flatness.
Ramandroog	... None.
Saint Thomas' Mount	... There are no special natural difficulties to be encountered in the event of the drainage being extended.
Seetabuldee	... Does not require improvement.
Secunderabad	... The Civil Town and Trimulgherry bazaar urgently need a completed drainage the cooping up of the waters needs to be wholly forbidden, and there are no natural difficulties to be encountered.
Shoaygheen	... None.

Sumbulpore	... No special difficulties to be encountered.
Trichinopoly	... Improvement is required in some places. There are no apparent special difficulties to be met.
Tonghoo	... I do not think any part of the Cantonment actually occupied requires to be drained.
Vellore.	... No, I think not.
Vizianagram	... The drainage could be much improved by stone drains being laid down in the Regimental Lines; there are no special natural difficulties to be encountered.
Wellington	... No improvement required, and the hilly character of the station readily admits of a perfect system of drainage.

QUESTION 3.—*Are there any marshy lands in the vicinity? if so, to what extent, and has any means for improving their condition been suggested?*

Bangalore	... There is some marshy ground in the tails of the Dumloor and Ulsoor Tanks; the former is being drained by the Mysore Department Public Works.
Bellary	... No surface water lodges after rains in the numerous irregularities of the ground close to Barracks. Suggested proper levelling.
Berhampore	... Not in the immediate vicinity, but some distance from Berhampore the country is largely covered with water, especially this season as the last monsoon was heavy.
Calicut	... No.
Cannanore	... None.
Cuttack	... Yes, and suggestions have been recommended, but nothing has been done.
Fort Saint George	... None.
French Rocks	... In the vicinity of the neighbouring tank is some marshy land, and when the tank becomes low, there is still more. No suggestions have been made, but the ryots might, with advantage, be more restricted as to the quantity of water they are allowed to drain away.
Hooshungabad	... None.
Kamptee	... No.
Kurnool	... Near the Barracks there is a low lying spot from which a made-drain runs to the river.
Malliapooram	... None.
Mangalore	... Paddy fields to the east, extensive.
Mercara	... None.
Moulmein	... None.
Palancottah	... There are several tanks and a large area of wet cultivation, but no swamps or marshes.
Palaveram	... None in the immediate vicinity.
Poonamallee	... None, surrounding country under paddy, indigo, and raggy cultivation.
Port Blair	... There is an extensive marsh on the mainland about three quarter mile from Ross. A bund, 1,100 feet long and 15 broad, was constructed in the dry months of the year, but the complete reclamation of the swamp is not yet attained. Prisoners are still employed on the work.
Quilon	... Paddy fields exist in many parts of the Cantonment. They do not appear to have proved inimical to the health of the station, and are better under cultivation than if left as neglected swamps.
Raepore	... To the north-east are three large tanks which afford drinking water to the Cantonment.
Rangoon	... None that exercise any specific influence on the health of the British Troops. A swampy piece of ground on the west side of the Infantry Barracks was deemed unwholesome, and is being converted into a lake, as well for supply of water as for bathing and ornament.
Rangoon	... None likely to have any prejudicial effect, the chief one to the west of the European Infantry Barracks is under great improvement; all refuse water

	carried off, land raised, and the ground converted into two lakes: when completed it will be of great benefit.
Ramandroog	... None.
Saint Thomas' Mount	... There are no natural marshy lands in the vicinity of the station; there are portions of land on different sides of the station which are under wet cultivation, but these would not appear to exert a prejudicial influence upon the health of the station.
Secunderabad	... There are no real marshes; but all over the Cantonment there are great open wells and many small tanks which are used for an area under wet cultivation of 200 acres within the Cantonment; near it is a great tank about eight miles in circumference which irrigates lands for thirty miles to the east. The discontinuance of wet cultivation near Regiment has been recommended.
Sectaluldee	... There are no marshy lands in the vicinity.
Shoaygheen	... There is a marshy land at the northern extremity of Cantonment extending from the stockade to the Tonghoo river bank. A plan is under consideration to convert all swamps in town and station into tanks which, for years past, has bred fever and dysentery.
Sumbulpore	... The country surrounding the station is cultivated, and there are no marshy lands in its immediate vicinity.
Trichinopoly	... There are patches of marshy or swampy land in several places in the neighbourhood of the station on both sides of the road leading from the Railway crossing nearest the Cantonment to the Race Course. Water lodges to a considerable extent after rain-falls, but this could not well be remedied without interfering with the water-supply of a large tank used for irrigation purposes which is adjacent. There are two objectionable localities in the Cantonment which have been noted as such for some years. I refer to the rocky hollow around Mr. Beaumont's house and extending to the rear of the Public Rooms. Water accumulates at these places, and in the process of drying up becomes putrescent and offensive. There is a small tank-like excavation near to the road passing between the Collector's Cutcherry and the house occupied by Dr. Peterkin. There is swampy land on two sides of the Lock Hospital compound, which when dry is always fouled by ordure. There are excavations near to the Railway line in Cantonment, more especially at the crossing near the Civil Dispensary which contain foul offensive water. The Fort ditch has proved often very offensive, but it is now being slowly filled up by the Municipality. I have to state, however, that a great error has been committed by the Municipality in this work. I allude to the fact that whilst the Fort ditch has been and is being filled up, no provision has been made for disposing of the sewage, that is by diverting it to a locality where it would cause no injury to the public health. In October last the late Collector, then President of the Municipality, was twice addressed by me on this subject, but without any result. In my last communication to him I offered to co-operate with the Municipality by aiding them with my professional opinion on the question. I stated on that occasion that any satisfactory procedure, as regards the work to be done, could only be effected by the members of the Municipal Commission, Executive Engineer, and Sanitary Officer visiting the spot and ascertaining distinctly the nature of the locality, because a perfect system of drainage could be based only on a correct knowledge of the various levels. To this a reply was received, that the Municipal Commissioners and Executive Engineer had already taken the steps suggested, but that the work was one of great magnitude and extensive outlay. The mistake committed is that the filling up of the Fort ditch and the disposal of the sewerage were not taken into consideration simultaneously. Almost the entire surface water from the eastern water-shed of the higher land at this station passes towards the site of the Fort which is nearly the lowest level to be

found, and in the North-East monsoons, when the fall of rain is of the full average amount, cholera almost invariably appears in and around the Fort from December to the end of February, extending frequently to the Cantonment, that is to the Native Troops and community. It will be obvious, therefore, that the best mode of draining and carrying off of the liquid refuse of the town, that is the Fort, is a most important question in a sanitary vie w. There are other localities where water lodges of minor importance in and around the station, but all deserve attention.

Tonghoo	... A piece of low marshy land lies east of the 12th N. I. Hospital and runs north nearly to the river. I am not aware of any suggestions having been made for its improvement.
Vellore	... Not in the immediate neighbourhood; there is some wet cultivation some distance off
Vizianagaram	... There are no marshy lands in the vicinity of the Cantonment.
Wellington	... No.

QUESTION 4.—*Quality of drinking water and from what source obtained?*

Bangalore	... Good, from old Dhobies' wells at east corner of Ulsoor Tank.
Bellary	... Of fair quality, from wells in the neighbourhood.
Berhampore	... Drinking water is very good, and obtained in abundance from wells and tanks.
Calicut	... Good, from a well at the foot of a hill.
Cannanore	... The drinking water is excellent, and is from wells, some of which fail in the very hot weather.
Cuttack	... Good, obtained from wells.
Fort Saint George	... Comes from the "Seven Wells." For quality, please refer to Chemical Examiner.
French Rocks	... Quality good, had from the tank above alluded to, also from wells.
Hooshungabad	... Water is obtained from wells in Cantonment and from the river Nerbuddah. The supply is generally sufficient, and quality good.
Kamptee	... Good, both from numerous pukka wells and from the river Kanhan.
Kurnool	... From the river, good during nine months of the year; it is somewhat polluted when the stream becomes small by dhobies, and cattle going to drink.
Malliapooram	... From wells, quality good.
Mangalore	... Three wells, good.
Mercara	... Quality of drinking water is different; obtained from seven surface-drainage wells and one deep sub-soil one.
Moulmein	... Good, obtained from wells.
Palamcottah	... Good and ample, from wells.
Palaveram	... Good, from wells.
Poonamallee	... Good, from wells, raised and distributed in earthen pots.
Port Blair	... Drinking water is good. It is obtained from numerous wells on the Island, and is in sufficient quantity the greater portion of the year. Occasionally at the end of the dry season it is scarce; but, as the station progresses and new wells are made, this difficulty will not occur.
Quilon	... Good and abundant, obtained principally from wells. During the monsoons rain water might be utilized.
Raeppore	... The drinking water contains much lime in solution. It is obtainable from wells and tanks. The men preferring tank water.
Ramandroog	... Good; three springs on the sides of the hill.
Rangoon	... Water is obtained wholly from wells, which are numerous and afford abundance of wholesome drinking water except during March, April, and the first half of May, when the supply is less; and if the barracks were fully occupied inadequate. Abundant and of good quality, chiefly from wells.
St. Thomas' Mount	... The quality of the drinking water, which is obtained from different wells distributed over the station, is good.

Secunderabad	... Drinking water of the community generally bad in various degrees, almost all of it is from wells. Two great wells have been under construction at Trimulgherry for the Europeans, and an experimental well for five years past near the Cheetah Rocks. The value of the wells in Cantonment is estimated at near 3 lacs of Rupees.
Seetabuldee	... Good, obtained from wells.
Shoaygheen	... Good, from wells.
Sumbulpore	... The water is procured from wells and nullahs. The water obtained from the latter source is unfit for drinking purpose. The water of the well is very good.
Trichinopoly	... The quality of the water is generally pretty good, but there are exceptions. From wells and irrigation channels.
Tonghoo	... Good, it is obtained from numerous wells situated in various parts of the Cantonment.
Vellore	... Good and abundant, from tanks and wells.
Vizianagaram	... There is an abundant supply of water of good quality procured from wells.
Wellington	... Good, obtained from springs, which are kept free from leaves and refuse, and water filtered before use.

QUESTION 5.—*State of the Station as regards trees? Have any steps been taken to plant more, especially near Barracks?*

Bangalore	... Bangalore is fairly well wooded. A number of trees have been planted on the Race Course plateau. Some trees were also planted at the Infantry Barracks at the Rifle Ranges and on the General Parade Ground.
Bellary	... Station well furnished. Very few near European Barracks.
Berhampore	... The station is well supplied with fine trees; none near Barracks.
Calicut	... The base of the hill is almost entirely surrounded by trees. No.
Cannanore	... The trees are scarce, except to the east of the Hospital and Place of Arms where there is a very finely shaded avenue. The topes on the landward side approach close to the Cantonment, and there are numerous cocoanut trees scattered throughout it.
Cuttack	... Well supplied with trees. An avenue along Parade Ground road has been planted.
Fort St. George	... There are as many trees as can conveniently find a place in the Fort. A good many have been planted near the Barracks.
French Rocks	... In and immediately surrounding are a good many trees. More are being planted daily.
Hooshungabad	... Numbers of trees, chiefly Mango and Tamarind, form avenues, and all grouped in various directions; a sanitary precaution of much value.
Kamptee	... The number of trees is ample.
Kurnool	... The roads have been lined with young trees planted by prisoners.
Malliapooram	... The adjacent valleys densely wooded; fir trees exist on the high ground; but there is an avenue leading along the buildings. None have been planted of late.
Mangalore	... Trees are most numerous.
Mercara	... The station presents a bare appearance owing to the absence of trees. No steps have been taken to plant any.
Moulmein	... There are rather too many trees in the station already; no steps have been taken to plant more.
Palamcottah	... Trees have been largely planted in and about the station of late years; most of them are thriving, but a good many have been damaged or destroyed by cattle and goats. The stormy wet weather in November blew down many.
Palaveram	... Pretty well planted; some have been lately planted near the Hospital.
Poonamallee	... Well planted with trees, and young trees have been planted at sides of roads.
Port Blair	... The Island of Ross is fairly covered with trees; but Viper, on which there is one Company of Infantry, is very bare; planting is always in progress to replace the jungle trees that are felled.

Quilon	... The principal thoroughfares are lined on either side with large trees, and there are very few spots in the Cantonment requiring them.
Raepore	... There are a large number of young trees planted out; none have been planted near Barracks.
Ramandroog	... The hill is well covered with trees; no more required.
Rangoon	... Pleasant shade and much ornament are afforded by numerous, handsome forest trees judiciously suffered to remain. Several trees have been planted within the last few years chiefly along the main road on either side: many compounds have many trees (ornamental), and planting trees in spots constantly being carried on.
St. Thomas' Mount	... The station is well wooded; additional trees have been planted during the year, but owing to the scarcity of water the larger portion have died.
Secunderabad	... Still very bare of trees, but many have been and are being planted every where, and there are good nurseries.
Seetabuldee	... There are plenty of trees in the vicinity of the station; no steps have been taken to plant any more.
Shoaygheen	... There are few trees about the Barracks, but more is necessary.
Sumbulpore	... There are a number of large Mango trees in and surrounding the lines.
Trichinopoly	... The station's state in regard to trees is generally ample. Young trees are being planted by the Municipality.
Tonghoo	... There are a considerable number of trees in various parts of the Cantonment. None have been planted near the Barracks, European or Native, but a number of young trees have been placed around the Parade Ground.
Vellore	... The station is well wooded; no steps have been taken to plant more during the year.
Vizianagram	... The station is sufficiently wooded; young trees have been planted near the Barracks and elsewhere to replace those destroyed by the Cyclone of 1867.
Wellington	... Young trees, chiefly <i>Eucalypti</i> , are being planted about.

QUESTION 6.—*Superficial Space for European Troops in Barracks.*

Bangalore	... 85 feet.
Bellary	... About 85 superficial feet.
Berhampore	... —
Calicut	... 1450·97.
Cannanore	... Artillery 101 square feet, Infantry 124 square feet.
Cuttack	... None.
Fort Saint George	... 89·05.
French Rocks	... —
Hooshungabad	... No European troops.
Kamptee	... —
Kurnool	... No European troops.
Malliapooram	... 6·135 square feet for each man.
Mangalore	... —
Mercara	... No European troops.
Moulmein	... Do.
Palamcottah	... Do.
Palaveram	... Each man has about 180 feet; I am not aware of the space the Details of the 45th Regt. have; they are not included in this return.
Poonamallee	... 83·39 feet.
Port Blair	... 91·91 feet per man.
Quilon	... —
Raepore	... Not applicable to Native Regiments.
Ramandroog	... 75 square feet.
Rangoon	... Infantry 190·26 and Artillery 94 feet.
St. Thomas' Mount	... 90·57 superficial feet per occupant of Barracks.

Secunderabad	... 80 to 90 feet.
Seetabuldee	... 110·02.
Shoaygheen	... No European Troops stationed here.
Sumbulpore	... No European Troops at this Station.
Trichinopoly	... —
Tonghoo	... 227 feet per man, Left Wing H. M.'s 76th Regiment, 180 feet per man No. 3 Battery 5th Brigade Royal Artillery.
Vellore	... None.
Vizianagram	... No European Troops in the Station.
Wellington	... 70·74 feet per man.

QUESTION 7.—*Space in Hospital for European Troops.*

Bangalore	... The space in Hospital has been ample.
Bellary	... Cubic space in Garrison Hospital has been 2,977 feet; 2nd Regiment L. C., 3,825 feet; 16th and 34th Regiments, 2,000 feet.
Berhampore	... None.
Calicut	... 1,911.
Cannanore	... Artillery 149 superficial and 2,058 cubic feet, Infantry 258 superficial feet and 4,038 cubic feet.
Cuttack	... —
Fort Saint George	... 1,310.
French Rocks	... —
Hooshungabad	... No European Troops here.
Kamptee	... —
Kurnool	... There is a ward 36×20 feet especially for Europeans; there have been one or two treated, travellers from Secunderabad.
Malliapooram	... 6,135 superficial feet for each man.
Mangalore	... —
Mercara	... None.
Moulmein	... —
Palamcottah	... —
Palaveram	... About 200.
Poonamallee	... 101·26.
Port Blair	... 624 feet per man.
Quilon	... —
Raepore	... Not applicable to Native Regiments.
Ramandroog	... 100 square feet.
Rangoon	... Infantry Barracks, 190·26 feet superficial space; Artillery Barracks, 94 feet; Hospitals 173·33, and 400 feet respectively.
Saint Thomas' Mount	... 2963·67 cubic feet per patient in Hospital.
Seetabuldee	... Cubic space 1555·20, superficial feet 129·60.
Secunderabad	... 100 feet superficial space.
Shoaygheen	... —
Sumbulpore	... Nil.
Trichinopoly	... —
Tonghoo	... 227 feet per man Left Wing H. M.'s 76th Regiment, 1,625 feet per man No. 3 Battery 5th Brigade Royal Artillery.
Vellore	... 19,106½ cubic feet, superficial space 1,338 feet.
Vizianagram	... —
Wellington	... 100 to 104 square feet per man.

QUESTION 8.—*Space for Native Troops in Hospital.*

Bangalore	... Sufficient accommodation exists for 80 patients, allowing to each 1113·2 cubic feet and 72·66 superficial feet.
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Bellary	... Cubic space in Garrison Hospital has been 2,977 feet; 2nd Regiment L. C., 3,825 feet; 16th and 34th Regiments, 2,000 feet each.
Berhampore	... 1,410 cubic feet to each patient when the Hospital contains 16 beds.
Calicut	... No Native Troops.
Cannanore	... Superficial space 99 feet, cubic 1,314 feet.
Cuttack	... Superficial space 2,880 feet.
Fort Saint George	... ———
French Rocks	... The Hospital consists of one ward measuring 130 by 18 feet, contents in cubic feet 23,930.
Hooshungabad	... Being only a Wing of the Regiment stationed here, the Native sick have had a large amount of hospital space, and it has at no time fallen below the limit of 1,200 cubic feet per man.
Kamptee	... The averages are 112 superficial and 2000 cubic feet.
Kurnool	... The ward for Native Troops is 120 x 20 feet.
Malliapooram	... 152 superficial feet for each man.
Mangalore	... Cubic feet per man 1,797.
Mercara	... Do. do. 1631
Moulmein	... ———
Palamcottah	... The Native Regimental Hospital is a large building larger than is necessary for the sick of the Regiment. The two main wards will accommodate 47 sick; 30 in the larger ward, 17 in the smaller, allowing over 1,000 cubic feet for each patient. The smaller ward's verandahs are also available if necessary.
Palaveram	... Cannot be ascertained, as the number of sick is constantly varying, and often the Hospital is overcrowded.
Poonamallee	... No Native Troops.
Port Blair	... Sapper Hospital accommodates 12 men, and contains 19,600 cubic feet of air, giving each man 1,633½ cubic feet. Detachment 37th Regiment Native Infantry do. do.
Quilon	... The superficial space per man in Hospital has been 174.3 feet during the year.
Raepore	... Area per bed 99 superficial feet, cubic feet 1584.
Ramandroog	... Not applicable.
Rangoon	... Sufficient.
Saint Thomas' Mount	... 1465.4 cubic feet for each patient.
Seetabuldee	... Cubic space 1555.20, superficial 129.60.
Secunderabad	... 78 feet.
Shoaygheen.	... On an average each patient had 2,880 cubic feet during the year.
Sumbulpore	... 2021 cubic feet per man with 172 feet superficial space.
Trichinopoly	... The space for Native Troops in Hospital has been ample excepting in the Hospital of the 26th Regiment Native Infantry which is barely sufficient in the ordinary health-state of the Regiment now at Pootoor, and it would be quite inadequate in periods of unusual sickness.
Tonghoo	... The Hospital contained 72,874 cubic feet and 4,200 feet superficial area, and is intended to hold 42 patients.
Vellore	... 3,963 feet (superficial.)
Vizianagram	... 54,752 cubic feet.
Wellington	... None.

QUESTION 9.—Any marked difference in health of different bodies of European or Native Soldiers ?
if so, how accounted for ?

Bangalore	... H. M.'s 16th Lancers have been much more healthy than either the Infantry Regiment or the Artillery, chiefly, no doubt, because the men of the Lancers are in their prime and have never occupied any station in India except Bangalore. Whereas many of the men of the Royal Artillery and Royal Horse Artillery are of long Indian service, and have been stationed at
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unhealthy places, while the Infantry Regiment before coming here was for four years in Burmah. But partly also because the Cavalry Barracks are better than those of the Infantry, and there is much less intemperance in the Cavalry than in either the Artillery or the Infantry. No difference has been remarked in the Native Troops.

Bellary	... Nothing very perceptible.
Berhampore	... No European Troops here.
Calicut	... No Native Troops.
Cannanore	... There is no marked difference in the health of the European Infantry and that of the European Artillery; but the per-centage of daily sick has been, during the year, 3.66 among the European Soldiers, and 2.09 among the Native Soldiers. The per-centage of deaths of European and Native Soldiers has been 2.11 of the former, and .74 of the latter. There has been some difference in the sickness and mortality of the two Native Infantry Regiments. The 13th M. N. I. had 220 admissions during the year, 9 daily sick, and 4 deaths in hospital, and 3 out of hospital, total 7 deaths. The 25th M. N. I. had 395 admissions, about 19 daily sick, and 6 died in, and 7 out of hospital, total 13 deaths. The recent foreign service of the latter Corps may account for its greater sickness and mortality.
Cuttack	... None.
Fort St. George	... ———
French Rocks	... ———
Hooshungabad	... None.
Kamptee	... None whatever that I can perceive. My predecessor considered the 1st Lines to be more unhealthy than others, because cholera always broke out there. This is, however, plainly owing to the main road between Jubbulpore and Nagpore running through the centre of these lines.
Kurnool	... None.
Malliapooram	... No Native Troops stationed here, only one Company of Europeans.
Mangalore	... No.
Mercara	... None.
Moulmein	... The station is at present only garrisoned by Native Troops.
Palamcottah	... No European Troops.
Palaveram	... None.
Poonamallee	... ———
Port Blair	... There has been more sickness among the Native Troops than the Europeans. It is to be accounted for by the Detachment 37th N. I. having suffered much from fever in India, and the Sappers also. The latter have, in addition to ordinary military duties, much out-door labour, and are exposed more than the other troops during the monsoon. Many Sepoys also returned sick from the Nicobars, and thus swell the return.
Quilon	... No comparison can be drawn, as this is a single station.
Raepore	... During the past quarter a large proportion of the men of this Corps suffered much from ague, which must have some prejudicial effect.
Ramandroog	... Not applicable.
Rangoon	... The difference of health between the European and Native Troops, as shown in the annexed returns, is attributable to the constitution of the Indian being better adapted to withstand tropical influences. It will be observed that there is no information given with regard to Details of Native Troops and that the sickness among Details of British Troops, chiefly Invalids from out-stations, is very considerable. The Native portion of the Army are remarkably healthy.
St. Thomas' Mount	... None.
Seetabuldee	... No.
Secunderabad	... The European Artillery, Cavalry, and Infantry have been variously affected. The Artillery in Secunderabad in the old Bombproof Barracks, which has always been a healthy site, lost 14 per 1,000 of strength; but the Cavalry

in Secunderabad in the old unhealthy Infantry Barracks lost 31 per 1,000; the Artillery and Infantry at Trimulgherry lost respectively 32 and 30 per 1,000; the two Infantry Regiments and the two bodies of Artillery at Trimulgherry suffered at different rates attributed (but without data) to one of each of them having come from Burmah. Amongst the Native Corps in the Tarbau Lines fever prevailed epidemically, and about 100 men, women, and children died.

Shoaygheen	... Comparison cannot be made, as there were no European Soldiers located here.
Sumbulpore	... The health of the men has become very much impaired from repeated attacks of malarious fevers.
Trichinopoly	... The Native Troops in Pootoor are generally less healthy than those stationed at Edayatheroovoo, though of late years the difference has not been so great as in former times.
Tonghoo	... There has been no marked difference in health between the different bodies of troops. The garrisons composed of 350 Europeans and 551 Natives of all ranks.
Vellore	... None.
Vizianagram	... None.
Wellington	... —

QUESTION 10.—Any Epidemic? If so, state extent and dates of its progress, and decline.

Bangalore	... The usual epidemic of country sore-eyes among the children of all Corps and a severe epidemic of measles among the children of the Royal Artillery, attended with considerable mortality. Among the men of Royal Artillery and Royal Horse Artillery there were several cases of typhoid fever, but there cannot be said to have been an epidemic of it. A few cases occurred among men of the other Corps also. Diphtheria prevailed epidemically, but by no means extensively among the European children.
Bellary	... None amongst Europeans.
Berhampore	... None.
Calicut	... Not visited by any epidemic during the past year. A few cases of choleraic diarrhoea very closely, in one or two instances, assimilating true cholera occurred in August. It did not take an epidemic form, and did not invade any Public Institution.
Cannanore	... No epidemic.
Cuttack	... None.
Fort Saint George	... One case of cholera occurred in August in the Fort, which proved fatal.
French Rocks	... No.
Hooshungabad	... None.
Kamptee	... Two in the 32nd Regiment; but no death from small-pox, and seven deaths from the same disease in the Kamptee bazaar. But in only one week did the number of deaths exceed one.
Kurrool	... None.
Mallipooram	... None.
Mangalore	... None.
Mercara	... None.
Moulmein	... None.
Palamcottah	... None.
Palaveram	... An epidemic of cholera: first in a Detachment of H. M.'s 45th who imported the disease from Fort Saint George. The detachment was 66 strong, there were * seven cases of cholera and two of choleraic diarrhoea, of the former five were fatal, both the latter recovered. The disease spread to the bazaar where there were 24 cases of cholera, of these seven proved fatal. There were many cases of choleraic diarrhoea which all recovered.

* These cases ought properly to be debited against Madras (Fort Saint George). The Detachment, 45th Regiment arrived at Palaveram with the disease.

Poonamallee	... Ophthalmia was epidemic amongst women and children of the Depôt from 13th July 1869 to 29th October 1869; the women (mothers) evidently contracted the disease by direct contagion with their children. The disease was general and due, in the origin, to climatic causes spreading by contagion.
Port Blair	... There has been no epidemic.
Quilon	... No epidemic.
Raepore	... First cholera, number of men attacked 112, number of deaths; second ague which prevailed during the past quarter; admitted 662.
Ramandroog	... None.
Rangoon	... None.
St. Thomas' Mount	... —
Seetabuldee	... —
Secunderabad	... An epidemic of fever in H. M.'s 24th Regiment M. N. I. which commenced in June and lasted till cessation of rains. The cholera epidemic of 14th November 1868 continued till September 1869; in the Cantonment 512, deaths occurred and in Hyderabad and the Residency 4,987.
Shoaygheen	... None.
Sumbulpore	... The fever which is at all times endemic at this station, at certain seasons, becomes epidemic. During the past year two of these epidemics occurred, the first commenced about the end of March, began early in September, and attained its maximum intensity about the middle of the following month. At the commencement of December the disease began to decline both in severity and frequency, and is not epidemic just now.
Trichinopoly	... At the time of the Streerungum festival which commenced early in December, cholera appeared at that place, and the disease also prevailed in the Moosery Taluk to a considerable extent from October. The first case which occurred in the town (Fort) is stated to have been on the 16th December, and up to the 31st idem 173 cases occurred in and around the Fort, of which 126 proved fatal. These numbers include one in the Lunatic Asylum and one in the District Jail. Amongst the Native Troops of the station three cases occurred in the 26th Regiment N. I. at Pootoor with one death.
Tonghoo	... None.
Vellore	... —
Vizianagram	... —
Wellington	... —

QUESTION 11.—Any Cholera among Troops or Civil Population? If so, state particulars?

Bangalore	... No cholera among the Troops; but in the Pettah the disease prevailed to some extent in August and September. Estimated by the mortality at 48 per cent. to attacked, the type could scarcely be called a malignant one.
Bellary	... Two cases among Europeans, both recovered.
Berhampore	... A few cases of cholera occurred in the lines. The disease did not spread, but quickly disappeared.
Calicut	... No true cholera at all. <i>Vide</i> Answers to No. 10. The disease (choleraic diarrhoea) was confined to the Civil population only. A few East Indians or Portuguese and a few Natives suffered from it.
Cannanore	... None.
Cuttack	... Two cases (fatal) amongst Native Troops.
Fort Saint George	... Again cholera broke out in September; 10 admissions at this station, four of which proved fatal. Was epidemic in Native town.
French Rocks...	... No.
Hooshungabad	... A solitary indigenous case of sporadic cholera occurred during the hot months in my practice amongst the Troops here: this case had its origin from imprudence in diet. There was no evidence to prove that it had been

	imported from any place where cholera prevailed ; but a child had died a few days before in the same house from choleraic diarrhoea. There was no local, personal, nor atmospheric conditions to which the occurrence of this case could be reasonably attributed ; but very soon after this an epidemic outbreak of cholera broke out in the city of Hooshungabad, it was at the latter part of the month of March. I regret, I cannot furnish much reliable information as to its rise, and it is quite impossible to offer information as to dates.
Kamptee	... Five in the 1st Light Cavalry with two deaths, and four with one death in the 32nd. There were two epidemics in the bazaar at Kamptee, one lasting from the middle of April till the end of May with forty-one deaths, the other lasting from the end of July to the middle of September with 141 deaths.
Kurnool	... Sporadic cases of cholera occurred in the Regiment and Native population in March and April ; it never reached an epidemic form.
Malliampooram	... None.
Mangalore	... None.
Mercara	... None.
Moulmein	... None amongst the Troops. There were a few cases in the Native town during the early part of the year.
Palamcottah	... None.
Palaveram	... None.
Poonamallee	... No.
Port Blair	... Two cases were returned as cholera among the prisoners, but it is very doubtful if they really were that disease.
Quilon	... No.
Raepore	... A large proportion of the Civil population suffered much from cholera during May, June, and July, and twelve men in this Corps were attacked with this disease. It is attributed in the Civil population to famine, and in this Corps to importation.
Ramandroog	... None.
Rangoon	... I have heard of but one case of cholera among the Civil population. No cases of cholera occurred amongst the Indian Troops ; a few isolated cases occurred amongst the followers.
St. Thomas' Mount	... One man of the 45th Regiment obtained leave from the Cholera Camp of a Detachment of his Regiment on Palaveram plain, entered the Mount at 1 p.m., was very shortly afterwards attacked with cholera, was admitted into the Royal Artillery Hospital at 4 p.m., and died at 2 p.m. the following day.
Sectabuldee	... No cholera amongst Troops save one or two cases.
Secunderabad	... Twelve cases amongst Europeans and four deaths ; amongst Natives very extensive prevalence.
Shoagheen	... There has been no cholera amongst the Detachment of M. N. I. stationed here.
Sumbulpore	... No cholera prevailed among the Sepoys or their families during the year. A few sporadic cases occurred in the Civil population of the town.
Trichinopoly	... <i>Vide</i> question 10.
Tonghoo	... None.
Vellore	... Six cases of cholera occurred in the Fort Jail between the 14th and 19th July with two deaths, a few sporadic cases in the town also occurred in July and August. In October three cases occurred in the Regiment, viz., two on the 5th and one on the 10th ; two were fatal.
Vizianagram	... There was a slight outbreak of cholera in the Cantonment which first made its appearance on 26th July. Eight cases occurred in the Cantonment bazaar, five of which were fatal and three recovered ; none of the cases were treated in Hospital. No case occurred amongst the Sepoys.
Wellington	... None.

QUESTION 12.—*Any evidence of importation from infected localities ?*

Bangalore	... There was ample evidence that the disease followed the stream of pilgrims from the Triputti Festival throughout the district ; but it is believed that no communication between any of these pilgrims and the men first attacked in the Pettah could be traced.
Bellary	... Supposed to have made its appearance first among some tank-diggers employed on the Railway, and carried by them along the Ghooty road into Bellary.
Berhampore	... None.
Calicut	... None. The diarrhoea is attributable to bad food, indulgence in quantities of over ripe and rotten cucumbers, and the like.
Cannanore	... —
Cuttack	... None.
Fort St. George	... Yes, imported from Chindadrepet.
French Rocks	... No.
Hooshungabad	... The results of my enquiries at the time were as follows ; cases of cholera were of frequent occurrence in the valleys between this and Nursingpore, and letters were received from the latter place recording the occurrence of cases in the Jail and the town, and also at Gurmwarm which is only fifty miles from Hooshungabad. My mind is quite clear on the subject that the cholera existing here during the last hot weather was brought into the city by travellers arriving there at the onset of the disease from Jubbulpore and Nursingpore, as many of these men died soon after arrival at Hooshungabad. Having often studied the movements of cholera, and watched its progress in various localities, and during several outbreaks of the kind, I am certain the disease was conveyed and invariably was introduced among a body of men by new arrivals from localities where cholera was known to have occurred. A case occurred in my practice which very forcibly leads to these conclusions. A man arrived in this place when cholera was not prevalent, and he himself, to all appearance, was in perfect health ; but then he passed through and resided for short periods at places where cholera was prevalent, and where he must have imbibed its influence ; he was attacked with diarrhoea and vomiting and died shortly after his arrival. I firmly believe a person may carry the poison about in his system in a very diluted form for several days until some favourable opportunity arises for its further development, such as fatigue of mind or body, or even temporary exhaustion is sufficient.
Kamptee	... The remarks regarding the first case which occurred in April have been torn off the register. The first three cases which occurred in July were of beggars who had come in from the districts for sustenance.
Kurnool	... The disease was imported from the Wing of this Regiment that was in the vicinity of Kurnool in camp ; in the Wing it assumed an epidemic form.
Malliampooram	... None.
Mangalore	... —
Mercara	... —
Moulmein	... —
Palamcottah	... —
Palaveram	... Was imported by Detachment 45th from Fort Saint George.
Poonamallee	... No.
Port Blair	... No evidence of its importation.
Quilon	... —
Raepore	... Yes, evidence can be traced in this Corps to importation.
Ramandroog	... None.
Rangoon	... —
Do.	None.
St. Thomas' Mount	... <i>Vide</i> previous question.
Seetabuldee	... No.

Secunderabad	... None, but the G. Company brought it back from the south road. The 5th Regiment and 3rd Cavalry Hyd. Contingent took it to Lingasoooor and Hingole to Aurungabad.
Shoaygheen	... There has been no cholera in the town of Shoaygheen or district.
Sumbulpore	... Cholera had been prevalent in the surrounding districts for some months before it appeared in the town. It is therefore to be presumed that the disease was imported from infected localities.
Trichinopoly	... —
Tonghoo	... None.
Vellore	... The deaths in the town were of travellers from other districts. No evidence of importation in Jail or Regiment.
Vizianagram	... No evidence of importation.
Wellington	... None.

QUESTION 13.—*When disease was known to be in vicinity, were any steps taken to prevent introduction in Cantonment and with what success?*

Bangalore	... Yes, localities in which cases occurred were at once disinfected. The Police and persons in charge of Chuttrum were also instructed in regard to segregation.
Bellary	... Sanitary regulations were strictly observed in European lines with success
Berhampore	... None that I am aware of.
Calicut	... For a considerable time the men of the Detachment were not allowed to visit the town.
Cannanore	... —
Cuttack	... Yes; pilgrims to and from Juggernaut were not permitted to pass through the station.
Fort St. George	... A Regimental Order was published prohibiting the men from going to affected districts.
French Rocks	... No disease known to be in the vicinity.
Hooshungabad	... The sale of unripe fruit was prohibited; the men were not allowed to enter the city without a pass; and various other sanitary precautions were enforced.
Kamptee	... A Cholera Hospital was established on the other side of the Kanhan river.
Kurnool	... Guards were placed on the principal roads; guards were also placed round the encampment; nevertheless, I think, communication was going on between the two places.
Malliapooram	... When cholera existed at Calicut, thirty miles off, the Natives were prevented passing near to barracks.
Mangalore	... —
Mercara	... None.
Palamcottah	... None necessary.
Palaveram	... The Detachment was marched out of Cantonment, and communication between it and the bazaar strictly prohibited.
Poonamallee	... Yes; new arrivals were encamped a mile from Cantonment, and intercommunication prevented.
Port Blair	... They happened at an out-station, and a vigilant look out was kept to see if the disease re-appeared.
Quilon	... —
Raepore	... Stringent measures were put into force for the prevention of the disease with good results.
Ramandroog	... —
Rangoon	... —
St. Thomas' Mount	... The Troops at the Mount were prohibited from any intercourse with the Cholera Camp of the 45th Regt. at Palaveram, and with the district outside the station towards Madras where cholera was present then, and with the Bengalee Bazaar at the Mount, so long as cases of cholera as above stated were occurring.

Seetabuldee	... No disease was known to be in the vicinity of the Cantonment last year.
Secunderabad	... Its appearance here, suddenly on 14th November 1868, was the first intimation of its presence within 180 miles; but when it was approaching warned and indicated requirements.
Shoaygheen	... None was necessary.
Sumbulpore	... When cholera was known to exist in the town, steps were taken to prevent the people of the lines having any intercourse with the town-people, and other precautionary measures were had recourse to, which were entirely successful.
Trichinopoly	... The prevalence of the disease at Moosery was not timely reported by the Civil authorities to this department. When information was received (on 4th December) that the inhabitants of certain villages in that talook were suffering from cholera, Native Surgeon C. Bauloo Moodelly was directed by the Garrison Surgeon, at that time in charge of this office, to proceed to these villages for the purpose of instructing the people as to the treatment of the disease for whom medicines had been already supplied; also to ascertain the exact nature of the disease, and to suggest the instituting of sanitary measures, viz: cleaning of the ground surface near to the houses and huts, also the drains; fumigating, cleansing and whitewashing the interior of the dwellings in which cases had occurred, and preventing communication with other places as much as possible: directions as regards the diet to be observed were likewise given. Similar instructions were issued to the inhabitants of Streerungum when the disease appeared there. An Apothecary and Hospital Assistant were located at that place during the whole of the festival, and on the disease breaking out medical aid and medicines were furnished to those attacked. A Police Guard, with a Medical Subordinate attached, was placed at the Cauvery bridge to prevent persons, apparently sick, coming from Streerungum to the town and Cantonment of Trichinopoly, and only removed after the disease appeared in the town.
Tonghoo	... The disease has not appeared.
Vellore	... None.
Vizianagram	... None.
Wellington	... —

QUESTION 14.—*Sanitary condition of Latrines?*

Bangalore	... Fair.
Bellary	... Satisfactory.
Berhampore	... The Hospital (Military) Latrines are kept in good order; the dry earth system is adopted.
Calicut	... Good.
Cannanore	... Very fair.
Cuttack	... No latrines; one pukka was completed a month ago.
Fort Saint George	... Good.
French Rocks	... Good, with the exception of the Hospital ones.
Hooshungabad	... There is only one pukka-built latrine that which is attached to the Hospital. It is kept in good order and in accordance with recent improvements.
Kamptee	... Public latrines kept clean.
Kurnool	... Latrines are regularly swept and cleaned.
Malliapooram	... Latrines have been kept clean by hand-emptying and tarring of tubs.
Mangalore	... Good.
Mercara	... Good.
Moulmein	... None.
Palamcottah	... No public latrines in Cantonment. There are four within Municipal limits. In the Regimental Lines each house has a small private latrine on dry earth system.
Palaveram	... Latrines in fair order; none for the public.

Poonamallee	... Good.
Port Blair	... Good.
Quilon	... There are no public latrines, though they are urgently required.
Raepore	... Do. do. do.
Ramandroog	... Good.
Rangoon	... Kept clean and regular. Latrine clean and well looked after as far as practicable, but the difficulties in Burmah are great.
St. Thomas' Mount	... Latrines have been kept in good sanitary condition.
Seetabuldee	... Good.
Secunderabad	... Town latrines injurious near habitations; Native Cantonment Hospital Latrines inadequately small; European latrine good.
Shoaygheen	... Very objectionable; being a cess-pool, engenders malaria.
Sumbulpore	... No latrines at this station.
Trichinopoly	... The sanitary condition of the Regimental latrines is generally good. The public latrines, so far as their defective construction admits, are also kept fairly, but the Municipal Inspectors of Nuisances find it a difficult matter to keep them at all times in a satisfactory state.
Tonghoo	... Good as regards those of the European Troops, not so satisfactory for those of the 12th M.N.I. latrines.
Vellore	... In the Fort the latrines are well kept, none provided for the Lines or quarter-guard.
Vizianagram	... The Hospital latrine is the only one in the station; it is kept extremely clean.
Wellington	... Generally good.

QUESTION 15.—*Is the Dry Earth System adopted?*

Bangalore	... To a certain extent in the Cavalry and Infantry Barracks and the Hospitals of Europeans and Natives; but covering of the latrines and metal tubs are required for the more efficient working of the system.
Bellary	... No.
Berhampore	... Yes.
Calicut	... No.
Cannanore	... It has not been adopted in the Barracks and Hospitals of the European Troops nor in the Hospital of the 26th M. N. I. But it is partially in use in the Hospital of the 13th M. N. I., and is very well carried out in the Garrison and Lock Hospitals.
Cuttack	... Yes.
Fort Saint George	... Yes.
French Rocks	... Yes.
Hooshungabad	... It is efficiently carried out.
Kamptee	.. Not used on account of the expense.
Kurnool	... No.
Malliampooram	... No.
Mangalore	... Yes.
Mercara	... Yes, as far as practicable.
Moulmein	... None.
Palamcottah	... Yes.
Palaveram	... Yes, as far as means at our disposal will permit.
Poonamallee	... No.
Port Blair	... Dry earth is used in the vessels which are made of zinc. There are no means for separating the urine or fæces by complicated arrangements as exists in some latrines.
Quilon	... Yes, in the latrine attached to the Hospital.
Raepore	... Yes, as far as practicable.
Ramandroog	... No.
Rangoon	... Only partially, as full sanction is not yet obtained.
St. Thomas' Mount	... Yes, in Barracks.
Seetabuldee	... Yes.

Secunderabad	... No, not in the form ordered, but dryness is tried as far as possible.
Shoaygheen	... No.
Sumbulpore	... Yes, in the Hospital Privy.
Trichinopoly	.. Yes, in the Hospitals of the Native Regiments, but not in the public latrines.
Tonghoo	... Yes, but very partially in latrines of the 12th M. N. I.
Vellore	... Only in the Regimental Hospital.
Vizianagram	... Generally so.
Wellington	... Yes.

QUESTION 16.—*How is Sewage (especially of private houses) disposed of?*

Bangalore	... The sewage of the Barracks and Lines of Native Corps is used as manure by the ryots. Rules for the daily removal from private houses are about to be introduced.
Bellary	... Carried away in carts.
Berhampore	... The sewage is, I believe, taken away by persons appointed by the Municipal authority to a considerable distance and buried.
Calicut	... Carried away at night and thrown into the sea.
Cannanore	... Mostly by interment in parts of compounds remote from houses. The sewage of some private houses is thrown into the sea, as is that of both the European Barracks and their Hospitals. The Garrison Hospital sewage is sent to the sea. The night soil of the M. N. I. Lines and Hospitals and that of the Lock Hospital is all sent to the latrine pits at Kharkhat, half a mile outside of the Cantonment boundry on the east.
Cuttack	... The sewage is conveyed away by carts.
Fort Saint George	... Into the sea. That from public latrines is carted away to a distance from the Fort.
French Rocks	... The sewage and other products capable of being utilized in manure removed by ryots.
Hooshungabad	... The disposal of sewage opposite to houses is carefully attended to; is conveyed to a distance and buried in the filth pits.
Kamptee	... The sewage of private houses is mostly deposited in a pit dug for the purpose.
Kurnool	... The filth from private houses is taken away by sweepers and sold.
Malliampooram	... Sewage of Barracks discharged into the river close by. That of the Natives promiscuously around their huts.
Mangalore	... Carried to a distance.
Mercara	... The latrines, both Regimental and those attached to private houses, are cleaned out morning and evening, and the contents carried away in a cart and thrown into a large pit about 300 yards westward.
Moulmein	... The sewage is buried in appropriate pits, and lime is occasionally thrown in.
Palamcottah	... Chiefly by open drains, leading the sewage and rain-water into the channel or adjacent tank.
Palaveram	... Chiefly carried off into the main drains; all excreta carefully removed.
Poonamallee	... No sewerage. The sewage is conveyed away by hand labour and carts and buried outside Cantonment.
Port Blair	... Sewage is removed in tubs to pits on the mainland, buried and covered with layers of earth.
Quilon	... The sewage from the Lines is conveyed to a distance in carts, and there thrown into trenches. Recent inspections lead to the conclusion that such sewage is not buried as it should be. Much of the sewage of the Native part of the town is allowed to flow into a canal.
Raepore	... Buried in pits and covered in with earth.
Ramandroog	... Taken away by hand and thrown down a ravine, a distance of 200 yards from the dwellings.
Rangoon	... For the most part faecal matter is buried in the compounds. Improved system in this respect is to form the subject of consideration at the next meeting of the Cantonment Committee.

Rangoon	... The sewage of private houses is chiefly buried within the precincts of such houses, but the matter is under consideration.
St. Thomas' Mount	... Sewage is disposed of by removal and burial beyond the neighbourhood of houses.
Seetabaldee	... Removed to filth pits.
Secunderabad	... Buried, but private houses of Officers is in their own compounds, that of Civil community and of Soldiers taken to pits outside.
Shoaygheen	... It is removed by private servants about a mile from Cantonment and buried.
Sumbulpore	... The sewage of private dwellings is removed by toties and buried some distance off.
Trichinopoly	... By means of Municipal carts.
Tonghoo	... The excreta contained in the various Regimental Latrines are removed twice daily. No arrangements at present exist for cleaning private houses, but the subject has been considered by the Committee. Latrines are, I believe, to be erected in the various parts of the Cantonment.
Vellore	... Part is removed by Municipal carts, in some cases deposited in cess-pits which are cleaned periodically.
Vizianagram	... The sewage of private houses is deposited in pits dug in the compounds.
Wellington	... Sewage from latrines of Troops buried in pits two miles from the Barracks, that from private houses carried by hand into the jungle and buried. The Committee have decided on the building of latrines in private houses for servants, &c.

QUESTION 17.—*Sanitary state of Bazaars.*

Bangalore	... Fair.
Bellary	... Good.
Berhampore	... Good.
Calicut	... Tolerably good ; they are kept clean, but stalls have encroached upon and narrowed the streets in some places, also obstructed the drains. These matters are being remedied by Municipal Commission.
Cannanore	... Good.
Cuttack	... Bad.
Fort Saint George	... None.
French Rocks	... Satisfactory.
Hooshungabad	... Kept clean and in good sanitary condition.
Kamptee	... Very satisfactory.
Kurnool	... Good.
Malliapooram	... No nuisance from the bazaar close by ; but those of large Malliapooram (1½ miles off) unsanitary as regards crowding, but were kept clean.
Mangalore	... Clean.
Mercara	... Good.
Moulmein	... Pretty good.
Palamcottah	... Satisfactory.
Palaveram	... Clean as can be kept.
Poonamallee	... In good sanitary condition ; vicinity requires constant surveillance to prevent natives defiling the ground around.
Port Blair	... The sanitary state of the bazaars is tolerable, and a conservancy gang are employed in constantly sweeping and removing refuse.
Quilon	... Capable of, and requiring, improvement.
Raepore	... Good.
Ramandroog	... Good.
Rangoon	... Bazaars are now clean. Cattle are forbidden to be kept in the huts and houses occupied by Natives. Two commodious latrines are being built, and matters are improving daily.
Do.	... Kept clean and carefully looked after.

Saint Thomas' Mount	... Bazaars have been kept in a fair sanitary state.
Seetabaldee	... Satisfactory.
Secunderabad	... That of Secunderabad is in a very evil state, overcrowding every where, and great enclosures preventing the town opening up its drainage is very bad ; and that of Trimulgherry also needs care.
Shoaygheen	... Good.
Sumbulpore	... Tolerably satisfactory.
Trichinopoly	... Generally in fair order. There are exceptions, and constant vigilance on the part of the Municipal authorities is necessary.
Tonghoo	... There is only one small bazaar in Cantonment, it is kept tolerably clean.
Vellore	... Good.
Vizianagram	... Good.
Wellington	... Excellent.

QUESTION 18.—*Supposed number of Native and Civil Population of Cantonment.*

Bangalore	... About 80,000.
Bellary	... Over 18,000.
Berhampore	... About 20,000.
Calicut	... There are no Cantonment limits, properly speaking, so it is difficult to find out the number.
Cannanore	... 8,853.
Cuttack	... 2,620.
Fort Saint George	... A variable number of servants.
French Rocks	... 520.
Hooshungabad	... 848 males and 1,064 females.
Kamptee	... Males 17,247 and 16,180 females.
Kurnool	... 2,841.
Malliapooram	... Not known: Conjecturally the number within a radius of a mile might be 1,000.
Mangalore	... 1,230.
Mercara	... 1,216.
Moulmein	... 750.
Palamcottah	... 2,428.
Palaveram	... 3,000.
Poonamallee	... —
Port Blair	... The population on Ross Island consists principally of prisoners, number about 2,488. The free Native population is about 55. In Viper there are 1,212 prisoners and about 100 free Natives.
Quilon	... —
Raepore	... 2,935.
Ramandroog	... 425.
Rangoon	... I am not competent to reply with accuracy.
Do.	... 3,508.
Saint Thomas' Mount	... 10,010.
Seetabaldee	... 9,920.
Secunderabad	... 51,907, but census never fully completed.
Shoaygheen	... About 25 souls.
Sumbulpore	... 667.
Trichinopoly	... 3,455 males and 6,806 females.
Tonghoo	... 659.
Vellore	... 2,674.
Vizianagram	... 1,738.
Wellington	... About 1,200

QUESTION 19.—*Have they Public Privies?*

Bangalore	... Yes.
Bellary	... There are, not sufficient in number.
Berhampore	... No.
Calicut	... Yes, four at present.
Cannanore	... Six well-built public latrines.
Cuttack	... No.
Fort Saint George	... Yes.
French Rocks	... No.
Hooshungabad	... Two kutcha latrines, or rather sheds made of bamboo matting, are placed at the disposal of the public.
Kamptee.	... There are numerous public privies.
Kurnool	... No.
Malliapooram	... None.
Mangalore	... Yes, for males only.
Mercara	... Yes, two.
Moulmein	... No.
Palamcottah	... Yes, four under the Municipal Department.
Palaveram	... No.
Poonamallee	... ———
Port Blair	... There are public latrines at suitable distances on the Island, and they are kept clean by a sufficient number of toties, the contents being removed twice a day.
Quilon	... No.
Raepore	... No.
Ramandroog	... No.
Rangoon	... Two large latrines have been built for the Natives in the Sudder Bazaar, which will materially attend to health and salubrity of bazaar generally.
St. Thomas' Mount	... Six public latrines will be opened for use shortly.
Seetabuldee	... Yes.
Secunderabad	... Yes.
Shoaygheen	... No.
Sumbulpore	... No.
Trichinopoly	... Yes.
Tonghoo	... No.
Vellore	... Yes, two.
Vizianagram	... No.
Wellington	... Yes.

QUESTION 20.—*Sufficient in number and in proper order?*

Bangalore	... Nearly sufficient; more are being built.
Bellary	... No.
Berhampore	... ———
Calicut	... No; insufficient in number and of bad construction; new and better ones are being built.
Cannanore	... They are not sufficient in number. There are only six properly built privies for a population of 8,000. The latrines already built require roofing, tarring, additional toties, and also carts to remove the filth.
Cuttack	... ———
Fort Saint George	... Native females are not provided with latrine accommodation in the Fort. This want should be supplied.
French Rocks	... ———
Hooshungabad	... Yes.
Kamptee	... Yes.
Kurnool	... ———

Malliapooram	... No.
Mangalore	... Yes.
Mercara	... Yes, and kept in proper order.
Moulmein	... ———
Palamcottah	... Yes.
Palaveram	... ———
Poonamallee	... ———
Port Blair	... Yes.
Quilon	... No.
Raepore	... ———
Ramandroog	... No.
Rangoon	... Yes.
St. Thomas' Mount	... Not sufficient; at least four more additional latrines are required.
Seetabuldee	... Yes.
Secunderabad	... Insufficient in number; not in good order, in very unsuitable localities; and some in perilous proximity to dwellings.
Shoaygheen	... None.
Sumbulpore	... Nil.
Trichinopoly	... Not sufficient in number. The public latrines are walled enclosures, without roofs, from which the ordure is generally removed to a distance and buried. The urine is absorbed by the soil, which is objectionable. During the rains, from want of cover, the ordure by solution sinks also into the ground.
Tonghoo	... ———
Vellore	... They are insufficient in number, but kept clean.
Vizianagram	... ———
Wellington	... Not sufficient; but privies for Native Followers are in course of erection in all compounds.

QUESTION 20.—*Are Deaths among Civil Residents duly registered?*

Bangalore	... Not reliable as yet; but on Cemeteries and burning grounds being centralized, this will be done.
Bellary	... Yes.
Berhampore	... Yes.
Calicut	... Yes, only those at Government Public Institutions are registered by Medical Officers. Deaths among Civil residents are, I believe, registered by Subordinates under the Collector, and published by the Deputy Collector.
Cannanore	... Yes.
Cuttack	... So far as can be done.
Fort Saint George	... By the Municipality.
French Rocks	... Yes, in Office of Station Staff Officer.
Hooshungabad	... Yes.
Kamptee	... Yes.
Kurnool	... Yes.
Malliapooram	... No.
Mangalore	... Yes.
Mercara	... Yes.
Moulmein	... Yes.
Palamcottah	... Yes.
Palaveram	... I believe so; the Joint Magistrate can reply to this.
Poonamallee	... ———
Port Blair	... The deaths of all prisoners are duly registered, and a return made to the Police of the deaths among the Civil population.
Quilon	... Of such only as are brought to the notice of the Station Staff and Sanitary Officer.
Raepore	... Yes, by the Station Staff Officer.

Ramandroog	... Yes.
Rangoon	... Yes, came into operation this year.
St. Thomas' Mount	... Yes, when reported.
Seetabuldee	... Yes.
Secunderabad	... Yes.
Shoaygheen	... Yes.
Sumbulpre	... Yes.
Trichinopoly	... Yes, duly registered.
Tonghoo	... Yes.
Vellore	... Yes.
Vizianagram	... Yes, the deaths among the European and Native Civil population are registered by Station Staff Officer.
Wellington	... Yes.

QUESTION 22.—*Any unusual Sickness or Mortality amongst them ?*

Bangalore	... No.
Bellary	... No.
Berhampore	... None.
Calicut	... None.
Cannanore	... No unusual sickness. The mortality during 1869 was 178 against 146 deaths reported in 1868.
Cuttack	... None.
Fort Saint George	... No.
French Rocks	... No.
Hooshungabad	... No.
Kamptee	... There has been no unusual sickness or mortality among the Civil population except as per question 11.
Kurnool	... No.
Malliapooram	... No.
Mangalore	... No.
Mercara	... None.
Moulmein	... No.
Palamcottah	... None.
Palaveram	... Nothing, excepting the epidemic of cholera alluded to in question 10.
Poonamallee	... —
Port Blair	... No, on the contrary the mortality of the past year has been less than any previous period, being with a daily average of 7,419 prisoners 1·84 per cent.
Quilon	... No.
Raepore	... A large number suffered from ague. Number of deaths in 1869 has been in excess of 1868.
Ramandroog	... No.
Rangoon	... None.
St. Thomas' Mount	... Diarrhœa and dysentery would appear to have been more than usually prevalent during the last three months of the year.
Seetabuldee	... No.
Secunderabad	... Yes, cholera has been severe and 321 deaths from it in 1869. In the epidemic from November 1868 to September 1869, 512 deaths.
Shoaygheen	... No.
Sumbulpore	... No.
Trichinopoly	... Cholera prevailed slightly during the month of December and still continues on the increase.
Tonghoo	... No.
Vellore	... None.
Vizianagram	... No.
Wellington	... None.

QUESTION 23.—*If so, state supposed Cause ?*

Bangalore	... —
Bellary	... None.
Berhampore	... —
Calicut	... —
Cannanore	... The difference has mostly been occasioned by the deaths being more carefully reported in 1869.
Cuttack	... —
Fort Saint George	... —
French Rocks	... —
Hooshungabad	... —
Kamptee	... —
Kurnool	... No.
Malliapooram	... —
Mangalore	... —
Mercara	... None.
Moulmein	... —
Palamcottah	... —
Palaveram	... —
Poonamallee	... —
Port Blair	... —
Quilon	... —
Raepore	... —
Ramandroog	... None.
Rangoon	... None.
St. Thomas' Mount	... Probably attributable to the climatic visitations which have been experienced during the past cold season.
Seetabuldee	... None.
Secunderabad	... Not detected, it seems endemic.
Shoaygheen	... None.
Sumbulpore	... Nil.
Trichinopoly	... Endemic ; for causes <i>vide</i> reply to Question 3 of this report relative to site, drainage, and sewage of the town.
Tonghoo	... <i>Vide</i> question 22.
Vellore	... —
Vizianagram	... None.
Wellington	... —

QUESTION 24.—*Have Lock Hospital Rules been introduced ?*

Bangalore	... Rules, such as they are, are in operation. Introduced at a time when the importance of preventive measures had not received the recognition which it now commands.
Bellary.	... Introduced, but not fully carried out.
Berhampore	... None registered.
Calicut	... No, but much required.
Cannanore	... No, they are to be introduced soon.
Cuttack	... No.
Fort St. George	... Yes.
French Rocks	... No.
Hooshungabad	... —
Kamptee	... Yes, from April 1867.
Kurnool	... No.
Malliapooram	... No.
Mangalore	... No.
Mercara	... No, there being no Lock Hospitals in the station.
Moulmein	... No.

Palamcottah	... No, but their introduction contemplated.
Palaveram	... Not yet.
Poonamallee	... No.
Port Blair	... There are no Lock Hospitals.
Quilon	... No.
Raepore	... No Lock Hospital in this station.
Ramandroog	... No.
Rangoon	... It is to be deplored that there should be no Lock Hospital. The subject has been frequently discussed and represented, but as yet nothing has been definitely settled.
	... The plan of an excellent Hospital has been submitted to me, sums for which have been received, and its construction will immediately be commenced.
St. Thomas' Mount	... Yes.
Seetabaldee	... No, but steps are being taken to build one.
Secunderabad	... A set of rules have been made applicable, but limited to registered women known to be associating with European Soldiers.
Shoaygheen	... None.
Sumbulpore	... No.
Trichinopoly	... The following is the reply received from the Cantonment Magistrate on this point:— "Chapter V. of the Rules and Regulations made under Clause VII., Section XIX., of Act I. of 1866, has been introduced into this station and within a radius of four miles from the boundaries of the Cantonment; but although introduced, its operations are greatly hindered for want of funds, as by Order of Government, para. 13 of Chapter V. has been kept in abeyance; and under para. 20 all registered prostitutes are to receive subsistence allowance whilst under treatment, which the Cantonment Committee have no means of giving. A reference has been made to Head Quarters, soliciting instructions as to how the funds for carrying on the provisions of the rules in question are to be raised.
Tonghoo	... No.
Vellore	... No.
Vizianagram	... No.
Wellington	... Yes, in the Cantonment since June 1868, and extended to Coonoor on 1st December 1869.

QUESTION 25.—*Number of Registered Prostitutes.*

Bangalore	... About 200.
Bellary	... 65.
Berhampore	... None registered.
Calicut	... To the best of my knowledge prostitutes (plentiful) are not registered.
Cannanore	... 57.
Cuttack	... None.
Fort Saint George	... The Health Officer will be able to supply information.
French Rocks	... —
Hooshungabad	... —
Kamptee	... 34.
Kurnool	... No, 25 are known by the Police to live in Military limits.
Malliapooram	... None.
Mangalore	... None.
Mercara	... No Register kept.
Moulmein	... —
Palamcottah	... No Register kept.
Palaveram	... Not known.
Poonamallee	... None.

Port Blair	... None; the greater part of the female population are convict women, and those unmarried are confined to their barracks, whilst those married live in separate huts.
Quilon	... —
Raepore	... None.
Ramandroog	... None.
Rangoon	... No registration of prostitutes has yet taken place.
St. Thomas' Mount	... 54.
Seetabaldee	... Not kept.
Secunderabad	... 86.
Shoaygheen	... None.
Sumbulpore	... None.
Trichinopoly	... Reported by the Cantonment Magistrate to be 23, frequented by Europeans only.
Tonghoo	... —
Vellore	... None.
Vizianagram	... None.
Wellington	... 8.

QUESTION 26.—*Average number under treatment.*

Bangalore	... 50.
Bellary	... 10½.
Berhampore	... —
Calicut	... Cannot tell, as there is no registration. Always some three or four cases at least of venereal under treatment in the Civil Dispensary.
Cannanore	... Total treated 76, average daily sick 9·41.
Cuttack	... None.
Fort St. George	... —
French Rocks	... —
Hooshungabad	... —
Kamptee	... Fifteen.
Kurnool	... None.
Malliapooram	... None.
Mangalore	... None.
Mercara	... None.
Moulmein	... —
Palamcottah	... None, except the few who resort, of their own accord, to the Civil Dispensary.
Palaveram	... —
Poonamallee	... None.
Port Blair	... Being convicts, any who are suspected to be diseased, or reported to be so, are sent to Hospital for examination, and the same control can be exercised over them as if the laws relating to this disease were in practice here.
Quilon	... —
Raepore	... —
Ramandroog	... None.
Rangoon	... 15 to 20 a month in the Civil Dispensary.
St. Thomas' Mount	... 27½ per month.
Seetabaldee	... None.
Secunderabad	... 2
Shoaygheen	... None.
Sumbulpore	... None.
Trichinopoly	... 9·1 during the year is the average number treated in the Lock Hospital, which refers to a much larger number of prostitutes than shown in preceding reply, the registration having been initiated only since 1st December 1869.
Tonghoo	... —

Vellore	... ———
Vizianagram	... None.
Wellington	... 272.

QUESTION 27.—*Effect of these Rules on Venereal Disease.*

Bangalore	... Much benefit has resulted. The prevalence of venereal disease is greatly less than it used to be, and the severity of the syphilitic disease is much lessened.
Bellary	... Diminished the frequency of its occurrence amongst troops.
Berhampore	... ———
Calicut	... No Rules.
Cannanore	... ———
Cuttack	... None.
Fort Saint George	... I am unable to say.
French Rocks	... ———
Hooshungabad	... ———
Kamptee	... The Rules are nearly useless, as they make no adequate provision for the discovery of clandestine prostitutes.
Kurnool	... ———
Malliampooram	... None.
Mangalore	... ———
Mercara	... None.
Moulmein	... ———
Palamcottah	... ———
Palaveram	... ———
Poonamallee	... ———
Port Blair	... Venereal diseases, however, are very rare among the troops, and have almost in every case been contracted elsewhere. The cases of primary syphilis, which have come under notice during the year, are very few.
Quilon	... ———
Raepore	... ———
Ramandroog	... Not applicable.
Rangoon	... Venereal disease prevails among the British Troops.
St. Thomas' Mount	... These Rules do not appear to have had the effect of reducing the number of admissions, by venereal disease, among the European Troops. The average number admitted per month during the nine months of the year 1868, when these rules were not in force, was 11.6 per mensem, and the monthly average during the year has been 11.27.
Seetabuldee	... None in force.
Secunderabad	... The written Rules now in force are only such as had been previously tacitly in operation.
Shoaygheen	... None.
Sumbulpore	... Nil.
Trichinopoly	... With reference to Statement by Cantonment Magistrate given in question 24 of this report it will be observed that the Lock Hospital Rules, for reasons therein shown, have not been fully carried out; and that, even if they had, the period from which they would have been introduced is too limited to enable any thing like a satisfactory reply to be given to this query.
Tonghoo	... Although a Lock Hospital has not been introduced, venereal disease is rare amongst the troops.
Vellore	... ———
Vizianagram	... ———
Wellington	... Have no doubt materially prevented its spread.

QUESTION 28.—*Suggestions for improving working of Rules.*

Bangalore	... Much more stringent supervision and more complete registration of prostitutes.
Bellary	... None.
Berhampore	... ———
Calicut	... ———
Cannanore	... ———
Cuttack	... ———
Fort St. George	... None.
French Rocks	... ———
Hooshungabad	... ———
Kamptee	... Make use of the registered prostitutes as detectives, and at once take up and examine any woman against whom there exists fair grounds for suspicion. The present rules are quite inadequate to prevent a practice carried on at night in secluded places, and which both parties are desirous of concealing. It is also necessary that there should be some surveillance of grass-cutters and other women employed about the Barracks.
Kurnool	... ———
Malliampooram	... None.
Mangalore	... ———
Mercara	... None.
Moulmein	... ———
Palamcottah	... ———
Palaveram	... ———
Poonamallee	... ———
Port Blair	... ———
Quilon	... ———
Raepore	... ———
Ramandroog	... None.
Rangoon	... ———
St. Thomas' Mount	... Extend the application of the Contagious Diseases Act to a radius of four or five miles round the station. At present the soldier, by walking only a short distance, can arrive at villages and bazaars where the prostitutes are subject to no control and where, therefore, diseased women who wish to escape supervision naturally transfer themselves.
Seetabuldee	... None.
Secunderabad	... Limiting the care of common women only to such as are known to associate with Europeans is preventing full good doing. Very many Soldiers prefer non-registered women, and from them all the sickness is derived. The rules should be extended to every public woman in the Cantonment, without which the Government money and sanitary labours are wasted.
Shoaygheen	... ———
Sumbulpore	... Nil.
Trichinopoly	... The rules not having as yet been fairly in operation, it follows that any suggestions in regard to their improvement cannot be given: these can only be made after due working of the system for a considerable period.
Tonghoo	... None.
Vellore	... ———
Vizianagram	... ———
Wellington	... None.

QUESTION 29.—*Any form of Cattle Disease in Cantonment or District?*

Bangalore	... Loodiana fever among Government horses, and some sickness among cattle.
Bellary	... Cattle disease called Musroo has been prevalent.
Berhampore	... None.
Calicut	... None.

Cannanore	... None; but sheep, cows, and bullocks here are all affected with depraved appetites and eat human feces greedily when they obtain access to such deposits. The flesh, &c., of such animals cannot be good for food, and must have some depressing effect, if not worse, on the health of its consumers.
Cuttack	... None.
Fort St. George	... None in the Fort.
French Rocks	... —
Hooshungabad	... None.
Kamptee	... —
Kurnool	... The Police report disease in the District, but none in Cantonment.
Malliampooram	... None.
Mangalore	... —
Mercara	... None.
Moulmein	... —
Palamcottah	... —
Palaveram	... —
Poonamallee	... —
Port Blair	... There has been no cattle disease.
Quilon	... No.
Raepore	... From the deficient supply of rain for the two previous years, cattle suffered much.
Ramandroog	... None.
Rangoon	... I am not in a position to ascertain. I believe there has been some mortality among the Government Elephants.
St. Thomas' Mount	... None.
Seetabuldee	... No.
Secunderabad	... Horses have had some fever but with little mortality; 22 camels died out of an average strength of 251½, and 39 bullocks out of 518½.
Shoaygheen	... None.
Sumbulpore	... —
Trichinopoly	... None in Cantonment.
Tonghoo	... None.
Vellore	... None in Cantonment, very slight in the District.
Vizianagram	... —
Wellington	... None in Cantonment, very slight in District.

QUESTION 30.—Has Price of Grain been normal or otherwise?

Bangalore	... Cheaper.
Bellary	... Normal.
Berhampore	... Normal.
Calicut	... —
Cannanore	... —
Cuttack	... Yes.
Fort St. George	... —
French Rocks	... Normal.
Hooshungabad	... —
Kamptee	... —
Kurnool	... —
Malliampooram	... —
Mangalore	... It has been dear.
Mercara	... Normal.
Moulmein	... Normal.
Palamcottah	... Much as usual.
Palaveram	... Said to be rather scarce and dear.
Poonamallee	... —

Port Blair	... All grain is imported and sold at a fixed rate.
Quilon	... The price of grain for the past year has ranged from 6 to 7 Madras Measures for the Rupee, a price much in excess of the price of grain in preceding years.
Raepore	... Normal.
Ramandroog	... The price of grain is very high; cholum has been selling, for the past three months, 25 per cent. dearer than last year.
Rangoon	... Unusually high.
St. Thomas' Mount	... Abnormally high.
Seetabuldee	... Not normal.
Secunderabad	... In the year 1869 grain was dearer; the prices have been rising during the last ten years.
Shoaygheen	... Same as last year.
Sumbulpore	... From January to July grain dear; from August to December returned to its normal rate.
Trichinopoly	... It has been high for the greater part of the year; more recently the prices have been below the average of the several preceding years.
Tonghoo	... Cheap during 1869.
Vellore	... Moderate during 1869.
Vizianagram	... Has ranged high during the past year.
Wellington	... Normal.

QUESTION 31.—Has Rainfall in Cantonment been above or below average?

Bangalore	... About the average.
Bellary	... Four inches below average.
Berhampore	... Rain was abundant; last monsoon above average.
Calicut	... Rainfall plentiful and considerably above the average.
Cannanore	... It was 125·68 inches according to the Register carefully kept in the Hospital of the Royal Regiment, or 4·68 inches above the average,—121 as stated by Dr. Parkes in his Hygiene 2nd Edition page 570.
Cuttack	... Below.
Fort St. George	... —
French Rocks	... No means of ascertaining.
Hooshungabad	... A little below the average.
Kamptee	... The rainfall has been almost the average.
Kurnool	... About average.
Malliampooram	... The rainfall has been, during 1869, below the average.
Mangalore	... About average.
Mercara	... Slightly below average.
Moulmein	... The amount of rainfall has been below the average of preceding years.
Palamcottah	... Above the average.
Palaveram	... Below average.
Poonamallee	... Below average.
Port Blair	... The rainfall has been beyond the average.
Quilon	... The rainfall for 1868, as gauged by the Superintendent of Police, was 76·881 inches, that for 1869 has been 87·101, showing an increase of 10·220.
Raepore	... Above the average.
Ramandroog	... Six inches above the average of the past five years and an inch above that of last year.
Rangoon	... The rainfall has been 105·50, about equal to average.
St. Thomas' Mount	... Little more than half the average rainfall of the year 1866.
Seetabuldee	... About the average.
Secunderabad	... The total rainfall for 1869-70 was 32·68 inches above average.
Shoaygheen	... About 4 inches and one-tenth below last year.
Sumbulpore	... Above.
Trichinopoly	... Above the average quantity.

Tonghoo	... The rainfall has been only 46.90 inches for the year; the average rainfall is 99.
Vellore	... None kept.
Vizianagram	... Above average.
Wellington	... Considerably above the average.

QUESTION 32.—*Suggestions for improving Sanitary Condition of Cantonment (or Station).*

Bangalore	... The drainage of the Race Course Plateau and of the Infantry Barracks; the removal of the village lying between the Cavalry and Artillery Barracks, and of the lane in Ulsoor occupied by milkmen; the completion of the works for supplying the troops with drinking water for all purposes; the introduction of the dry earth system of conservancy; more efficient measures for the check of venereal disease; the construction of additional public latrines; a better system of conservancy in private compounds. The conservancy of nullahs and broken grounds, especially that near the Cavalry Barracks are all measures much to be desired. During the year 1869, the pavilions of the Race Course Hospital for Cavalry and Artillery were completed and occupied, also Plunge-baths, Racket and Fives Courts. The Municipal Board have agreed to a proposal for erecting a Market at Shoolay; sanitary improvements and side drains in Ulsoor and in the Cantonment Bazaar have been energetically proceeded with.
Bellary	... As the Cantonment Rules are not yet introduced, I am unable to offer any suggestions.
Berhampore	... Public latrines are much required.
Calicut	... The adoption of dry earth system; a good Soldiers' Garden and a small Gymnasium would tend greatly to improve the health of the men.
Cannanore	... More public latrines are required. The dhobies' nullah should be made into a straight water-course, and the public excluded from it. The dry earth system should be fully adopted throughout the Cantonment.
Cuttack	... Latrines for civil population; new drainage for lines; filling in fetid tanks and fort tank; enclosure for hospital; lids for wells, filling in tanks close to hospital.
Fort St. George	... A Provost Serjeant to inspect all "office" and "public" latrines daily, in order to see that they are properly cleaned. Sanitary control in the fort is too much divided among several officials. The system is cumbersome. Sanitary control should be vested in a specially appointed officer whose word should be law. Deodorising the main drain of Black Town whose outlet is near the north-east angle of the Fort. During the north-east monsoon, nuisance from the drain is extremely offensive to all residents in the fort.
French Rocks	... —
Hooshungabad	... —
Kamptee	... —
Kurnool	... The roads and public lines of the Cantonment are regularly swept and cleaned by a staff of sweepers, superintended by a Havildar and six Sepoys; but there must be great collections of filth in the houses, as each has its own privy. Until this arrangement is altered, the Cantonment will never be in a good sanitary condition. There is no system of drainage whatever to carry away the urine and sewage of the town. I have no doubt, were the compounds examined, a corner of each would be found in a very dirty state.
Malliapooram	... —
Mangalore	... —
Mercara	... —

Moulmein	... The great difficulty, as regards the sanitary condition of the station, is the keeping down the rank vegetation which springs up so rapidly during and also after the rainy season, the expenses of which could scarcely be met by the local funds; but which could easily be done by employing the prisoners in the jail to do the work, who would, after the rains are over, not be subject to any exposure liable to undue division, but on the contrary would most probably be benefited by out-door employment.
Palamcottah	... —
Palaveram	... I am not prepared in this return to offer any general suggestions for improving the sanitary condition of the Cantonment, the Cantonment Committee, formed under a recent Act, has scarcely yet commenced operations.
Poonamallee	... Public latrines for natives are much required, and there should be proper drains from houses to a culvert for refuse water to be carried off to some suitable reservoir.
Port Blair	... This station is so young that many things require to be done to render it more perfect in a sanitary point of view, and to this end almost all the labour of the convicts is directed.
Quilon	... Nothing to add to the suggestions made last year.
Raepore	... Latrines are urgently required. Relief works that are going on, such as making roads and draining the station, will act beneficially both to the Civil and Military population of this Cantonment.
Ramandroog	... I would suggest a latrine for the use of the inhabitants of the village.
Rangoon	... The following suggestions have been made and carried out during the year :— 1st.—Construction of a brick wall and gallery to the Royal Artillery Fives Court. 2nd.—Planting trees on Lake road. 3rd.—Completion of lake and coast boundary road, earth-work, and metalling. 4th.—Putting corrugated iron roof on verandah of European Infantry Cells, and rendering the upper roof watertight. 5th.—Constructing a urinal for Quarter-guard, European Infantry Lines. 6th.—Metalling and draining East Cantonment boundary road from Lake road to Signal Pagoda road. 7th.—Constructing a latrine for European Infantry. 8th.—Levelling Barrack Square, European Infantry Lines.
St. Thomas' Mount	... The establishment of a system of a permanent water-supply, the erection of four additional latrines; the entertainment of four additional carts and sweepers to remove the refuse from the street, and the establishment of thirty additional dirt receptacles.
Seetabuldee	... —
Secunderabad	... Here is needed good water supply; diminution of arrack shops; improved drainage; streets more and wider; resumption of the enclosures in and around this town which bind it up; break down tank bunds; discontinue wet cultivation; give more distant latrines and pits further off. A tramway would be of great value. Remove bandy-stands and toddy selling and burial places, milkmen, shepherds, slaughter sites, market, jail and karkhannah all outside. Give increased hospital accommodation for European sick at Trimulgherry; a Dispensary at Trimulgherry. Introduce Bye-laws of Act 22 of 1864, also give full effect of Act 14 of 1868, and enlarge Cantonment area, give a Civil Surgeon, and the bringing into Cantonment any fresh manure to be prohibited.
Shoayghen	... Recommended that trees at convenient distances be planted in the neighbourhood of the barracks and along the sides of the roads; also the latrine be adapted to the dry earth system of conservancy.
Sumbulpore	... —

Tonghoo	... The rainfall has been only 46.90 inches for the year; the average rainfall is 99.
Vellore	... None kept.
Vizianagram	... Above average.
Wellington	... Considerably above the average.

QUESTION 32.—*Suggestions for improving Sanitary Condition of Cantonment (or Station).*

Bangalore	... The drainage of the Race Course Plateau and of the Infantry Barracks; the removal of the village lying between the Cavalry and Artillery Barracks, and of the lane in Ulsoor occupied by milkmen; the completion of the works for supplying the troops with drinking water for all purposes; the introduction of the dry earth system of conservancy; more efficient measures for the check of venereal disease; the construction of additional public latrines; a better system of conservancy in private compounds. The conservancy of nullahs and broken grounds, especially that near the Cavalry Barracks are all measures much to be desired. During the year 1869, the pavilions of the Race Course Hospital for Cavalry and Artillery were completed and occupied, also Plunge-baths, Racket and Fives Courts. The Municipal Board have agreed to a proposal for erecting a Market at Shoolay; sanitary improvements and side drains in Ulsoor and in the Cantonment Bazaar have been energetically proceeded with.
Bellary	... As the Cantonment Rules are not yet introduced, I am unable to offer any suggestions.
Berhampore	... Public latrines are much required.
Calicut	... The adoption of dry earth system; a good Soldiers' Garden and a small Gymnasium would tend greatly to improve the health of the men.
Cannanore	... More public latrines are required. The dhobies' nullah should be made into a straight water-course, and the public excluded from it. The dry earth system should be fully adopted throughout the Cantonment.
Cuttack	... Latrines for civil population; new drainage for lines; filling in fetid tanks and fort tank; enclosure for hospital; lids for wells, filling in tanks close to hospital.
Fort St. George	... A Provost Serjeant to inspect all "office" and "public" latrines <i>daily</i> , in order to see that they are properly cleaned. Sanitary control in the fort is too much divided among several officials. The system is cumbersome. Sanitary control should be vested in a specially appointed officer whose word should be law. Deodorising the main drain of Black Town whose outlet is near the north-east angle of the Fort. During the north-east monsoon, nuisance from the drain is extremely offensive to all residents in the fort.
French Rocks	... —
Hooshungabad	... —
Kamptee	... —
Kurnool	... The roads and public lines of the Cantonment are regularly swept and cleaned by a staff of sweepers, superintended by a Havildar and six Sepoys; but there must be great collections of filth in the houses, as each has its own privy. Until this arrangement is altered, the Cantonment will never be in a good sanitary condition. There is no system of drainage whatever to carry away the urine and sewage of the town. I have no doubt, were the compounds examined, a corner of each would be found in a very dirty state.
Malliapooram	... —
Mangalore	... —
Mercara	... —

Moulmein	... The great difficulty, as regards the sanitary condition of the station, is the keeping down the rank vegetation which springs up so rapidly during and also after the rainy season, the expenses of which could scarcely be met by the local funds; but which could easily be done by employing the prisoners in the jail to do the work, who would, after the rains are over, not be subject to any exposure liable to undue division, but on the contrary would most probably be benefited by out-door employment.
Palamcottah	... —
Palaveram	... I am not prepared in this return to offer any general suggestions for improving the sanitary condition of the Cantonment, the Cantonment Committee, formed under a recent Act, has scarcely yet commenced operations.
Poonamallee	... Public latrines for natives are much required, and there should be proper drains from houses to a culvert for refuse water to be carried off to some suitable reservoir.
Port Blair	... This station is so young that many things require to be done to render it more perfect in a sanitary point of view, and to this end almost all the labour of the convicts is directed.
Quilon	... Nothing to add to the suggestions made last year.
Raepore	... Latrines are urgently required. Relief works that are going on, such as making roads and draining the station, will act beneficially both to the Civil and Military population of this Cantonment.
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St. Thomas' Mount	... The establishment of a system of a permanent water-supply, the erection of four additional latrines; the entertainment of four additional carts and sweepers to remove the refuse from the street, and the establishment of thirty additional dirt receptacles.
Seetabuldee	... —
Secunderabad	... Here is needed good water supply; diminution of arrack shops; improved drainage; streets more and wider; resumption of the enclosures in and around this town which bind it up; break down tank bunds; discontinue wet cultivation; give more distant latrines and pits further off. A tramway would be of great value. Remove bandy-stands and toddy selling and burial places, milkmen, shepherds, slaughter sites, market, jail and karkhannah all outside. Give increased hospital accommodation for European sick at Trimulgherry; a Dispensary at Trimulgherry. Introduce Bye-laws of Act 22 of 1864, also give full effect of Act 14 of 1868, and enlarge Cantonment area, give a Civil Surgeon, and the bringing into Cantonment any fresh manure to be prohibited.
Shoayghen	... Recommended that trees at convenient distances be planted in the neighbourhood of the barracks and along the sides of the roads; also the latrine be adapted to the dry earth system of conservancy.
Sumbulpore	... —

Trichinopoly	... I.—Keep up and add, as required, to the present system of drainage, and see that the drains are not fouled or choked. II.—Fill up all existing hollows or excavations in which water lodges, and around in the immediate vicinity of the station, adopting such drainage as may be sufficient to maintain these places always in a dry state. III.—Remove all refuse of houses and that found on the ground surface generally throughout the Cantonment, and cause the same to be buried. The ordure found on ground surface to be disposed of in same manner as the excreta of latrines. IV.—Erect a sufficient number of properly-constructed latrines, that is with roofs, and supply them with gneiss or granite troughs, and dry earth, and urinal tubs coal tarred, and cause to be removed therefrom regularly all excreta to a distance where it should be buried. The vicinity of public latrines being often fouled by ordure, these places should be better attended to by Nuisance Inspectors, who should enforce the people to use the latrines only for <i>d'aisance</i> purpose. The Sanitary Officer brings to notice an irregularity of procedure, as regards the arrangement of the refuse pit at Beemanaikenpolliem near to the Potters' houses. It was arranged with the Municipality in 1868 that this pit, which is of large dimensions, should receive all the dry refuse of houses in the vicinity, such as sweepings, &c., but nothing more; and it was understood that the mode of placing such refuse in the excavation mentioned should be properly attended to by the Inspectors of Nuisance; also that a strong bamboo and thatch roof would be erected and maintained, likewise a masonry parapet all round to prevent the accumulated refuse being wetted by rain or drainage. These arrangements have recently been departed from: the roof has fallen, there is no parapet, the refuse is thrown in at random, and it is not of the description specified, viz., dry refuse. Stable and cattle refuse is deposited there, and there is good reason for believing, that is judging from the offensive odour prevailing, that human excreta are likewise thrown into the said excavation. V.—Greater attention should be paid to preserve the purity of wells supplying drinking water. VI.—The carrying out strictly the provisions of the Municipal or Towns' Improvement Act, and the Act pertaining to contagious disease. VII.—The manner in which the Inspectors of nuisances discharge their duties is of the greatest importance as regards efficient sanitation, and it will be obvious, from the foregoing replies to queries, that they have not been altogether successful in maintaining that very desirable state.
Tonghoo	... It would be well, I think, were public latrines erected in various parts as proposed by the Cantonment Committee; but it will be necessary to strictly enforce the dry earth system, or they will become public nuisances and hot beds of disease.
Vellore	... Drainage is very much required in the Regimental Lines.
Vizianagram	... Stone drains should be laid down in the Lines and Cantonment Regulations already submitted should be sanctioned. No new works or measures of sanitary importance have been sanctioned, commenced or completed during the past year.
Wellington	... None.

APPENDIX C.

ABSTRACT OF REPORTS OF THE MUNICIPALITIES IN THE MADRAS PRESIDENCY.

ABSTRACT OF THE REPORTS OF THE SEVERAL MUNICIPALITIES IN THE MADRAS
PRESIDENCY FOR 1869.

BELLARY, ADONI, ANANTAPOOR, GOOTY.—The table below shows the number of deaths registered in each of the above Municipalities in the Bellary District. The small number of deaths from cholera generally is attributed to the great attention that was paid to sanitation and to the precautionary measures that were adopted during the festivals at Humpi and Mylar, where in former years the disease used to be propagated.

—					Cholera.	Small-pox.	Fevers.	All other causes.	Total.
Bellary	...	...	...	...	21	19	250	135	425
Adoni	...	...	...	...	178	8	139	64	389
Anantapoor	...	...	...	...	8	3	12	62	85
Gooty	...	...	...	...	21	...	29	58	83

The sanitary works done during the year consisted in clearing the respective Municipalities of the cactus (prickly-pear) which harboured venomous reptiles and served as a screen for the purposes of nature.

In *Bellary*, besides this work upon which 1,000 Rupees were expended, latrines, consisting of screen walls, were constructed at a cost of Rupees 678, and great attention was paid to drainage and conservancy. The other sanitary works done during the year in this Municipality consisted in the construction of drains, filling up hollows, and clearing of wells.

In *Anantapoor* the dilapidated fort walls on the south and west of the town were removed, and roads constructed on their sites. Two large ruined wells were filled in, as also several low swampy places. Side trenches of stone were constructed to drain the two principal streets of the town, and a latrine, thirty yards square, was built for females.

In *Adoni* four latrines consisting of screen walls of mud were erected during the year, and a site outside was selected as a cemetery for the Mahomedans who hitherto buried their dead in the very heart of the town. Also two slaughter-yards, for the use of beef butchers and chucklars who cut up the carcasses of dead animals, were built and stone drains constructed.

In addition to these improvements, a Cholera Camp was formed for the treatment of patients during the late outbreak of the disease and the houses of the poorer inhabitants were lime-washed at the cost of the Municipality.

In *Gooty* no sanitary work of any importance was done during the year, as the Municipal Act was only lately introduced there. The conservancy of the town is maintained by scavengers with carts.

COIMBATORE.—The table in the margin shows the deaths registered in this Municipality during the year. Only two deaths from cholera are recorded, and these occurred while cholera was raging at Poothanoor. The great immunity from the disease enjoyed by the towns-people was owing to the stringent measures adopted to prevent the cholera, which broke out at Poothanoor, from spreading.					
Cholera	...	2			
Small-pox	...	...			
Fevers	...	94			
All other causes.	...	258			
Total...	...	354			

The sanitary works done during the year consisted in improving the drainage of the town, for which purpose long lines of streets were levelled and relaid and the side drains cleaned; and in the intersections of streets, brick-work culverts were built in lieu of the old Irish bridges.

Great improvements were also effected in the conservancy of the town. Nine new latrines of masonry, well roofed over, were built during the year in lieu of the matted fenced trenches which

were in use. The plan of the latrines was designed by the Sanitary Commissioner. It was referred to a Sub-Committee on latrines, and the following is the Minute of the President of the Committee :—

“ The main objection to the open yard system is, that filth is deposited in all directions, and on a shower of rain falling, the whole of the interior of the latrine becomes perfectly disgusting.

2. “ The objection to the latrine shown in the Sanitary Report pamphlet is, that the persons using it have to sit one behind another, a most unpleasant arrangement !

3. “ In the Coimbatore latrine there is a raised platform along each side, this platform has trenches in it at intervals of three feet, the bottom of each trench slopes from the centre forwards and backwards.

4. “ The person using the latrine squats over the trench with his back to the wall, the backward slope has dry earth in it, and is intended for the deposit of solid matter. The forward slope is intended for the reception of urine and of water used in washing.

5. “ After one of the trenches has been used the sweeper throws dry earth on the filth, and pushes it and the dry earth through a hole in the wall into a longitudinal trench which runs outside each wall, and which is protected by part of the roof. He then puts fresh earth in the latrine, and it is available for use by a fresh comer.

6. “ There is accommodation for twenty-eight persons in each full-sized enclosure.

7. “ At the request of the Native Municipal Commissioners a wall has been built down the centre of each enclosure, and a small wall two feet high has been built on either side of each place of ease.

8. “ There are boxes for dry earth in each enclosure, and there are large dry earth stores in the immediate neighbourhood.

9. “ All the places of ease are under cover.

10. “ The advantages of the Coimbatore system are : that decency is respected; that the place is perfectly inoffensive both to sight and to smell; that the system is just as effective in wet weather as in dry; that the filth is removed from outside; and that the latrines are approved of by the persons who have to make use of them.

11. “ The only objection to the system is, that to provide latrines of this pattern costs a great deal in the first instance; keeping them up is not more expensive than keeping up less perfect latrines.”

Owing to the want of funds much was not done towards the efficient cleansing of the town; fifteen country carts were constructed for this work, and these are reported to be insufficient if anything approaching to the removal of the total excreta of the population of nearly 30,000 inhabitants is to be effected. The greater portion of the population still make use of the cess-pool system. In three places, within the limits of the Municipality, rubbish is still collected in heaps; these are increasing considerably in size, and unless something is done to dispose of the rubbish as manure by sale or otherwise, it will be necessary to remove these dépôts further off from the town.

Many of the sources of water-supply are reported to be in very dangerous proximity to cess pools and other contaminating influences. During the hot weather, when the wells are mostly dry or scantily filled with fetid water, if conservancy and preservation from contaminating influences be attended to, much practical benefit will thereby be derived.

The slaughter-house remains as last year, and the only improvement proposed at present is that of flagging the floor with granite slabs.

No bandy-stands exist now in the town; one large one, with good walls and gates, is nearly completed to accommodate 150 bandies and 300 bullocks, and another is about to be constructed. The large bandy-pettah although within the town will not be a source of evil in any way as it is entirely under the control of the Municipality.

Nothing has been done in the way of improving the burial grounds. The difficulty in closing intramural burial grounds are great; land to form new cemeteries should be obtained before the present ones can be shut up.

A great benefit upon the community of Coimbatore has been conferred by the Government agreeing to a new cemetery being made at Pothanore. To carry any bodies, especially the corpses of those who

die of cholera,—the fatal disease at the Railway station—five miles to a town like Coimbatore has always been looked upon as a crying evil.

CUDDAPAH.—The marginal table gives the deaths registered in this Municipality during the year. It is remarked that since the introduction of the Towns' Improvement Act a perceptible improvement in the public health of Cuddapah has been the result. The sanitary works done during the year were as follows: 150 dust bins in different parts of the town, and one cart-stand, in addition to the two already existing ones, were constructed. Four temporary and two pukka double latrines of blue stone for males and females were built; a great number of streets were widened and straightened, and two large roads opened out through the town to allow a free circulation of fresh air; a main drain at a cost of Rupees 500 was constructed to carry away the rain water; all old and ruined houses and mud walls were removed and levelled to the ground; all hollows and pits filled in and the town cleared of prickly-pear bushes, which answered as shelter for the purposes of nature; and all the tanks and wells within Municipal limits were cleaned out repaired, and deepened to increase the watersupply. On the whole great attention appears to have been paid to the general conservancy of the town.

BERHAMPORE AND CHICACOLE.—The following table shows the deaths registered in these Municipalities:—

	Cholera.	Small-pox.	Fevers.	All causes.	Total.
Berhampore	40	...	201	59	300
Chicacole	12	2	115	148	277

In *Berhampore* 816 yards of cut-stone drains were constructed during the year, and one well and four tanks which were dirty and dangerous to public health were filled in.

In *Chicacole* 1,813 yards of masonry drain was laid on either side of the principal roads running through the town; a piece of ground by the side of the river, covered with rubbish and rank vegetation, was cleared and fenced in, and a tank near the market was enlarged to supply the town with drinking water.

COCANADA, ELLORE, AND RAJAHMUNDY.—The table below shows the number of deaths that was registered in each of these Municipalities during the year:—

	Cholera.	Small-pox.	Fevers.	All other causes.	Total.
Cocanada	...	3	125	166	294
Ellore	...	10	122	343	475
Rajahmundry	...	3	159	187	349

In *Cocanada* the sanitary works executed during the year were as follows:—

Some latrines were built; a new tank was dug, and the old ones kept in good repair; prickly-pear and croton-oil plants on private and public grounds were removed; some roads have been newly graveled, and the old ones kept in good order; and trees have been planted along the sides of the roads.

In *Ellore* seven public latrines were erected during the past year, and all rubbish and offensive matter removed daily.

In *Rajahmundry* four roads were repaired and a new one made; two public wells were repaired, three new latrines were erected, making a total of eight. One slaughter-house for sheep and goats and another for cattle, and a stall for selling beef were also constructed, and all private and public grounds were cleared of the prickly-pear and croton-oil bushes.

GUNTOOR AND MASULIPATAM.—The following table shows the number of deaths registered in these Municipalities during the year. No epidemic occurred, and the health of the towns on the whole was good:—

	Cholera.	Small-pox.	Fevers.	All causes.	Total.
Guntoor	...	5	23	173	201
Masulipatam	...	6	59	259	324

In *Guntoor* two public latrines were built and also a small one adjoining the new Police Station-house for the use of the constables and prisoners. Six urinals also, consisting of iron boxes, were fixed in the town, which are conserved on the dry earth system; they are cleaned daily and fresh clean sand put in them. A sluice and channel sixty yards long was built connecting the black tank with a large reservoir to improve the water-supply of the town. The reservoir was filled from the tank and was the sole source of water-supply in the southern half of the town during the hot season. The repairs to the red tank on the northern side of Guntoor were vigorously pushed forward, and it is hoped that the sufferings of the people from want of water in that part of the town will be greatly lessened during the next hot season.

A Vaccinator was employed by the Municipality during the year, but his operations were considerably impeded owing to the Natives declining to allow lymph to be taken from their children and others who had been vaccinated. This was, however, remedied by obtaining a supply from the District Superintendent and from the vaccinated patients in the jail.

In *Masulipatam* much was not done in a sanitary point of view.

The only sanitary improvements made were the cleaning of the streets, repairing latrines, cutting drains for the free efflux of water with which the town becomes inundated during the rainy season, and clearing the town of the prickly-pear bushes. But the progress made in this latter work was not very satisfactory, owing to the services of the convicts who were placed by Government at the disposal of the Commissioners, having been discontinued.

A Vaccinator was employed by the Municipality during the year.

KURNOOL AND CUMBUM.—The table below gives the number of deaths registered during the year in these two Municipalities. In *Kurnool* cholera and fever prevailed, but the mortality compared with former years was not great:

	Cholera.	Small-pox.	Fevers.	All causes.	Total.
Kurnool	323	30	291	120	764
Cumbum	...	1	128	40	169

In *Kurnool* several new streets were laid throughout the town to admit of greater currents of air, and drains were built to carry off surface water. There are twenty-two large public latrines worked on the dry-earth system of conservancy, and they are kept as clean and free from smell as coal-tar and disinfecting powder can make them.

In *Cumbum* four large latrines in stone and mud were erected during the year, and several streets were widened and repaired.

CONJEVERAM.—The figures in the margin show the number of deaths registered in this Municipality during the year. No sanitary work of any kind appears to have been executed during the year under review in Conjeveram, except the temporary sanitary arrangements that were adopted during the feast that took place in May. It is satisfactory to note that this feast, in which cholera used generally to break out and spread into the town of Madras and other adjoining places, passed off without the occurrence of epidemics or sickness of any kind. This exemption from disease is in a great measure due to the sanitary precautions that were taken. In this Municipality great attention is paid to conservancy and other matters connected with sanitation.

MADURA.—In this Municipality no registry of deaths was kept. The sanitary works done during the year 1869 consisted only in the building of twenty-two new drains, two latrines, and 100 dust-boxes.

DINDIGUL.—The figures in the margin show the number of deaths registered in this Municipality. No sanitary work of any importance was executed during the year. The town was kept clean by the ordinary establishment of sweepers and carts.

CALICUT, CANNANORE, COCHIN, PALGHAT, AND TELlichERRY.—The following table shows the number of deaths registered in each of these Municipalities during the year. The public health on the whole is reported to have been generally good :—

	Cholera.	Small-pox.	Fevers.	All causes.	Total.
Calicut	26	1	270	740	1037
Cannanore	...	...	...	...	...
Cochin	...	3	36	225	264
Palghat	...	1	178	251	430
Tellicherry	...	...	100	359	459

Fever prevailed to a certain extent in Calicut and Palghat. In the former place the disease was most rife during the prevalence of the S. W. monsoon and in the latter from November to March when strong east winds blow over the Walliar jungles bringing with them a great deal of malaria. In Calicut cholera also prevailed to a certain extent; 26 deaths were recorded from this disease during the year.

A Vaccinator was employed by the Municipality in Calicut, and 705 persons were vaccinated during the year, on 652 of whom the operations proved successful. In Palghat and Tellicherry also a Vaccinator was entertained by the Commission. At Tellicherry 490 persons were vaccinated, of those operations 315 were successful.

No sanitary work of importance appears to have been executed in any of the above Municipalities during 1869.

In Calicut the surface drainage is reported to be good, except in the Moplah town, parts of which are low-lying. The attention of the Commissioners is being given to it and improvements will soon be effected. As the majority of the houses in Calicut are situated in large compounds ample accommodation is thus afforded for private latrines which are invariably in the form of cess-pools, six feet in depth, over which a small hut is built. They are never cleaned out, but when one gets filled a fresh pit is dug on another spot, and so on. These cess-pools are reported as causing no annoyance except in the more densely peopled part of the Moplah town, where they become dangerous to public health from their vicinity to the road and to wells from which drinking water is obtained. In this part of the town it is reported that nothing short of the establishment of public latrines or the daily removal of excreta from every private latrine would effect any good.

There are four public latrines of a temporary character in use in the town, but as they do not work satisfactorily, permanent ones are being built by the Municipality in their stead.

CANNANORE.—The only sanitary works executed in this Municipality during the year consisted in the erection of six latrines and in the construction of some drains and dust boxes.

COCHIN.—The sanitary works executed during the year in Cochin consisted only in the construction of some new and in the repair of some old latrines and drains. Great attention was paid to conservancy, which is reported to be a most difficult question to deal with owing to a long established custom among the people of having sunk cess-pools attached to each house. This evil can only be remedied gradually and by the spread of improved ideas of sanitation among the people.

COONOR AND OOTACAMUND.—No deaths have been registered in these Municipalities during the year.

COONOR.—Great attention was paid to conservancy, and the disgusting smells which were of frequent occurrence in former years is now very rarely felt in Coonor.

Ten new latrines were built which, together with the twenty already in existence, are reported to be amply sufficient for the wants of the people. New Police lines and a slaughter-house also were built during the year. It is much to be regretted that Government have not made over a Sholah Jungle near the Church to the Municipality, as the dense undergrowth in it answers as a shelter for the purposes of nature, and great difficulty is experienced in preventing the natives using it as a latrine.

Ootacamund.—The sanitary works executed in this Municipality during the past year consisted in the following :—

Thirty-seven latrines were erected at a cost of Rupees 7,730-1-11.

The jungle and undergrowth of Acacia which was so much objected to by the Senior Medical Officer as a fertile source of disease was removed by the Commissioners where it existed on Government land, and owners of private lands were compelled to keep their own compounds clean.

A new slaughter-house was erected for the slaughter of cows and bullocks at a cost of about Rupees 3,000. The work of draining the bazaar was commenced during the year and is progressing satisfactorily.

NELLORE.—The figures in the margin show the number of deaths registered during the past year in this Municipality. 1,007 persons were vaccinated; 969 or 95 per cent. of these operations proved successful, which is very satisfactory.

The sanitary works done during the year were as follows :—two latrines in brick and chunam for females, which were very much required, were erected; the Cutcherry reservoir, which was commenced in 1865 before the Municipal Commission was organized, was completed at a cost of Rupees 1,430. It is proposed to fill this reservoir with water raised from an irrigation channel quarter of a mile distant, whence after filtration it will be distributed to various parts of the town. Several streets were widened, a few drains constructed, and some repairs and alterations were made to the Town Police station and slaughter-house. A site was also selected for the erection of a market which will soon be commenced with. About the same time (February) that the Agricultural Show took place, two feasts also occurred in Nellore, when a large concourse of people was assembled. Every precaution was taken by the adoption of sanitary measures to prevent the outbreak of sickness among the crowd, and it is satisfactory to note that the occasions passed off without the appearance of any disease.

VELLORE.—The figures in the margin show the mortality that took place in Vellore in 1869; the public health is reported as having been on the whole good; 415 persons were vaccinated during the year; how many of these operations were successful is not stated.

The sanitary works done during the year were as follows :—one latrine was erected on the dry earth system as a trial before building others; 160 stone dust bins were placed in different parts of the town, and a large rubbish depot was constructed. Three large culverts were built, to facilitate the drainage of the town, and a masonry drain was constructed. Some attention was also paid to the widening of the streets and the lighting of the town.

WALLAJAPETTAH.—The marginal figures denote the number of deaths that took place in this town during the past year. The Vaccinator entertained by the Municipality operated on 176 persons, of these operations only three proved unsuccessful which is very gratifying.

Great attention appears to have been paid to sanitation in this Municipality during the year. A slaughter-house was set apart for the slaying of cattle, and the objectionable practice of slaughtering animals in all parts of the town was put a stop to. Many streets were widened to secure a free ventilation throughout the town, and all old and ruined wells and tanks which had been in a dilapidated condition for years, and become nuisances were repaired and thoroughly cleaned, to improve the

water-supply. All old and ruined houses were pulled down as suggested by the Sanitary Commissioner during one of his inspections of the town. A large number of prickly-pear bushes, which were resorted to for the purposes of nature, harboured thieves, and snakes and other venomous creatures, and which were great nuisances all over the town, were removed during the year. Fifteen masonry drains were built, and ninety-five dust boxes placed in different parts of the town.

A very important sanitary measure was undertaken during the year with reference to the disposal of manure and sweepings of private houses. Section 88 of the Municipal Act, which was almost a dead letter, was very rigidly enforced, and no accumulation of filth or rubbish is now permitted to remain in the compounds or backyards of private houses formore than twenty-four hours, and the towns-people were enjoined, within a fortnight's notice, to remove all their stock of manure, that was stored up for the purpose of sale, to the fields or otherwise to dispose of it.

The town of Wallajapettah has lost much of its commercial importance as the centre of the cotton and betel-nut traffic, by the extension of the North-West Line of Railway to Cuddapah and Ghooty, and the people are now taking more to agricultural occupations; consequently the practice of accumulating rubbish and other filth, which are sold as manure, in the compounds and back yards of private houses, has of late become very common. It is hoped, however, that the dangerous consequences of such an objectionable practice will be averted by the rigid enforcement of the Section of the Act which requires all accumulations of filth to be deposited in the dust boxes or removed to the fields within twenty-four hours.

At the beginning of the Municipal year all owners of houses were compelled to white-wash their houses. This ought to be enforced every year; it not only adds to the general appearance of the town, but is also very commendable in a sanitary point of view.

SALEM.—The figures in the margin show the number of deaths that was registered in Salem during 1869. Cholera prevailed in the town during the year, but this appears to have been the result of importation. A Railway Guard, who contracted the disease at Coimbatore, died of it at the Salem Railway Station, his body was carried into the town three miles distant and there buried. It was after this circumstance that cases of cholera appeared in Salem.

In regard to the sanitary works done during the year, the Municipality have used their utmost endeavours to put the town in a good sanitary condition. Although the means at the disposal of the Commissioners was small comparatively, still the improvements effected in the town in a sanitary point of view are reported to be apparent.

Scavengers and carts were employed for the sweeping and removal of the daily rubbish and filth, for the cleaning of the drains and latrines. Men were employed to watch and prevent the fouling of the river and its bed, and measures were adopted for cleaning the wells and protecting the sources of water-supply. Also drains were built in several parts of the town where they were very much wanted. There is no doubt that great improvements were made, but much still remains to be done, and this will gradually be effected. The general scheme of drainage, &c., of the town was roughly estimated to cost over a lac of rupees, and the Commissioners not having such a large amount at their disposal, have only undertaken the construction of masonry drains wherever they were absolutely necessary.

Cuddalore.—The number of deaths that occurred in this Municipality is shown in the margin. The public health is reported to have been generally very good. As regards the working of the Municipality with reference to sanitation, it is noted that twenty-five carts and fifty scavengers are kept up for the daily cleaning of the town. The streets and lanes are swept twice every day, and the sweepings carted away to places selected for the purpose. During the past year twelve men were employed to remove all prickly-pear bushes and other noxious vegetation encroaching upon Municipal limits, and the town was kept tolerably clean. A temporary female latrine also was constructed during the year on the dry earth system, as an experiment, and it is generally resorted to by the people. Much was not done as regards drainage, but it is in contemplation to introduce a thorough system of drainage as soon as funds would permit. Great attention was paid during the year to sanitation, and everything was done to promote the health and convenience of the public in general as far as Municipal resources admitted of, and it is gratifying to

observe that since the introduction of Municipal action the public health of Cuddalore has been exceptionally good.

MANGALORE.—The number of deaths registered in the town of Mangalore during the past year is shown in the margin. The ten deaths by cholera which appear among the figures are reported as having been severe cases of diarrhoea mistaken for cholera. It is stated that no cases of true cholera occurred in the town during 1869. January, August and September are reported as being the worst months for fever mortality. The large number of deaths from fevers in

January is attributed to the fact that many persons who go up the ghauts about the end of December to work on the Coffee estates there, return with fever contracted in the jungles; and the comparatively high death-rate in the monsoon months is, it is believed, attributable to persons suffering from fever during the hot months succumbing to the disease after a few months' illness.

A conservancy establishment, at a cost of Rupees 3,515, was kept up during the year, and the sanitary works executed consisted in enclosing a Hindoo burning ground, in cleaning and putting in order two tanks, one for drinking purposes and the other for bathing and watering cattle, and in the repairing of certain drains and roads.

TANJORE, NEGAPATAM, MAYAVERAM, COMBACONUM, AND MANARGOODI.—The following table shows the number of deaths recorded in each of the Municipalities of the Tanjore District during 1869 :—

	Cholera.	Small-pox.	Fevers.	All causes.	Total.
Tanjore	157	22	209	680	1,068
Negapatam	62	26	159	514	761
Mayaveram	16	11	106	391	521
Combaconum	125	5	152	394	676
Manargoodi	44	9	88	411	552

The following are the sanitary works that were attended to during the past year in each of the above Municipalities :

Tanjore.—Sewage drains in several sub-streets inside the fort were built, with a view of draining out the bath and waste water from the houses therein situated.

Openings were made in two different directions of the ramparts to introduce fresh and pure air into the town. One of these has not only been the source of a freer circulation of air, but it has promoted the traffic also by forming a roadway.

The utmost care was taken to prevent people from taking water through the man-holes over the good water conduits for drinking purposes, as the sewage drain and the other run parallel in several places, thus making the good water in the conduits utterly unfit to drink. Three latrines on the dry earth system of conservancy, and nine open privies, divided into partitions to suit the convenience of the people, were built during the year, and a sufficient number of carts and men engaged to keep them in proper working order. The conservancy of the town was well attend to. All filth and street sweepings were removed by a system of dust carts, and the ash tubs in every street were emptied twice a day. An establishment of 74 scavengers was maintained to clean the drains and keep them in a sanitary condition, and an Inspector of Nuisance and twelve scavenging beat peons were employed to enforce sanitary measures.

Soil carts to remove night soil from the public latrines and privies were employed, and it is contemplated to introduce this system into private houses also by arranging with the owners to build their privies in such a manner that toties may have access to them.

The annual white-washing of all houses was punctually carried out, and no cattle was permitted to be kept in places other than those set apart for the purpose.

Negapatam.—The cleaning of the streets was attended to as usual, and scavenging carts constructed and toties employed to remove night soil from private premises. The number of trench latrines also were increased. The large tank near the College was cleaned out, so as to furnish a supply of good water to the whole town.

Mayavaram.—During the year 1869 twenty scavenging carts and forty sweepers were kept constantly at work cleansing every part of the town. No other purely sanitary work was carried out during the year.

Combaconum.—The chief sanitary work done consisted in the removal of rubbish and night soil, in cleaning the streets, and in securing a good supply of drinking water.

Manargoody.—This is the smallest Municipality in the Tanjore District. Rubbish was removed good drinking water provided, and special arrangements made to keep the town clean at the annual feast.

TINNEVELLY, PALAMCOTTAH, AND TUTICORIN.—The table below gives the deaths registered in these Municipalities during the past year. There was nothing during the period calling for remarks as regards the public health in any of them, which appears to have been on the whole satisfactory :—

	Cholera.	Small-pox.	Fevers.	All causes.	Total.
Tinnevelly	2	4	36	347	389
Palamcottah	...	2	24	233	259
Tuticorin	1	15	52	179	247

Tinnevelly.—Great attention appears to have been paid in this town to conservancy and to sanitation in general. The town was divided into twelve circles and a conservancy establishment employed to keep the streets, lanes, and latrines clean and in a sanitary condition. The night soil from private privies and all offensive matters from every cart-stand were daily removed by three toties employed for the purpose. The sale of meat, fish, &c., was restricted to the market set aside for the purpose, and the sale of unwholesome food prohibited. One scavenger was employed especially to keep the market clean and to prevent nuisances. Measures were also adopted to keep all sources of water-supply pure and free from defilement, and a long drain was built to bring water into the town with a view to flush the existing drains and to water the main roads during the hot weather. A Nuisance Inspector was entertained to superintend the general conservancy, and, in fact, everything within the resources of the Municipality was done to improve the sanitary condition of the town.

During an outbreak of cholera in the District of Tinnevelly special sanitary arrangements were adopted to prevent the disease from spreading into the town. Extra scavengers were employed to remove the night soil from private privies; the services of a Native Doctor were secured to distribute cholera pills and to treat premonitory diarrhoea; a quarantine was established, and the carts of travellers and others were washed and fumigated before entering the town; the houses were white-washed; the cloths of cholera patients were at once burnt, and those of the inmates of a house where a cholera case occurred were soaked in chunam water prior to removal by the dhoby; and provisions of all kinds exposed for sale were inspected and the sale of unwholesome food prevented.

PALAMCOTTAH.—A Conservancy Establishment was maintained at a cost of Rupees 244 to keep the town and the latrines clean and in a sanitary condition; all rubbish was daily collected and removed to a distance from the town; the dry earth system of conservancy was introduced into the latrines, twenty dust boxes were built in addition to the twenty-eight existing ones; a market was established and a slaughter-house put under construction during the year. At the end of the year, during a slight occurrence of cholera, an extra conservancy establishment was entertained to keep the town clean and to prevent the disease from spreading.

TUTICORIN.—The sanitary works done in this Municipality during the past year were much the same as those carried out in Tinnevelly and Palamcottah. Four temporary latrines were constructed, and conservancy establishment was maintained to keep the town clean.

TRICHINOPOLY.—The figures in the margin show the number of deaths that was registered in this Municipality during the past year. The sanitary works executed were as follows :—the old fort ditch and certain swamps were filled in; prickly-pear bushes were cleared; new latrines were constructed; the drainage of the tanks in the fort and its vicinity ^{was} improved; the conservancy of the bazaars and streets was attended to; and three slaughter-houses and a market were constructed.

Cholera	...	89
Small-pox	...	11
Fevers	...	203
All causes	...	682
Total	...	985

The want of pure and untainted water for drinking purposes is reported to be greatly felt in Trichinopoly. The wells for the greater portion of the year become brackish and unfit for drinking, while the tanks, to which the people as a matter of course resort, are filled with impurities, being fed by open channels.

BIMLIPATAM, PALCONDAR, VIZAGAPATAM, AND VIZIANAGRAM.—The following table shows the number of deaths registered in each of these Municipalities during the past year :—

	Cholera.	Small-pox.	Fevers.	All causes.	Total.
Bimlipatam	3	4	13	36	35
Palcondah	4	21	36	68	129
Vizagapatam	8	1	162	448	619
Vizianagram	56	...	104	206	366

Much has not been done in them in a sanitary point of view, and the only sanitary works reported as having been executed during the year are as follows :—

In *Bimlipatam* a few new drains and roads were constructed and old ones put in repair, and MacDougall's powder was used to disinfect the drains.

In *Vizagapatam* several drains and cross under-drains were built, and pukka-built latrines were constructed contributing greatly to the sanitary condition of the town.

In *Vizianagram* cut-stone drains and two large under-ground tunnels were constructed; several stagnant ponds were filled up; and some new roads were made, and old ones repaired.

APPENDIX D.

EUROPEAN
ARMY RETURNS.

III.

Table showing Sickness and Mortality among Her Majesty's British Troops serving in the Madras Presidency arranged according to the different Arms of the service during the year 1869.

Diseases.	RATIO PER 1,000 OF STRENGTH.				
	Artillery.	Cavalry.	Infantry.	The whole Army.	
Strength	2,817	892	6,568	10,277	
Admissions	4,173	1,196	8,285	13,654	
Daily sick	197	56	335	688	
Deaths (In Hospital)	70	23	120	213	
Deaths (Out of do.)	12	1	13	26	
Invalided	153	48	372	573	
Diseases.	RATIO PER 1,000 OF STRENGTH.				
	Artillery.	Cavalry.	Infantry.	The whole Army.	
Small-pox	4	...	6	10	0.3
Typhoid do.	15	...	23	38	0.3
Continued do.	194	...	578	772	0.3
Intermittent do.	384	...	1,027	1,411	0.3
Remittent do.	37	...	185	222	0.3
Cholera	6	...	54	60	0.3
Rheumatism	112	...	350	462	0.3
Phthisis	86	...	75	161	0.3
Atrophy and Anæmia	6	...	20	26	0.3
Dropsies	12	...	21	33	0.3
Sunstroke and Heat Apoplexy	55	...	65	120	0.3
Heart Diseases	125	...	274	399	0.3
Respiratory do.	204	...	428	632	0.3
Dysentery	270	...	557	827	0.3
Diarrhoea	193	...	438	631	0.3
Hepatic Diseases	8	...	55	63	0.3
Spleen do.	655	...	74	729	0.3
Veneral do.	39	...	531	570	0.3
Abscesses	303	...	100	403	0.3
Skin Diseases	104	...	694	798	0.3
Delirium Tremens	417	...	1,755	2,172	0.3
Violence and Accidents	946	...	...	...	0.3
Other Diseases	...	...	...	...	0.3
Total...	4,173	1,196	8,285	13,654	23.2
Admissions.	4,173	1,196	8,285	13,654	23.2
Deaths in and out of Hospi- tal.	82	24	133	239	26.9
Admissions.	4,173	1,196	8,285	13,654	26.9
Deaths in and out of Hospi- tal.	...	...	...	...	20.2
Admissions.	4,173	1,196	8,285	13,654	20.2
Deaths in and out of Hospi- tal.	...	...	...	...	28.3
Admissions.	4,173	1,196	8,285	13,654	28.3

IV.

Return showing the loss to H. M.'s British Troops serving in the Madras Presidency by Deaths and Invaliding during the year 1869.

Died in and out of Hospital.	Ratio of deaths per 1,000 of strength.	INVALIDED FOR CHANGE OF CLIMATE.				INVALIDED FOR DISCHARGE FROM THE SERVICE.				RATIO OF INVALIDED PER 1,000 OF STRENGTH.		
		Artillery.	Cavalry.	Infantry.	Total.	Artillery.	Cavalry.	Infantry.	Total.	For change of climate.	For discharge from the service.	Total.
Small-pox	3	...	...	8	10	...	...	...	10	0.97	...	0.97
Enteric Fever	10	...	...	...	...	...	...	...	...	0.09	...	0.09
Simple Continued Fever.	3	...	...	...	...	...	...	...	...	...	...	...
Remittent Fever	11	...	...	1	...	...	...	...	1	0.09	...	0.09
Typhus	1	...	...	...	...	...	...	...	...	0.09	...	0.09
Cholera	27	...	...	...	...	...	...	...	...	0.48	0.19	0.68
Primary Syphilis	1	...	...	...	...	...	...	...	...	3.50	0.58	4.08
Secondary do.	1	...	...	...	...	...	...	...	...	0.29	0.29	0.58
Phthisis	9	...	...	...	...	...	...	...	...	...	...	...
Scurvy	1	...	...	...	...	...	...	...	...	...	...	...
Cancer of Stomach	1	...	...	...	...	...	...	...	...	...	...	...
Meningitis	1	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	19	...	...	...	...	...	...	...	...	...	...	...
Sunstroke	11	...	...	...	...	...	...	...	...	...	...	...
Paralysis	3	...	...	...	...	...	...	...	...	...	...	...
Epilepsy	1	...	...	...	...	...	...	...	...	...	...	...
Mania	1	...	...	...	...	...	...	...	...	...	...	...
Abscess of Brain	1	...	...	...	...	...	...	...	...	...	...	...
Pericarditis	1	...	...	...	...	...	...	...	...	...	...	...
Valve Disease of Heart	4	...	...	...	...	...	...	...	...	...	...	...
Aneurism	7	...	...	...	...	...	...	...	...	...	...	...
Hypertrophy	1	...	...	...	...	...	...	...	...	...	...	...
Atrophy of the Heart	1	...	...	...	...	...	...	...	...	...	...	...
Bronchitis	1	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Extravasation	2	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	2	...	...	...	...	...	...	...	...	...	...	...
Laryngitis	1	...	...	...	...	...	...	...	...	...	...	...
Dysentery	17	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea	8	...	...	...	...	...	...	...	...	...	...	...
Hepatitis	56	...	...	...	...	...	...	...	...	...	...	...
Enteritis	1	...	...	...	...	...	...	...	...	...	...	...
Nephritis	1	...	...	...	...	...	...	...	...	...	...	...
General Debility	1	...	...	...	...	...	...	...	...	...	...	...
Delirium Tremens	10	...	...	...	...	...	...	...	...	...	...	...
Alcoholic Poisoning	1	...	...	...	...	...	...	...	...	...	...	...
Fracture	3	...	...	...	...	...	...	...	...	...	...	...
Rupture of Stomach	1	...	...	...	...	...	...	...	...	...	...	...
Asphyxia by drowning	4	...	...	...	...	...	...	...	...	...	...	...
Fracture of Spine	1	...	...	...	...	...	...	...	...	...	...	...
Concussion of Brain	1	...	...	...	...	...	...	...	...	...	...	...
Asphyxia by accidents	1	...	...	...	...	...	...	...	...	...	...	...
Gunshot	3	...	...	...	...	...	...	...	...	...	...	...
Submersio	1	...	...	...	...	...	...	...	...	...	...	...
Bursting of Gun	1	...	...	...	...	...	...	...	...	...	...	...
Suicide	2	...	...	...	...	...	...	...	...	...	...	...
Stabbed in the Heart	1	...	...	...	...	...	...	...	...	...	...	...
Total...	239	23.2	134	39	315	488	19	9	57	85	573	47.4
For change of climate.	...	...	...	...	...	...	...	...	...	...	...	...
For discharge from the service.	...	...	...	...	...	...	...	...	...	...	...	...
Total.	...	...	...	...	...	...	...	...	...	...	...	...

Table showing the Invaliding in H. M.'s British Troops arranged according to Stations during the year 1869.

Diseases.	FORT ST. GEORGE.		SAINT THOMAS' MOUNT.		TRICHINOPOLY.	BANGALORE.	CANNANORE.	BELGARY.	SECUNDERABAD.	KAMPTEE.	RANGOON.	THAYETMYO.	TONGHOO.	TOTAL.	
	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.
Ague ...	4	...	1	...	...	...	1	...	...	...	...	4	...	10	...
Continued Fever ...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Tonsillitis ...	1	...	...	...	...	1	...	1	...	...	...	1	...	5	2
Lumbago ...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	3
Scrofula ...	2	1	...	...	...	4	3	1	...	...	9	...	...	36	6
Phthisis Pulmonalis ...	2	...	3	1	...	...	...	...	8	2	...	...	...	51	3
Secondary Syphilis ...	6	1	3	...	2	1	2	3	17	...	9	1	...	19	5
Rheumatism ...	1	...	...	...	...	1	1	6	3	...	2	...	...	1	...
Lupus ...	...	...	...	...	...	...	...	1	1	...	...	...	...	2	1
Paralysis ...	...	...	...	...	...	...	1	...	2	...	...	...	...	3	5
Epilepsy ...	...	2	...	...	...	...	...	3	2	...	1	...	...	4	1
Cephalica ...	...	...	...	...	...	...	1	1	...	...	2	1	...	1	...
Meningitis ...	...	...	...	...	...	...	1	...	...	...	...	...	...	2	...
Encephalitis ...	...	...	...	...	...	...	1	...	1	...	1	...	...	8	1
Neuralgia ...	3	...	1	...	...	...	1	...	1	...	...	1	...	1	6
Mania ...	...	3	...	...	...	1	1	...	1	...	...	...	...	1	...
Sunstroke ...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Melancholia ...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Shaking Palsy ...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
Dementia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...
Amaurosis ...	...	...	...	...	...	...	...	...	1	1	...	...	...	1	1
Opacity of Cornea ...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	1
Ophthalmia ...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	1
Cataract ...	...	...	...	...	...	1	1	...	...	...	...	...	...	3	1
Deafness ...	1	...	...	...	...	1	...	1	2	...	...	...	...	5	1
Aneurism of Aorta ...	...	...	...	...	...	...	...	1	1	...	...	1	...	3	...
Hypertrophy of Heart.	...	...	...	...	...	1	...	4	...	...	...	...	...	5	1
Varicose veins ...	...	...	...	...	...	1	...	...	2	3	...	2	...	10	7
Valve Disease of Heart	2	...	1	...	1	4	2	...	1	...	2	...	...	5	...
Palpitation ...	...	2	...	...	...	...	...	...	...	...	...	...	...	8	2
Bronchitis ...	...	...	...	...	...	1	2	1	2	...	3	...	1	2	...
Asthma ...	...	...	...	...	...	...	1	...	...	...	...	1	...	2	...
Pneumonia ...	...	...	...	...	...	1	...	...	1	...	...	...	...	2	1
Hæmoptysis ...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
Gastritis ...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Constipation ...	...	...	...	...	...	...	2	...	3	...	...	3	1	10	...
Dyspepsia ...	...	...	...	...	...	...	...	...	...	1	...	...	...	65	1
Dysentery ...	...	1	...	1	...	5	1	4	...	...	15	10	...	12	...
Diarrhoea ...	1	...	...	...	...	...	2	...	7	...	...	1	...	3	...
Hæmorrhoids...	...	...	...	...	...	1	1	...	...	...	...	...	...	3	...
Hepatitis ...	...	2	...	...	...	8	1	3	...	1	4	...	...	92	5
Splenitis ...	...	...	...	...	...	...	...	3	...	1	...	2	...	7	...
Hernia...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...
Gonorrhœa ...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Rubo ...	...	...	...	...	...	...	...	2	...	1	...	1	...	4	...
Nephritis ...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...
Stricture of Urethra...	...	...	...	...	...	1	...	...	...	...	...	1	...	1	1
Rupture of do.	...	...	...	...	...	...	...	1	...	...	...	...	...	1	1
Fungus of Testicle	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...
Orchitis ...	...	...	...	...	...	...	...	...	1	...	...	...	...	2	...
Abscess ...	1	...	...	...	...	...	...	...	...	1	...	...	...	12	2
Ulcer ...	1	1	...	...	...	...	2	3	1	2	...	3	...	1	...
Asthenia ...	...	...	...	...	...	1	...	...	...	...	2	...	...	9	...
Anæmia ...	...	...	...	...	...	1	...	...	5	...	...	1	...	9	...
General Debility	9	4	2	...	2	10	1	6	3	6	2	6	5	5	18
Wound...	...	...	...	...	...	...	...	1	...	1	...	1	...	1	2
Concussion of Brain...	...	...	...	...	...	2	...	...	...	1	...	1	...	1	3
Fracture ...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...
Sprain ...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...
Arthritis ...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...
Synovitis ...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...
Caries ...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...
Contractura ...	1	...	...	...	...	...	...	1	1	...	...	...	...	2	1
Spasm of Muscle	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...
Total...	35	13	15	2	6	35	21	36	5	45	17	146	18	20	488

Table showing the ratio per 1,000 of Strength of Invaliding in H. M.'s British Troops arranged according to Stations during the year 1869

Diseases.	FORT ST. GEORGE.		SAINT THOMAS' MOUNT.		TRICHINOPOLY.		BANGALORE.		CANNANORE.		BELLARY.		SECUNDERABAD.		KAMPTEE.		RANGOON.		THAYEMYOO.		TONGHOO.		TOTAL.	
	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.	For change of climate.	For discharge from Service.
Ague	4·48	...	2·01	...	...	...	...	...	1·01	...	...	...	...	...	...	...	...	...	4·73	...	...	...	1·02	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·18	...	...	...	0·10	...
Tonsillitis	1·12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·16	...	
Lumbago	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·18	...	...	...	0·10	...
Scrofula	2·24	1·12	...	...	...	...	0·75	...	...	...	0·95	...	0·43	...	...	...	...	...	1·18	...	...	0·51	0·20	
Phthisis Pulmonalis	2·24	...	6·14	2·01	...	...	3·60	2·25	1·01	...	0·95	...	3·47	0·86	...	...	9·25	...	9·45	...	...	3·67	0·61	
Secondary Syphilis	6·73	1·12	6·14	...	3·88	...	0·75	...	2·03	...	2·85	0·95	7·37	...	1·43	...	9·25	1·02	8·27	...	...	5·21	0·30	
Rheumatism	1·12	...	...	...	...	...	...	...	0·75	1·01	...	2·85	...	...	...	...	2·03	...	3·54	118	...	1·94	0·51	
Lupus	...	...	...	...	...	...	...	...	...	...	...	...	0·43	...	...	...	...	...	...	...	...	0·10	...	
Paralysis	...	...	...	...	...	...	...	...	1·01	...	...	...	0·43	0·43	...	...	...	...	...	...	...	0·20	0·10	
Epilepsy	2·24	...	...	...	...	...	...	...	...	...	2·85	...	0·86	...	...	...	1·02	...	...	...	...	0·30	0·51	
Cephalæa	...	...	...	...	...	...	...	...	1·01	...	0·95	...	...	...	...	...	2·05	...	1·18	...	...	0·40	0·10	
Meningitis	...	...	...	...	...	...	...	...	1·01	...	...	...	...	...	...	...	...	...	1·18	...	...	0·10	...	
Encephalitis	...	...	...	...	...	...	...	...	1·01	...	...	...	...	...	1·43	...	...	...	...	...	...	0·20	...	
Neuralgia	3·36	...	...	2·01	...	...	...	...	1·01	...	...	...	0·43	...	1·43	...	1·02	...	1·18	...	...	0·81	0·10	
Mania	3·36	...	...	...	...	...	...	0·75	1·01	...	0·95	...	0·43	...	...	...	...	...	...	...	0·10	0·61		
Sunstroke	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·18	...	...	0·10	...	
Melancholia	1·12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	
Shaking Palsy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	118	...	...	0·10	
Dementia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	118	...	...	0·10	
Amaurosis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·43	...	1·02	...	...	...	...	0·20	...	
Opacity of Cornea	...	...	...	...	...	...	...	...	...	...	...	...	0·43	0·43	...	...	...	...	...	...	...	0·10	...	
Ophthalmia	...	...	...	...	...	...	0·75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·16	...	
Cataract	...	...	...	...	...	...	...	0·75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	
Deafness	1·12	...	...	...	...	...	...	...	...	1·01	...	...	...	...	...	...	...	...	...	...	...	...	0·20	
Aneurism of Aorta	...	...	...	...	...	...	...	...	...	...	...	...	0·86	0·43	...	...	...	...	1·18	...	...	0·30	0·10	
Hypertrophy of heart	...	...	...	...	...	...	...	...	...	1·01	3·81	...	0·43	0·43	...	...	...	...	...	...	...	0·51	0·20	
Varicose veins	...	...	...	...	...	...	0·75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·20	...	
Valve disease of heart	2·24	...	2·01	6·91	...	...	3·00	2·03	...	...	...	...	0·86	1·30	...	...	...	...	2·36	...	...	1·02	0·71	
Palpitation	...	4·09	...	...	...	...	...	...	...	...	...	...	0·43	...	...	...	2·05	...	...	...	...	...	0·51	
Bronchitis	...	...	...	...	...	...	0·75	1·50	1·01	...	...	...	0·86	...	...	...	...	...	...	...	12·19	...	0·20	
Asthma	...	...	...	...	...	...	...	...	1·01	...	...	...	...	...	...	...	...	...	1·18	...	...	...	0·20	
Pneumonia	...	...	...	...	...	...	0·75	...	...	...	...	...	...	0·43	...	...	...	...	...	...	...	...	0·20	
Hæmoptysis	...	...	...	...	...	...	...	...	...	...	0·95	...	...	...	...	...	...	...	...	...	...	...	0·10	
Gastritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	
Constipation	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	
Dyspepsia	...	...	...	...	...	...	...	...	2·03	...	...	...	1·30	...	1·43	...	...	...	...	...	...	...	0·10	
Dysentery	...	...	2·01	6·94	...	3·75	0·75	4·07	...	0·95	...	11·71	1·43	...	1·43	...	15·43	...	3·54	...	12·19	...	0·10	
Diarrhoea	1·12	...	...	...	...	...	...	2·03	...	...	...	3·03	...	1·43	...	...	...	...	11·82	...	...	6·61	0·10	
Hæmorrhoids	...	...	...	...	...	...	0·75	1·01	...	0·95	...	...	...	...	...	...	...	...	1·18	...	...	1·22	...	
Hepatitis	...	...	4·03	...	...	6·01	0·75	3·05	...	12·39	1·90	18·65	0·43	5·72	...	10·18	...	0·63	118	...	...	0·30	0·10	
Spentitis	...	...	...	...	...	...	...	...	...	2·85	...	0·43	...	...	...	1·01	...	2·36	...	...	...	0·71	0·51	
Hernia	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·02	...	...	...	...	...	0·10	...	
Gonorrhoea	...	...	...	...	...	...	...	...	...	...	...	...	0·43	...	...	...	...	...	1·18	...	...	...	0·10	
Bubo	...	...	...	...	...	...	...	...	...	1·90	...	...	...	...	...	...	...	...	...	...	...	...	0·10	
Nephritis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·02	...	1·18	...	...	0·40	...	
Stricture of Urethra	...	...	...	...	...	...	0·75	...	...	...	...	...	...	...	...	...	...	...	1·18	...	...	0·10	0·10	
Rupture of do.	...	...	...	...	...	...	0·75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	
Fungus of testicle	...	...	...	...	...	...	...	...	...	...	0·95	...	...	...	...	...	...	...	...	...	...	...	0·10	
Orethritis	...	...	...	...	...	...	...	...	...	...	...	...	0·43	...	...	...	...	...	...	...	...	...	0·10	
Abscess	1·12	...	...	...	...	...	...	...	...	...	...	...	...	...	1·43	...	...	...	...	...	...	0·10	...	
Ulcer	1·12	1·12	...	...	...	...	...	...	2·01	...	2·85	0·95	0·86	...	1·43	...	...	...	3·54	...	...	1·22	0·20	
Asthenia	...	...	...	...	...	...	0·75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	
Anæmia	...	...	...	...	...	...	0·75	...	...	...	...	...	2·16	...	...	...	2·05	...	1·18	...	...	0·91	...	
General Debility	10·10	4·18	4·09	13·48	...	7·51	0·75	6·1	3·05	5·71	1·90	2·60	2·16	7·15	1·31	1·02	8·27	2·36	12·19	...	...	6·61	1·83	
Wound	...	...	...	...	...	...	...	...	...	...	0·95	...	0·43	...	...	...	...	...	...	...	...	0·10	0·20	
Concussion of Brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·43	...	...	...	...	...	...	...	0·10	
Fracture	...	...	...	...	...	...	...	1·50	...	...	...	...	...	...	...	...	...	1·02	1·18	...	...	0·10	0·30	
Sprain	...	...	...	...	...	...	...	...	...	...	...	...	0·43	...	...	...	...	...	...	...	...	0·10	...	
Arthritis	...	...	...	...	...	...	...	...	...	...	...	...	0·43	...	...	...	...	...	...	...	...	0·10	...	
Synovitis	...	...	...	...	...	...	...	...	...	...	...	...	0·43	...	...	...	...	...	...	...	...	0·10	...	
Caries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1·43	...	...	...	...	...	...	0·10	...	
Contractura	1·12	...	...	...	...	...	...	...	...	...	0·95	0·43	...	...	...	...	...	...	...	...	...	0·20	0·10	
Spasm of Musculo	...	...	...	...	...	...	...	...	1·01	...	...	...	...	...	...	...	...	...	...	...	...	0·10	...	
Total	3·28	14·59	30·74	4·0	41·66	...	26·29	15·78	3·69	5·09	12·40	1·02	33·44	7·81	28·61	7·10	3·08	3·7	7·69	4·85	49·85	8·67	...	

VII.

Return showing the Admissions and Deaths among Officers, Women, and Children of Her Majesty's British Troops serving in the Madras Presidency during the year 1869.

		OFFICERS																				Strength 403.	
		Small-pox.	Measles.	Intermittent Fever.	Remittent Fever.	Continued Fever.	Typhoid Fever.	Cholera.	Influenza.	Pertussis.	Cynanche trachealis.	Convulsions.	Hydrocephalus.	Dentition.	Ophthalmia.	Conjunctivitis.	Croup.	Tonsillitis.	Dysentery.	Diarrhoea.	Vermes.	Anemia and Asthenia.	Scabies.
Admitted ...	...	2	100	98	23	29	2	15	5	9	...	24	8	98	3	100	4	6	55	239	18	26	4
Died ...	...	8	...	...	1	1	...	7	...	...	...	22	4	21	...	...	1	...	8	28	1	5	...
		WOMEN																				Strength 1,263.	
		Small-pox.	Measles.	Intermittent Fever.	Remittent Fever.	Continued Fever.	Typhoid Fever.	Cholera.	Influenza.	Pertussis.	Cynanche trachealis.	Convulsions.	Hydrocephalus.	Dentition.	Ophthalmia.	Conjunctivitis.	Croup.	Tonsillitis.	Dysentery.	Diarrhoea.	Vermes.	Anemia and Asthenia.	Scabies.
Admitted ...	...	99	24	32	4	10	13	10	3	21	24	47	61	25	2	16	9	1	9	202	7	4	6
Died ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
		CHILDREN																				Strength 2,121.	
		Small-pox.	Measles.	Intermittent Fever.	Remittent Fever.	Continued Fever.	Typhoid Fever.	Cholera.	Influenza.	Pertussis.	Cynanche trachealis.	Convulsions.	Hydrocephalus.	Dentition.	Ophthalmia.	Conjunctivitis.	Croup.	Tonsillitis.	Dysentery.	Diarrhoea.	Vermes.	Anemia and Asthenia.	Scabies.
Admitted ...	...	2	100	98	23	29	2	15	5	9	...	24	8	98	3	100	4	6	55	239	18	26	4
Died ...	...	8	...	...	1	1	...	7	...	...	...	22	4	21	...	...	1	...	8	28	1	5	...
		RATIO PER 1,000 OF STRENGTH.																				RATIO PER 1,000 OF STRENGTH.	
Admitted ...	...	16.2	51.4	56.3	4.9	...	29.4	...	2.4	22.06	4.9	4.9	19.6	12.2	78.4	71.08	95.5	2.4	17.1	46.5	100.4	19.6	...
Died ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

VIII.

Table showing the Sickness and Mortality among the whole European Army stationed in the Madras Presidency during the year 1869, and the Prevalence of the Principal Diseases in each quarter of the year.

Quarter.	ADMISSIONS INTO HOSPITAL.				DEATHS IN HOSPITAL.																									
	Average Strength.	Total Admissions.	Total Deaths in Hospital.	Average Daily Sick.	Small-pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phtisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Stroke and Heart-apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Causes.	
1st Quarter ...	11,187	3,371	31	7	626.5	5	4	144	217	49	5	123	33	2	18	5	9	29	137	157	160	177	17	698	42	271	41	296	732	
2nd do. "	11,472	3,546	70	11	660.8	5	3	237	296	46	12	148	28	3	34	...	33	34	111	122	215	178	17	523	37	305	51	311	797	
3rd do. ...	11,055	3,963	88	3	740.6	...	1	26	332	86	29	143	24	1	16	3	2	25	133	220	439	217	22	459	30	251	49	291	902	
4th do. ...	9,810	2,814	40	5	582.5	...	5	187	228	27	1	116	25	1	5	3	1	16	82	158	133	174	11	418	18	199	26	324	656	
For the year...	10,880	13,694	229	26	652.6	10	1	840	1,073	208	47	530	110	7	73	11	45	104	453	657	947	746	67	2,098	127	1,026	167	1,222	3,087	
Ratio per 1,000 of strength for the year...				0.9 0.03 3.4 77.2 98.6 19.1 4.3 48.7 10.1 0.6 6.7 1.0 4.1 9.5 41.6 60.3 87.0 68.5 6.1 192.8 11.6 94.3 15.3 112.3 288.7																										
Ratio per 1,000 of strength.				Ratio per 1,000 of strength.																										
1st Quarter ...	301.33	2.77	0.62	56.00	...	...	1	2	...	2	1	...	...	2	...	...	1	3	3	3	...	...	7	...	...	1	...	1	2	1
2nd do. ...	309.10	6.10	0.95	57.60	3	...	1	...	...	4	7	...	...	2	...	...	17	2	2	1	3	9	...	2	1	...	3	2	11	3
3rd do. ...	358.48	7.96	0.27	66.99	...	1	6	1	1	6	16	...	...	2	...	...	1	2	2	2	8	8	25	...	...	1	4	1	3	4
4th do. ...	286.85	4.07	0.50	59.37	...	...	1	1	...	1	1	...	...	4	1	...	...	...	1	3	4	16	...	...	...	...	1	1	2	4
For the year...	1258.6	21.01	2.38	59.98	3	1	9	4	1	13	25	...	...	10.1	1	...	1	7	8	15	15	57	...	2	2	1	...	9	7	19
Ratio per 1,000 of strength for the year...				0.27 0.09 0.83 0.36 0.09 1.19 2.29 ... 0.91 0.09 ... 0.09 1.74 0.64 0.73 1.37 5.23 ... 0.18 0.18 0.09 0.73 0.64 1.83																										

Table showing Sickness and Mortality among the European Troops at each Station of the Madras Presidency during the year 1869.

Stations.	Average Strength.	Total Admissions.	Average Daily Sick.	Deaths in Hospital.	Deaths out of Hospital.	Ratio per 1,000 of Strength.			
						Admissions.	Average Daily Sick.	Deaths in Hospital.	Deaths out of Hospital.
Fort Saint George ...	819	885	43·6	14	2	1080·6	53·2	17·09	2·4
Saint Thomas' Mount ...	487	579	32·8	14	...	1188·9	67·3	28·7	...
Vellore ...	7	2	0·8	...	...	285·7	28·5	...	...
Poonamallee ...	142	519	32·1	11	1	3654·9	236·06	77·4	7·04
Palaveram (a) ...	47	20	0·2	6	...	425·5	6·4	127·6	...
Trichinopoly ...	345	408	24·2	6	2	1182·6	70·1	17·3	5·8
Wellington ...	389	515	34·0	5	1	1323·9	87·4	12·8	2·5
Bangalore ...	2,025	1,959	96·9	28	2	967·4	47·8	13·8	0·9
Cannanore ...	665	629	24·9	15	1	945·9	37·4	22·5	1·5
Calicut (b) ...	29	35	1·4	...	...	1206·9	48·3	...	...
Malliapooram ...	81	73	2·7	...	1	901·2	33·3	...	12·3
Bellary ...	908	1,109	60·5	6	2	1221·4	66·6	6·6	2·2
Ramandroog ...	49	46	2·1	1	...	934·6	42·8	20·4	...
Secunderabad ...	2,091	2,916	134·7	66	8	1394·5	64·4	31·5	3·8
Kamptee ...	721	1,347	47·6	23	2	1868·2	66·02	31·9	2·7
Seetabuldee (c) ...	30	42	0·6	2	...	1400·0	20·0	66·6	...
Chindwarrah (d) ...	15	22	1·07	...	...	1466·6	71·3	...	...
Rangoon ...	834	1,331	53·7	7	2	1595·9	64·3	8·4	2·4
Thayetmyoo ...	461	677	26·2	13	...	1468·54	56·83	28·1	...
Tonghoo ...	320	291	15·3	2	1	909·3	47·8	6·2	3·1
Port Blair (e) ...	109	109	3·6	...	...	1000·	33·02	...	...
Nyoung Gyo (f) ...	10	9	0·5	...	...	900·	50·0	...	...
<i>European Veterans.</i>									
Palaveram ...	206	103	5·1	6	1	500·	24·7	29·1	4·9
Vizagapatam ...	90	68	2·4	4	...	755·5	26·4	44·4	...
Total...	10,880	13,694	646·4	229	26	1258·6	59·4	21·04	2·3

(a.) For 22 weeks only. (d.) For 25 weeks only.
(b.) For 19 weeks only. (e.) For 50 weeks only.
(c.) For 39 weeks only. (f.) For 10 weeks only.

X.
Table showing the Principal Diseases which have contributed to make up the Admissions into Hospital at each Station during 1869.

Stations.	ADMISSIONS FROM																			Total Admissions.							
	Small-pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Sunstroke.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.		Venereal Diseases.	Abscesses.	Skin Diseases.	Diluvium Tremens.	Violence and Accidents.	All other Diseases.	
Fort Saint George	...	...	...	20	38	9	9	33	9	1	...	1	1	1	19	20	47	24	4	190	9	81	59	82	219	885	
Saint Thomas' Mount	...	...	...	52	11	1	1	12	11	...	...	...	1	1	9	23	27	25	26	...	187	6	68	9	44	114	579
Vellore	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	
Poonamallee	...	...	...	20	9	...	...	22	32	...	4	...	5	4	31	51	21	...	68	9	132	1	3	...	5	519	
Palaveram	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20	
Trichinopoly	...	...	...	28	13	...	...	7	1	...	...	...	1	3	14	17	13	...	...	2	135	1	34	8	38	71	408
Wellington	...	...	...	31	54	5	...	28	3	...	...	...	...	3	13	24	23	18	2	55	10	34	16	250	44	164	515
Bangalore	...	...	...	118	105	8	...	67	11	...	...	...	1	11	80	76	119	123	2	222	10	151	16	82	114	629	
Cannanore	...	...	...	29	22	...	...	17	6	...	3	3	1	11	20	43	61	35	4	85	4	75	13	82	114	629	
Calicut	...	...	...	3	...	1	...	1	...	...	...	...	...	1	1	6	1	...	...	...	...	5	2	3	6	35	
Mallapooram	...	...	...	...	2	...	...	5	...	...	...	...	...	...	...	5	8	3	...	4	1	10	2	22	10	73	
Bellary	...	...	...	71	56	...	...	72	2	5	2	...	...	14	35	8	82	67	14	194	28	108	...	84	179	1,109	
Ramandroog	...	...	...	1	2	3	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	18	
Secunderabad	...	...	...	193	274	26	...	92	9	1	51	...	16	24	83	237	348	188	11	402	20	133	16	200	2,916		
Kamptee	...	...	...	91	284	40	6	30	6	...	2	...	9	1	29	27	118	46	...	225	9	109	3	31	239	1,347	
Seetabuldee	...	...	...	...	11	...	...	...	...	...	...	...	1	...	...	5	...	...	...	...	...	2	3	4	10	42	
Chindwarrah	...	...	...	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22	
Rangoon	...	...	...	138	96	14	1	59	7	...	3	3	5	14	68	61	21	49	1	176	14	111	17	154	317	1,331	
Thayetnyoo	...	...	...	17	50	12	...	55	4	...	3	...	3	1	16	28	28	52	7	87	2	51	3	65	189	677	
Tonghoo	...	...	...	9	17	7	1	3	5	...	2	...	1	3	9	24	18	8	1	20	4	12	6	47	94	291	
Port Blair	...	...	...	...	16	3	...	8	1	...	...	...	...	...	...	2	3	6	...	4	...	16	6	25	22	109	
Nyong Gyo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	1	...	...	3	...	...	...	...	...	9	
European Veterans.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Palaveram	...	...	...	7	...	...	...	9	2	...	...	1	1	1	8	1	5	10	...	6	1	4	...	6	42	103	
Vizagapatam	...	...	...	2	7	...	...	11	...	...	...	1	...	2	1	2	3	...	...	...	5	3	...	...	30	68	
Total...	10	1	38	840	1,073	208	47	530	110	7	73	11	45	104	453	657	947	746	67	2,098	137	1,026	167	1,222	3,087	13,694	

XI.
Table showing the Principal Diseases which have contributed to make up the Deaths in Hospital at each Station during 1869.

Stations.	DEATHS FROM																										
	Small-pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phtisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Sunstroke.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Dolirium Tremens.	Violence and Accidents.	All other Diseases.	Total Death.	
Fort Saint George ...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	1	...	...	1	2	...	...	...	1	1	...	14	
Saint Thomas' Mount	...	...	...	...	...	...	...	...	2	...	...	...	...	...	1	...	...	...	2	...	...	...	1	2	...	14	
Vellore	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	14	
Poonamallee	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6	...	...	...	...	...	...	11	
Palaveram	...	...	...	...	...	...	5	...	2	...	...	1	...	...	...	1	...	...	2	...	...	...	...	...	...	6	
Trichinopoly	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	11	
Wellington	...	...	1	...	...	...	...	...	...	...	...	...	...	1	1	2	...	2	14	...	...	1	...	2	...	28	
Bangalore	...	...	...	...	...	...	...	...	1	...	...	1	...	1	...	...	2	6	...	...	...	...	...	...	...	5	
Cannanore	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	1	...	...	...	...	...	...	...	...	6	
Calicut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15	
Mallapooram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Bellary	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Ramandroog	...	...	...	...	...	2	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1	
Secunderabad	...	1	7	1	...	4	4	...	2	...	...	...	7	...	1	7	3	...	19	...	1	1	...	1	...	66	
Kanptee	1	...	...	...	...	3	5	...	...	...	...	6	...	...	1	1	...	...	...	...	...	...	...	...	...	23	
Seetabdee	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Chindwarrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Rangoon	...	...	...	1	...	...	1	...	...	...	...	1	3	...	...	1	...	1	...	...	...	...	...	...	...	7	
Thayetmyoo	...	...	1	1	...	...	4	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	13	
Tonghoo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	
Port Blair	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	
Nyoung Gyo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
European Veterans.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	...	2	...	...	...	...	...	...	6	
Palaveram	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	
Vizagapatam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total...	3	1	9	4	1	13	25	...	10	1	...	1	19	7	8	15	15	...	57	...	2	2	1	8	7	20	229

XII.

Table showing the Ratio of the Principal Diseases which have contributed to make up the Admissions into Hospital at each Station during 1869.

Stations.	ADMISSIONS FROM																										
	Small-pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phtisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Stroke.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Diseases.	Total Admissions.	
Fort Saint George ...	...	...	...	35.4	46.3	10.9	10.9	40.2	10.9	1.2	...	1.2	1.2	1.2	23.1	24.4	57.3	29.3	4.8	281.9	10.9	98.0	72.03	100.1	267.3	1080.5	
St. Thomas' Mount.	...	...	...	106.7	22.5	2.05	2.05	28.57	22.5	1.84	4.1	...	2.05	1.84	47.2	55.4	51.3	53.3	...	281.3	12.3	139.6	18.4	90.3	234.0	1188.9	
Vellore...	7.04	...	...	140.8	63.3	...	...	154.9	225.3	28.1	28.1	...	35.2	28.1	218.3	359.5	147.8	47.8	63.3	929.5	...	62.5	7.04	35.2	669.0	435.5	
Poonamallee	...	...	...	21.2	37.6	...	...	20.2	2.8	8.6	...	...	2.8	8.6	40.5	49.2	42.5	...	57.9	391.3	8.6	98.5	23.1	110.1	205.7	1182.6	
Palavaram	...	...	...	81.1	37.6	...	...	71.9	7.7	7.7	...	...	7.7	33.4	61.6	37.6	37.6	57.9	5.7	391.3	8.6	98.5	23.1	110.1	205.7	1182.6	
Trichinopoly	...	...	...	79.6	138.8	12.8	12.8	8.9	7.7	5.4	2.5	...	0.4	5.4	39.5	37.5	58.7	60.7	5.1	141.3	25.7	87.4	5.1	113.1	421.5	1333.9	
Wellington	2.5	...	...	11.3	58.2	8.9	8.9	5.4	5.4	5.4	1.4	0.9	0.4	5.4	39.5	37.5	58.7	60.7	0.4	109.6	4.9	74.5	7.4	123.4	276.0	967.4	
Bangalore	...	...	...	43.5	33.08	...	...	25.5	9.02	...	4.5	4.5	1.4	16.5	30.07	64.6	91.7	52.6	6.01	127.8	6.0	112.7	19.5	123.3	171.4	945.9	
Cananore	...	...	...	183.4	...	34.4	34.4	34.4	...	34.4	...	...	...	34.4	206.8	206.8	34.4	34.4	...	137.8	...	172.4	68.9	103.4	206.8	1206.8	
Calicut ...	...	...	...	...	...	...	...	61.7	...	...	...	...	...	...	34.4	34.4	34.4	34.4	...	49.3	12.3	123.4	24.6	271.6	901.2	1221.4	
Mallapooram	1.1	...	...	78.1	24.6	93.6	93.6	79.2	2.2	5.5	2.2	...	...	15.4	38.5	8.8	90.3	73.7	15.4	213.6	30.8	118.9	20.4	40.8	367.3	938.7	
Bellary ...	...	...	...	20.4	40.8	61.2	61.2	20.4	4.3	20.4	2.2	...	...	20.4	39.6	108.5	166.4	20.4	5.2	192.2	9.5	63.6	7.6	95.6	280.7	1394.5	
Ramandroog	...	...	...	92.3	131.0	12.4	12.4	43.9	4.3	24.3	24.3	...	7.6	11.4	39.6	108.5	166.4	37.0	8.3	312.2	12.4	151.1	4.1	84.6	331.6	1808.2	
Secunderabad	0.4	...	...	126.2	394.0	55.4	55.4	41.6	8.3	2.7	2.7	...	33.3	1.3	40.2	37.4	163.6	63.8	8.3	166.6	...	66.6	100.0	133.3	333.3	1400.0	
Kamptee	8.3	...	...	...	366.6	...	...	...	...	...	...	...	...	...	...	168.6	...	...	...	...	...	...	...	...	...	1466.6	
Seetabuldee	33.3	...	...	...	400.0	...	...	66.6	66.6	...	...	...	...	...	...	...	...	66.6	266.6	266.6	...	...	...	...	...	1466.6	
Chindwarrah	...	...	...	165.4	115.1	16.7	16.7	70.7	8.3	5.9	3.5	3.5	5.9	16.7	81.5	73.1	25.1	58.7	1.1	211.0	16.7	133.0	20.3	184.6	380.0	1585.9	
Rangoon	...	...	...	36.8	108.4	13.0	26.0	119.3	8.6	6.5	2.1	2.1	6.5	2.1	34.7	60.7	60.7	112.7	15.1	188.7	4.3	110.6	6.5	140.3	409.9	1488.5	
Thayetmyoo	...	...	...	28.1	53.1	21.8	3.1	9.3	15.6	6.2	6.2	...	3.1	9.3	28.1	75.0	56.2	95.0	3.1	62.5	12.5	37.8	18.9	146.8	293.7	909.3	
Tonghoo	...	...	...	...	146.7	27.5	...	27.5	9.1	...	...	...	...	...	18.3	18.3	27.5	55.0	...	36.6	...	146.7	5.50	229.3	221.8	1000.0	
Port Blair	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	300.0	100.0	...	...	300.0	...	...	...	...	200.0	900.0	
Nyoung Gyo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	200.0	900.0
European Veterans.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palavaram	...	...	...	33.9	...	...	...	43.6	9.7	...	...	4.8	...	4.8	38.8	4.8	24.2	48.5	...	29.1	4.8	19.4	...	29.1	203.8	500.0	
Vizagapatam	...	...	...	22.2	77.7	...	...	122.2	...	22.2	...	11.1	...	22.2	11.1	22.2	33.3	...	...	...	55.5	33.3	11.1	...	333.3	755.5	
Total...	0.9	0.09	3.4	77.2	98.6	19.1	4.3	48.7	10.1	0.6	6.7	1.0	4.1	9.5	41.6	60.3	87.0	68.5	6.1	132.8	11.6	94.3	15.3	112.3	283.7	1256.6	

Table showing the Ratio per 1,000 of Strength of the Principal Diseases which have contributed to make up the Deaths in Hospital at each Station during 1869.

Stations.	DEATHS FROM																										
	Small-Pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Sunstroke.	Heart Disease.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accident.	All other diseases.	Total Deaths.	
Fort Saint George	...	...	...	...	...	...	6.10	...	2.44	1.22	...	...	2.05	...	1.22	...	1.22	2.44	...	...	...	2.05	1.22	1.22	4.10	...	17.09
Saint Thomas' Mount	...	...	...	...	...	...	2.05	...	4.10	...	...	...	2.05	...	2.05	...	...	4.10	...	...	...	2.05	2.05	2.05	4.10	...	287
Vellore	...	...	...	...	...	...	106.3	...	14.03	...	...	...	...	...	...	...	...	42.25	...	...	...	...	...	...	...	...	77.4
Poonamallee	7.04	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	21.2
Palaveram	...	...	...	...	...	...	...	...	2.89	...	...	...	2.89	...	...	...	...	5.79	...	...	...	...	...	...	...	...	127.6
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5.14	...	...	...	...	...	...	...	...	17.3
Wellington	...	...	...	...	...	...	5.14	...	...	...	...	...	...	...	...	...	...	6.91	...	...	...	...	...	...	...	...	12.8
Bangalore	...	...	...	...	...	...	0.49	...	...	...	...	...	0.49	...	...	...	...	6.91	...	...	...	...	...	...	...	...	1.97
Calicut	...	...	...	...	...	...	...	...	1.50	...	...	...	...	...	...	...	...	9.02	...	...	...	...	...	...	...	...	13.8
Cannanore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.50	...	...	...	...	...	...	...	...	1.97
Calicut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	22.5
Mallipooran	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.50
Bellary	...	...	...	...	...	...	2.20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.6
Ramandroog	...	...	...	...	...	...	1.91	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20.4
Secunderabad	...	...	...	...	...	...	4.16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31.5
Kamptee	1.38	0.47	2.34	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31.9
Seetabuldee	33.33	...	...	...	...	...	8.53	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	66.6
Chindwarrah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rangoon	...	...	...	...	...	...	1.19	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8.4
Thayetmyoo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	28.1
Tonghoo	...	...	...	...	...	...	8.67	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.2
Port Blair	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nyoung Gyo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
European Veterans.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palaveram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	29.1
Vizagapatam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	44.4
Total...	0.27	0.09	0.82	0.36	0.03	1.19	2.29	...	0.91	0.09	...	0.09	1.74	0.64	0.73	1.37	1.37	5.23	...	0.18	0.18	0.09	0.73	0.64	1.83	21.04	

XIV.

Table showing the Number of Admissions and Deaths under different classes of Diseases at each Station during 1869.

Stations.	GENERAL DISEASES.		LOCAL DISEASES.		CONDITIONS.		POISONS.		INJURIES.		SURGICAL OPERATIONS.		NOT YET DIAGNOSED.		NO APPRECIABLE DISEASE.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Fort Saint George	205	8	443	4	84	...	68	1	82	1	...	...	2	...	1	...
Saint Thomas' Mount	159	4	329	6	9	...	38	2	44	2	...	...	...	...	...	...
Vellore	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poonamallee	201	4	293	7	18	...	1	...	5	...	...	...	1	...	...	...
Palaveram	8	6	8	...	...	...	1	...	3	...	...	...	...	...	...	...
Trichinopoly	102	1	252	5	6	...	10	...	38	...	...	...	...	...	...	...
Wellington	167	2	273	3	24	...	7	...	44	...	...	...	...	...	...	...
Bangalore	484	2	1,125	24	22	...	75	...	250	2	...	...	3	...	...	...
Cannanore	120	1	408	12	4	...	14	2	82	...	...	...	1	...	...	...
Calicut	6	...	24	...	...	...	2	...	3	...	...	...	...	...	...	...
Mallipooram	9	...	40	...	...	...	2	...	22	...	...	...	...	...	...	...
Bellary	484	2	565	3	8	1	18	...	84	...	...	...	...	...	...	...
Ramandroog	10	...	33	1	...	...	1	...	2	...	...	...	...	...	...	...
Secunderabad	929	20	1,739	43	32	...	16	3	200	...	...	...	...	...	...	...
Kamptee	579	12	678	10	19	...	9	...	61	1	...	...	...	...	1	...
Seetabuldee	15	1	20	...	...	...	3	1	4	...	...	...	...	...	...	...
Chindwarrah	8	...	13	...	...	...	...	...	1	...	...	...	...	...	...	...
Rangoon	434	3	642	3	67	...	28	...	154	1	...	...	5	...	1	...
Thayetmyoo	201	8	383	5	25	...	3	...	65	...	...	...	...	...	...	...
Tonghoo	72	...	163	1	3	...	6	1	47	...	...	...	...	...	...	...
Port Blair	28	...	48	...	...	...	7	...	25	...	...	...	1	...	...	...
Nyoung Gyo	8	...	5	...	1	...	...	...	...	...	...	...	...	...	...	...
European Veterans.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palaveram	22	...	57	6	2	...	11	...	6	...	...	...	4	...	1	...
Vizagapatam	27	1	33	2	7	1	1	...	...	...	...	...	...	...	...	...
Total...	4,225	75	7,574	135	331	2	321	10	1,222	7	...	...	17	...	4	...

Table showing the Admissions and Deaths under different Orders of Diseases at each Station during 1869.

Stations.	GENERAL DISEASES.				LOCAL DISEASES.																														
	Sub-division A.		Sub-division B.		Diseases of the Nervous System.		Diseases of the Eye.		Diseases of the Ear.		Diseases of the Nose.		Diseases of the Circulatory System.		Diseases of the Absorbent System.		Ductless Glands.		Diseases of the Respiratory System.		Diseases of the Digestive System.		Diseases of the Urinary System.		Diseases of the Genitive System.		Organs of Locomotion.		Cellular Tissue.		Cutaneous System.				
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.			
Fort Saint George	85	5	120	3	16	..	12	..	4	..	..	..	2	..	8	..	..	..	19	1	157	3	196	..	..	..	15	..	2	..	9	..	81	..	
Saint Thomas' Mount	70	2	89	2	5	1	15	..	5	..	..	..	9	1	..	..	..	..	23	1	100	2	79	..	..	10	..	..	..	7	1	68	..		
Vellore	...	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Poonamallee	30	1	171	3	16	..	1	..	3	..	..	..	9	..	..	..	..	..	31	..	190	7	29	..	..	2	..	4	..	..	..	9	..		
Palavaram	8	6	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	85	..	..	4	..	..	..	3	..	34	1		
Trichinopoly	41	..	61	1	9	..	6	..	2	..	..	..	3	..	..	..	..	..	14	..	75	3	85	..	..	4	..	1	..	10	..	34	..		
Wellington	92	2	75	..	26	1	11	..	2	..	..	..	5	..	2	..	..	..	13	..	145	2	16	..	..	4	..	5	..	20	..	151	..		
Bangalore	263	2	221	..	24	3	60	..	5	2	..	..	15	1	23	..	..	..	80	1	571	18	119	1	..	42	..	13	..	13	..	20	..	75	..
Cannanore	52	..	68	1	6	..	10	..	1	..	..	..	13	2	..	..	..	..	20	1	214	9	50	..	..	10	..	4	..	5	..	75	..		
Calicut	4	..	2	..	..	..	2	..	..	..	..	..	1	..	1	..	..	..	1	..	11	..	3	..	..	..	..	..	..	..	..	..	..		
Mallipooram	2	..	7	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	20	..	4	..	..	1	..	1	..	1	..	10	..		
Bellary	226	2	208	..	7	1	22	..	3	..	..	..	13	..	23	..	..	..	35	..	236	2	75	..	..	9	..	4	..	23	..	108	..		
Ramanudroog	6	..	4	..	1	..	2	..	..	..	..	..	1	5	..	..	..	..	..	..	6	..	10	..	..	..	..	..	..	..	..	8	..		
Secunderabad	530	17	399	3	69	10	69	..	10	2	..	..	28	1	55	..	..	..	83	1	1,005	31	191	..	..	48	..	8	..	38	..	133	..		
Kamptee	435	11	144	1	29	6	25	..	7	..	..	..	5	1	17	..	..	..	29	1	292	2	129	..	..	18	..	8	..	10	..	109	..		
Setabuldee	12	1	3	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	..	6	..	..	..	..	..	..	..	2	..	..		
Chindwarah	6	..	2	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	10	..	4	..	..	..	..	1	..	1	..	..	..		
Rangoon	256	2	178	1	22	1	25	..	10	..	..	..	14	..	3	..	..	..	68	..	270	2	79	..	..	17	..	5	..	17	..	111	..		
Thayemyoo	86	7	115	1	16	3	2	..	4	..	..	..	1	3	..	..	..	16	..	233	2	49	..	..	6	..	2	..	2	..	51	..			
Tonghoo	44	..	28	..	4	..	4	..	2	..	..	..	4	1	1	..	..	9	..	90	..	20	..	..	7	..	5	..	5	..	12	..			
Fort Blair	20	..	8	..	3	..	2	..	1	..	..	..	..	..	..	..	..	2	..	21	..	1	..	..	1	..	..	..	1	..	16	..			
Nyong Gyo	..	..	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	1	..	..	..	..	..	..	..		
European Veterans.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
Palavaram	7	..	15	..	6	..	3	..	..	..	..	..	1	1	..	..	..	8	2	30	4	4	..	..	..	3	..	..	1	..	4	..	..		
Vizagapatam	15	1	12	..	1	..	..	..	..	..	..	..	2	2	..	..	..	..	1	..	12	..	6	..	..	..	..	..	5	..	3	..	..		
Total	2,290	59	1,935	16	264	27	272	..	59	..	4	..	130	11	157	..	1	..	453	8	8,700	87	1,085	1	198	..	61	..	164	1	1,026	1	..		

XVI.

Table showing the Admissions and Deaths under different Orders of Diseases at each Station during 1869.

Stations.	Conditions.		Poisons.		INJURIES.												Surgical Operation.		Not yet diagnosed.		No appreciable Disease.	
					Battle.		Accidental.		Homicidal.		Self-inflicted.		Judicial.									
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.		
Fort Saint George	84	...	68	1	...	...	82	1	...	...	...	...	...	...	...	...	2	...	1	...		
St. Thomas' Mount	9	...	38	2	...	...	44	2	...	...	...	...	...	...	...	...	...	...	...	...		
Vellore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Poonamallee	18	...	1	...	...	...	5	...	...	...	...	...	...	...	...	...	1	...	...	...		
Palaveram	...	...	1	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...		
Trichinopoly	6	...	10	...	...	...	38	...	...	...	...	...	...	...	...	...	...	...	...	...		
Wellington	24	...	7	...	...	...	44	...	...	...	...	...	...	...	...	...	...	...	...	...		
Bangalore...	22	...	75	...	...	...	249	1	...	...	1	1	...	...	...	...	3	...	...	...		
Cannanore	4	...	14	2	...	...	82	...	...	...	...	...	...	...	...	...	1	...	...	...		
Calicut	...	...	2	...	...	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...		
Mallapooram	...	...	2	...	...	...	22	...	...	...	...	...	...	...	...	...	...	...	...	...		
Bellary	8	1	18	...	...	...	83	...	...	...	1	...	...	...	...	...	...	...	...	...		
Ramandroog	...	...	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...		
Secunderabad	32	...	16	3	...	...	200	...	...	...	...	...	...	...	...	...	...	...	...	...		
Kamptee	19	...	9	...	...	...	61	1	...	...	...	...	...	...	...	...	...	...	1	...		
Seetabuldee	1	...	3	1	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...		
Chindwarrah	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...		
Rangoon	67	...	28	...	...	...	154	1	...	...	...	...	...	...	...	...	5	...	1	...		
Thayetmyoo	25	...	3	...	...	...	65	...	...	...	...	...	...	...	...	...	...	...	...	...		
Tonghoo	3	...	6	1	...	...	47	...	...	...	...	...	...	...	...	...	...	...	...	...		
Port Blair...	...	...	7	...	...	...	24	...	...	...	1	...	...	...	...	...	1	...	...	...		
Nyoung Gyo	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
European Veterans.																						
Palaveram	2	...	11	...	...	...	6	...	...	...	...	...	...	...	...	...	4	...	1	...		
Vizagapatam	7	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
Total...	331	2	321	10	...	...	1219	6	...	...	3	1	...	...	...	...	17	...	4	...		

XVII.

Table showing the Ratio per 1,000 of Strength, of Admissions and Deaths under different classes of Diseases at each Station during 1869.

Stations.	GENERAL DISEASES.		LOCAL DISEASES.		CONDITIONS.		POISONS.		INJURIES.		SURGICAL OPERATIONS.		NOT YET DIAGNOSED.		NO APPRECIABLE DISEASE.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Fort Saint George ...	250.30	9.75	540.90	4.87	102.56	...	83.02	1.22	100.12	1.22	...	...	2.44	...	1.22	...
Saint Thomas' Mount ...	326.48	8.21	675.56	12.32	18.48	...	78.02	4.10	90.31	4.10	...	...	...	...	...	...
Vellore ...	285.71	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poonamallee ...	1415.49	28.16	2063.38	49.29	126.76	...	...	...	35.21	...	...	...	7.04	...	...	...
Palaveram ...	170.21	127.66	170.21	...	...	...	21.27	...	63.83	...	...	...	...	...	...	...
Trichinopoly ...	295.65	2.80	730.43	14.49	17.39	...	28.98	...	110.14	...	...	...	...	...	...	...
Wellington ...	429.30	5.14	701.79	7.71	61.69	...	17.99	...	113.11	...	...	...	...	...	...	...
Bangalore ...	239.01	0.94	555.55	11.85	10.86	...	87.03	...	123.45	0.98	...	...	1.48	...	...	...
Cannanore ...	180.45	1.50	613.53	18.04	6.01	...	21.05	3.00	123.30	...	...	...	1.50	...	...	...
Calicut ...	206.90	...	827.58	...	...	...	68.96	...	103.45	...	...	...	...	...	...	...
Mallapooram ...	111.11	...	493.82	...	...	...	24.69	...	271.69	...	...	...	...	...	...	...
Bellary ...	477.97	2.20	622.24	3.30	8.31	1.10	19.82	...	92.51	...	...	...	...	...	...	...
Ramandroog ...	204.08	...	673.43	20.40	...	...	20.40	...	40.81	...	...	...	...	...	...	...
Secunderabad ...	444.28	9.56	831.65	20.53	15.30	...	7.65	1.43	95.65	...	...	...	...	...	...	...
Kamptee ...	803.05	10.64	940.36	13.80	26.35	...	12.48	...	84.60	1.38	...	...	...	1.38	...	...
Seetabuldee ...	500.0	33.33	666.66	...	...	...	100.0	33.33	133.33	...	...	...	...	...	...	...
Chindwarrah ...	533.33	...	866.66	...	...	...	...	...	66.66	...	...	...	...	...	...	...
Rangoon ...	520.38	3.59	769.78	3.59	80.33	...	33.57	...	184.63	1.19	...	...	5.99	...	1.19	...
Thayetmyoo ...	436.00	17.35	830.80	10.84	54.23	...	6.50	...	140.99	...	...	...	...	...	...	...
Tonghoo ...	225.0	...	509.37	3.12	9.37	...	18.75	3.12	146.87	...	...	...	...	...	...	...
Port Blair ...	256.88	...	440.36	...	...	...	64.22	...	229.35	...	...	...	9.13	...	...	...
Nyoung Gyo ...	300.0	...	500.0	...	100	...	...	...	...	...	...	...	...	...	...	...
European Veterans.																
Palaveram ...	106.79	...	276.69	29.12	9.70	...	53.39	...	29.12	...	...	...	19.41	...	4.85	...
Vizagapatam ...	300.0	11.11	366.66	22.22	77.77	11.11	11.11	...	...	...	...	...	...	...	...	...
Total...	388.32	6.89	696.13	12.40	30.42	0.18	29.50	0.91	112.31	0.64	...	...	1.56	...	0.36	...

XVIII.

Table showing the Ratio per 1,000 of Strength, of Admissions and Deaths under the different orders of Diseases at each Station during 1869.

Stations.	GENERAL DISEASES.				LOCAL DISEASES.											
	Sub-Division A.		Sub-Division B.		Diseases of the Nervous System.		Diseases of the Eye.		Diseases of the Circulatory System.		Diseases of the Absorbent System.		Diseases of the Respiratory System.		Diseases of the Digestive System.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Fort Saint George.	103.78	6.10	146.52	3.66	19.58	4.88	14.65	...	2.44	...	10.42	...	23.19	1.22	3.66	153.84
St. Thomas' Mount.	143.73	4.10	182.75	4.10	10.26	10.26	30.80	...	18.48	2.05	...	...	47.22	2.05	4.10	162.21
Vellore...	...	...	285.71	...	...	...	...	...	...	...	...	...	...	...	...	...
Poonamallee	211.26	7.04	1204.22	21.12	112.67	21.12	7.04	...	63.38	...	...	...	218.31	...	...	...
Palaveram	170.31	127.66	176.81	2.80	26.08	5.79	17.39	...	21.27	...	46.37	...	40.57	...	...	...
Trichinopoly	118.84	5.14	192.80	...	66.83	5.14	28.27	...	8.69	...	5.14	...	33.41	...	...	...
Wellington	236.50	0.98	109.13	...	11.85	2.46	29.62	...	12.85	...	11.35	...	39.50	...	...	...
Bangalore	129.87	...	102.25	1.50	9.02	1.50	15.03	...	19.54	3.00	...	...	30.07	...	...	...
Cannanore	78.19	...	102.25	...	...	...	...	...	34.48	...	34.48	...	34.48	...	...	...
Calicut...	137.93	...	68.96	...	...	...	68.96	...	...	...	...	...	...	...	...	...
Mallapooram	24.69	...	86.41	...	12.34	...	12.34	...	16.51	...	25.33	...	12.34	...	...	...
Bellary...	248.89	2.20	229.07	...	7.70	...	24.22	...	20.40	20.40	102.04	...	38.54	...	...	...
Ramandroog	122.44	...	81.63	...	20.40	...	40.81	...	13.39	0.47	26.30	...	39.69	...	...	...
Secunderabad	253.46	8.13	190.81	1.43	32.99	4.78	32.99	...	18.39	0.47	26.30	...	40.22	...	...	...
Kamptee	603.82	15.35	199.72	1.38	40.22	9.70	34.67	...	6.93	1.38	23.57	...	40.22	...	...	...
Seetabuldee	400	33.33	100	...	66.66	...	...	...	66.66	...	...	...	...	...	...	...
Chudwarrah	400	...	133.33	...	66.66	...	...	...	16.78	...	3.59	...	81.53	...	...	...
Rangoon	306.95	2.39	213.42	1.19	26.37	1.19	29.37	...	2.16	...	6.50	...	34.70	...	...	...
Thayetmyoo	186.55	15.18	249.45	2.16	34.70	6.50	4.33	...	12.50	3.12	3.12	...	28.12	...	...	...
Tonghoo	137.50	...	87.50	...	12.50	...	18.34	...	...	...	...	...	18.34	...	...	...
Port Blair	183.48	...	73.39	...	27.52	...	...	...	...	...	...	...	...	...	...	...
Nyoung Gyo	...	...	300	...	...	...	...	...	...	...	...	...	...	...	...	...
European Veterans.																
Palaveram	33.98	...	72.81	...	29.12	...	14.56	...	4.85	...	...	...	38.83	...	...	...
Vizagapatam	166.66	11.11	133.33	...	11.11	...	...	...	22.22	22.22	...	...	11.11	...	...	...
Total...	210.47	5.42	177.84	1.47	24.26	2.48	25	...	11.94	1.01	14.43	0.09	41.63	0.73	7.99	99.72

Table showing the Ratio per 1,000 of Strength, of Admissions and Deaths under different Orders of Diseases at each Station during 1869.

Stations.	Conditions.		Poisons.		Battle.		Accidental.		Homicidal.		Self-inflicted.		Judicial.		Surgical Operations.		Not diagnosed.		No appreciable Disease.	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fort Saint George	102.56	...	83.02	1.22	...	...	100.12	1.22	...	...	...	...	...	...	...	...	2.41	...	1.22	...
Saint Thomas' Mount	18.48	...	78.02	4.10	...	...	90.34	4.10	...	...	...	...	...	...	...	...	...	...	...	...
Velore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poonamallee	126.76	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palaveram	...	...	7.04	...	...	...	35.21	...	...	...	...	...	...	...	...	...	7.04	...	...	...
Trichinopoly	...	...	21.27	...	...	...	63.83	...	...	...	...	...	...	...	...	...	...	...	...	...
Wellington	17.39	...	28.98	...	...	...	110.11	...	...	...	...	...	...	...	...	...	...	...	...	...
Bangalore	61.69	...	17.99	...	...	...	113.11	...	...	...	...	...	...	...	...	...	...	...	...	...
Cannanore	10.86	...	37.03	...	...	...	122.06	0.49	...	...	0.49	0.49	...	...	...	...	1.48	...	...	...
Calicut	6.01	...	21.05	3.00	...	...	123.30	...	...	...	...	...	...	...	...	...	1.50	...	...	...
Mallapooram	...	...	68.96	...	...	...	103.45	...	...	...	...	...	...	...	...	...	...	...	...	...
Bellary	...	...	24.69	...	...	...	271.60	...	...	...	...	...	...	...	...	...	...	...	...	...
Ramandroog	8.81	1.10	19.82	...	...	...	91.40	...	...	...	1.10	...	...	...	...	...	...	...	...	...
Secunderabad	...	...	20.40	...	...	...	40.80	...	...	...	...	...	...	...	...	...	...	...	...	...
Kamptee	15.30	...	7.65	1.43	...	...	95.64	...	...	...	...	...	...	...	...	...	...	...	...	...
Seetabuldee	26.35	...	12.48	...	...	...	84.60	1.38	...	...	...	...	...	...	...	...	...	...	1.38	...
Chindwarrah	...	...	100.0	33.33	...	...	133.33	...	...	...	...	...	...	...	...	...	...	...	...	...
Rangoon	...	...	...	...	...	...	66.66	...	...	...	...	...	...	...	...	...	...	...	...	...
Thayetmyoo	80.33	...	33.57	...	...	...	184.65	1.19	...	...	...	...	...	...	...	...	5.99	...	9.13	...
Tonghoo	54.23	...	6.50	...	...	...	149.99	...	...	...	...	...	...	...	...	...	...	...	...	...
Port Blair	9.87	...	18.75	3.12	...	...	146.87	...	...	...	...	...	...	...	...	...	...	...	...	...
Nyoung Gyo	...	...	64.22	...	...	...	220.09	...	...	...	...	...	...	...	...	...	9.13	...	...	...
Nyoung Gyo	100.0	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
<i>European Veterans</i>																				
Palaveram	9.70	...	53.39	...	...	...	20.12	...	...	...	...	...	...	...	...	...	19.41	...	4.85	...
Vizagapatam	77.77	11.11	11.11	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	30.42	0.18	29.50	0.91	...	...	112.03	0.55	...	...	0.27	0.09	...	...	...	...	1.56	...	0.36	...

NATIVE ARMY RETURNS.

Table showing the Increase and Decrease among the Native Army serving in the Madras Presidency during the year 1869.

	Sappers and Miners.	Artillery.	Cavalry.	Infantry.	Sappers and Miners.	Artillery.	Cavalry.	Infantry.	Total Madras Army.
Strength on 1st January 1869	...	...	...	...	1,290	652	1,435	28,441	31,818
<i>Increase.</i>									
By Recruits	92	17	...	1,222					
By Transfers	2	2	8	202					
Joined from desertion	1	1	...	4					
By other causes	4	10	...	43					
Total Increase...	99	30	8	1,471	99	30	8	1,471	1,608
<i>Decrease.</i>									
By Invaliding...	30	10	36	747					
By reduction of establishment	...	1	...	...					
Discharged	By Summary dismissal.	4	6	2	180				
	By Court-Martial	1	2	4	40				
By desertion	5	...	1	38					
By deaths	29	4	21	471					
By other causes	11	13	8	19					
Total Decrease...	80	36	72	1,495	80	36	72	1,495	1,683
Strength on 1st January 1870	...	...	...	...	1,309	646	1,371	28,417	31,743

II.
Table showing the Sickness and Mortality among the whole Native Army stationed in the Madras Presidency during the year 1869, and the Prevalence of the Principal Diseases in each Quarter of the year.

Quarter.	ADMISSIONS INTO HOSPITAL.																DEATHS IN HOSPITAL.															
	Average Strength.	Total Admissions.	Total deaths in Hospital.	Do. out of Hospital.	Average Daily Sick.	Small-Pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Sun-stroke and Heat Apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other diseases.			
1st Quarter.	24,476	3,642	60	14	640.0	14	...	...	164	1,093	38	21	268	24	1	33	18	1	7	133	98	87	9	...	135	129	469	2	363	540		
2nd do.	25,563	4,294	56	18	730.0	9	...	...	274	1,417	46	21	249	10	2	35	10	...	5	87	148	218	9	3	140	141	645	1	260	594		
3rd do.	26,037	5,273	81	25	808.8	3	...	...	304	2,143	86	30	274	7	...	42	13	2	5	127	262	321	6	7	126	107	490	2	230	716		
4th do.	26,316	4,774	64	36	830.6	...	...	...	305	2,017	23	6	312	5	3	79	9	1	10	135	126	170	18	3	106	96	483	...	271	596		
For the year	25,598	17,965	261	93	752.3	26	...	...	1,047	6,670	113	78	1,103	46	6	189	50	4	27	482	629	796	42	13	507	473	2,087	5	1,144	2,446		
Ratio per 1,000 of strength for the year	...	...	...	...	...	1.01	...	...	40.9	260.5	4.4	3.04	43.08	1.8	0.2	7.3	1.9	0.1	1.04	18.8	24.4	31.09	1.6	0.5	19.8	18.4	8.1	0.1	44.6	95.5		
Ratio per 1,000 of strength.																																
1st Quarter	...	148.7	2.4	0.5	26.1	1	...	...	...	5	2	7	1	7	...	3	2	1	2	5	2	2	5	...	...	...	...	1	...	1	15	
2nd do.	...	167.9	2.1	0.7	28.5	1	...	...	...	5	2	6	3	5	...	1	2	...	2	9	2	2	2	...	...	...	...	...	1	1	14	
3rd do.	...	202.5	3.1	0.9	31.06	...	...	...	...	6	3	16	...	6	...	2	5	...	3	1	7	8	...	...	...	...	...	2	4	13		
4th do.	...	181.4	2.4	1.3	31.5	...	...	...	...	6	5	3	...	1	...	2	...	...	2	10	4	7	2	1	...	...	...	...	2	16		
For the year	...	702.5	10.1	3.6	29.3	2	...	...	5	22	11	32	5	19	...	8	7	3	9	25	15	22	3	1	...	3	2	1	8	58		
Ratio per 1,000 of strength for the year	...	...	...	...	...	0.07	...	...	0.1	0.8	0.4	1.2	0.1	0.7	...	0.3	0.2	0.1	0.3	0.9	0.5	0.8	0.1	0.03	...	0.1	0.07	0.03	0.3	2.2		

V.

Table showing the principal Diseases which have contributed to make up the Deaths in Hospital at each Station during 1869.

Stations.	Small-pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis	Scurvy.	Atrophy & Anæmia	Dropsies.	Stroke.	Heart Disease.	Respiratory Dis-eases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Acci-dents.	All other Diseases.
Madras ..	..	..	..	..	..	1	1	..	3	..	1	..	..	2	1	..	..	2	..	..	1	..	..	..	3
St. Thomas' Mount Palaveram ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	3
Vellore ..	..	..	..	..	..	..	2	..	2	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	3
Arcoot ..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Walair ..	..	..	..	..	..	1	..	..	1	..	..	1	1	1	1	..	..	..	..	..	..	..	..	..	3
Vizianagaram ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Berhamptore ..	..	..	..	..	..	..	2	..	2	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	3
Cuttack ..	..	..	..	..	1	..	2	..	1	..	..	..	..	2	2	..	..	..	..	..	..	..	..	..	3
Sambulpore ..	..	..	..	..	..	3	..	..	2	..	..	..	..	2	2	..	..	..	..	..	..	1	..	..	3
Vizagapatam ..	..	..	..	..	1	..	..	..	1	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	3
Bangalore ..	..	..	..	..	..	..	..	..	1	..	3	..	..	..	1	..	..	..	..	..	..	..	..	..	3
French Rocks ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Cannanore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Mangalore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Mercara ..	..	..	..	..	2	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Luokady ..	..	..	..	..	..	3	2	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	3
Bellary ..	1	..	..	..	1	..	6	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	3
Kurnool ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Mysore ..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	4	..	..	..	..	..	..	..	..	..	3
Trichinopoly ..	..	..	..	..	1	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	3
Quilon ..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Trichore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Trevandrum ..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	3
Palamcottah ..	..	..	..	..	..	..	..	..	1	..	1	1	1	1	1	2	..	..	..	..	..	..	..	..	3
Secunderabad ..	1	..	..	..	2	..	7	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Kamptee ..	..	..	..	..	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Seetabuldee ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Hoosungabad ..	..	..	..	..	..	..	1	..	2	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	3
Raeopore ..	..	..	..	1	3	1	4	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	3
Chandah ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Seroncha ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Rangoon ..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	1	2	3	..	..	..	..	..	1	..	3
Thayetmyoo ..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Moulmein ..	..	..	..	..	3	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	3
Tonghoo ..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	3
Shogheen ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	3
Singapore ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	3
Malacca ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Port Blair ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Nicobars ..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Total...	2	..	..	5	22	11	32	5	19	..	8	7	3	9	25	15	22	3	1	..	3	2	1	8	58

VI

Table showing the Ratio per 1,000 of Strength of the principal Diseases which have contributed to make up the Admissions into Hospital at each Station during 1869.

Stations.	ADMISSIONS FROM														Violence and Accidents.	Delirium Tremens.	All other Diseases.									
	Small-pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Pulvis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Stroke.	Heart Diseases.				Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	
Madras	...	...	...	32.5	42.7	1.8	1.8	14.3	5.1	0.4	5.5	2.3	...	1.8	17.6	12.07	17.1	1.3	...	...	29.7	14.8	103.06	0.4	39.4	97.5
Saint Thomas' Mount	...	...	...	28.8	163.4	...	...	163.4	4.8	...	9.6	...	...	...	19.2	28.8	9.6	...	...	...	33.6	38.6	62.5	67.3	76.9	
Palavaram	...	...	...	243.4	243.4	8.7	...	286.9	34.7	...	147.8	...	...	...	104.3	26.08	191.3	...	...	8.7	95.6	173.9	...	43.5	565.2	
Vellore	...	...	...	8.8	310.9	...	5.3	74.2	3.5	...	...	1.7	...	...	10.6	15.9	26.3	1.7	...	1.7	30.03	12.3	70.6	...	39.8	109.5
Arcot	...	...	...	76.9	...	...	...	...	...	...	...	...	...	...	133.8	...	...	...	...	...	...	76.9	...	76.9	...	
Vizianagaram	...	...	...	...	16.3	...	...	23.7	...	...	5.9	2.9	...	1.4	2.9	4.4	1.4	...	...	...	1.4	25.06	...	4.4	22.2	
Behanpore	...	...	...	...	75.1	...	7.5	87.5	...	...	17.5	7.5	...	5.02	20.05	10.04	7.5	...	...	...	37.5	12.5	8.9	15.03	122.8	
Cuttack	...	...	...	7.8	45.9	...	2.6	9.1	...	1.3	...	...	...	...	3.5	38.9	70.1	24.5	...	...	28.07	21.05	...	1.2	110.8	
Sunbulpore	...	...	...	...	289.2	108.7	...	80.7	7.01	...	...	1.2	1.2	...	13.8	2.5	5.93	...	...	...	6.2	21.4	96.7	0.5	107.6	
Vizagapatam	...	...	...	...	86.6	1.2	...	31.4	3.7	1.09	12.08	...	...	0.1	34.06	18.1	25.2	1.09	...	0.5	21.9	30.2	37.03	18.5	79.6	
Bangalore	...	...	...	202.7	212.6	17.03	...	39.01	1.09	1.09	...	...	...	...	16.6	12.9	3.7	3.7	...	1.8	19.2	39.2	76.2	30.04	115.5	
French Rocks	...	...	...	...	262.9	...	...	53.7	...	...	11.1	...	...	0.7	14.6	16.9	14.6	...	...	...	13.4	114.9	...	40.3	82.1	
Bangalore	...	...	...	18.4	65.4	1.5	...	35.4	0.7	...	1.4	1.5	0.7	...	11.9	65.6	11.9	7.4	...	...	13.4	224.1	...	54.1	266.01	
Cannanore	...	...	...	...	149.2	...	...	85.8	...	...	1.4	2.4	...	...	36.9	270.9	497.5	...	...	...	12.3	39.4	138.8	...	54.1	
Mangalore	...	...	...	...	1184.7	...	...	64.03	...	...	13.8	...	...	...	97.7	55.5	166.3	...	...	...	...	...	...	...	33.3	41.6
Mercara	...	...	...	27.7	298.61	180.5	...	69.4	...	...	...	...	...	...	17.9	17.3	6.1	...	...	...	22.9	21.2	85.05	...	28.5	95.1
Luckady	...	...	...	57.6	87.2	6.1	...	34.6	1.6	...	1.6	1.6	...	1.6	17.9	17.3	6.1	...	...	...	11.8	13.2	69.4	...	95.1	115.2
Bellary	...	...	...	78.2	134.4	...	20.6	84.1	...	1.4	2.9	2.9	1.4	1.4	28.03	10.3	19.2	...	...	...	...	...	...	...	38.4	96.1
Kurnool	...	...	...	692.3	38.4	...	...	153.8	...	...	...	...	...	...	19.2	...	7.2	18.6	2.1	...	...	...	...	...	29.5	115.2
Mysore	...	...	...	18.7	54.7	0.7	2.1	48.01	0.7	2.05	1.4	0.7	...	0.7	20.1	6.2	4.1	8.3	...	...	...	...	...	...	38.4	96.1
Trichinopoly	...	...	...	4.1	2.05	...	...	...	...	...	...	...	...	...	41.4	11.8	...	...	...	...	...	...	...	...	23.05	61.3
Quilon	...	...	...	17.7	35.5	...	...	47.3	...	...	12.03	...	...	12.03	...	48.1	36.1	...	...	...	24.05	24.05	108.4	...	17.7	53.2
Trichoor	...	...	...	24.05	36.1	...	...	36.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23.05	61.3
Trevandrum	...	...	...	6.6	23.3	...	...	56.8	1.6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	31.3	31.3
Palamcottah	...	...	...	43.8	416.6	3.3	7.4	21.9	0.3	...	10.02	2.9	0.3	2.2	8.1	9.6	19.6	...	...	...	...	...	...	...	60.2	156.6
Secunderabad	...	...	...	6.1	574.6	2.3	8.3	78.5	0.7	...	...	1.5	...	...	17.5	18.4	44.2	...	...	...	...	...	...	...	17.7	53.2
Kamptee...	...	...	...	19.1	200.0	...	2.1	17.01	...	...	...	...	...	...	17.01	6.3	6.3	...	...	...	...	...	...	...	106.8	56.7
Seetabuldee	...	...	...	16.08	474.5	...	2.6	13.4	...	...	2.6	...	...	...	8.04	8.04	18.7	...	...	...	...	...	...	...	45.6	79.01
Hooshingabad	...	...	...	...	...	1.5	18.2	80.6	3.03	...	6.06	4.5	...	3.03	...	...	...	...	...	...	...	...	...	...	60.2	105.5
Raepore	...	...	...	...	993.9	...	...	...	...	...	105.2	...	...	...	...	...	...	...	...	...	...	...	...	...	2.6	37.5
Chandah	...	...	...	...	368.4	...	...	210.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48.7	86.7
Seroncha	...	...	...	...	148.6	...	...	47.3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	315.7	315.7
Bangoon	...	...	...	...	97.4	...	...	51.2	2.5	...	10.8	3.2	...	...	...	...	...	...	...	...	...	...	...	...	47.3	135.1
Thayemyoo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	48.07	100.6
Moulmein	...	...	...	12.8	97.4	...	...	22.07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	51.4	50.9
Tonghooh	...	...	...	64.5	...	...	...	43.2	2.05	...	102.8	...	...	...	...	...	...	...	...	...	...	...	...	...	41.1	67.6
Shoaheen	...	...	...	...	298.3	4.1	...	16.1	3.5	...	...	7.1	...	...	...	...	...	...	...	...	...	...	...	...	55.6	116.6
Shoaheen	...	...	...	...	260.3	...	...	22.2	...	...	8.9	...	...	...	...	...	...	...	...	...	...	...	...	...	321.4	321.4
Singapore	...	...	...	...	401.7	...	...	73.7	...	...	8.9	...	...	...	...	...	...	...	...	...	...	...	...	...	98.2	139.3
Singapore	...	...	...	...	655.7	...	...	105.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	53.2	139.3
Singapore	...	...	...	...	90.2	...	...	105.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	52.6	118.6
Malacca	...	...	...	285.7	345.3	5.1	...	108.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	52.6	118.6
Port Blair	...	...	...	...	1333.3	47.6	...	142.8	...	...	25.7	30.9	...	...	...	...	...	...	...	...	...	...	...	...	108.2	118.6
Nicobars	...	...	...	207.14	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	142.8	190.4
Total...	1.01	...	...	40.8	260.6	4.4	3.04	43.08	1.7	0.2	7.3	1.9	0.1	1.05	18.8	24.1	31.09	1.6	0.5	19.8	18.4	81.1	0.1	44.6	95.5	

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[illegible]

*Table showing the number of Admissions and Deaths under different classes of Diseases at each Station,
during the year 1869.*

STATIONS.	General diseases.		Local diseases.		Conditions.		Poisons.		Injuries.		Surgical operations.		Not yet diagnosed.		No appreciable disease.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Madras	296	6	542	8	18	...	5	...	85	2	...	...	4	...	...	...
St. Thomas' Mount	80	1	52	2	...	...	...	...	14	...	...	...	...	...	...	...
Palaveram ...	105	4	90	9	21	1	...	...	5	...	...	...	1	...	...	...
Vellore	242	4	137	5	8	...	...	...	22	...	...	...	...	...	...	...
Arcot	1	...	3	...	...	...	...	...	1	...	...	...	...	...	...	...
Waltair	84	2	80	4	65	1	...	...	1	...	...	...	...	...	...	...
Vizianagaram ...	35	3	33	1	...	...	...	...	3	...	...	...	...	...	...	...
Berhampore ...	98	5	56	2	...	...	...	...	6	...	...	...	...	...	...	...
Cuttack	89	3	156	1	4	...	...	...	17	...	...	...	1	...	1	...
Sumbulpore ...	889	6	62	2	1	...	...	...	13	...	...	...	...	...	...	...
Visagapatam ...	22	3	15	2	...	...	...	...	...	...	...	...	...	...	...	...
Bangalore ...	930	10	547	6	19	1	2	...	159	...	...	...	1	...	...	...
French Rocks ...	187	...	92	2	...	...	1	...	10	...	...	...	...	...	...	...
Cannanore ...	242	...	288	5	17	2	...	...	39	2	...	...	...	...	...	...
Mangalore ...	134	1	180	4	26	1	1	...	27	...	...	...	...	...	...	...
Mercara	514	4	470	...	71	...	...	...	22	...	...	...	...	...	...	...
Luckady	237	...	31	1	...	...	...	...	24	1	...	...	...	...	...	...
Bellary	408	8	394	7	21	1	2	1	51	...	...	...	1	...	...	...
Kurnool	251	7	146	4	3	...	...	...	20	...	...	...	...	...	...	...
Mysore	46	...	19	...	...	...	...	...	2	...	...	...	...	...	...	...
Trichinopoly ...	180	4	198	7	4	1	3	...	32	...	...	...	1	...	...	...
Quilon	30	1	93	1	3	...	3	...	16	...	...	...	...	...	...	...
Trichoor	19	...	41	2	...	...	1	...	3	...	...	...	...	...	...	...
Trevandrum ...	9	...	33	1	...	...	1	...	5	...	...	...	...	...	...	...
Palamcottah ...	55	1	83	4	4	...	...	...	64	...	...	...	...	...	...	...
Secunderabad ...	1,412	13	457	10	29	...	...	...	123	1	...	...	2	...	3	...
Kamptee	899	6	391	2	21	1	...	...	79	...	...	...	1	1	1	...
Seetabuldee ...	125	1	141	1	2	...	1	...	15	...	...	...	...	...	...	...
Hooshungabad ...	197	1	55	2	1	...	1	...	9	...	...	...	...	...	...	...
Raepore	750	11	139	3	4	...	...	...	32	...	...	...	...	...	...	...
Chandah	13	...	15	...	...	...	...	...	6	...	...	...	...	...	...	...
Seroncha	31	...	52	...	...	...	...	...	7	...	...	...	...	...	...	...
Rangoon	316	2	439	7	27	2	3	1	75	...	...	...	14	...	3	...
Thayetmyoo ...	59	1	89	1	6	...	...	...	48	...	...	...	4	...	...	...
Moulmein	243	4	112	5	...	...	...	...	20	1	...	...	...	...	...	...
Tonghoo	178	4	252	1	18	1	...	...	31	...	...	...	...	...	...	...
Shoaygheen ...	74	...	71	2	11	...	...	...	11	...	...	...	...	...	...	...
Singapore... ..	180	...	159	2	2	...	...	...	13	1	...	...	...	...	...	...
Malacca	109	1	74	2	...	...	...	...	21	...	...	...	...	...	...	...
Port Blair ...	68	...	61	1	1	...	...	...	7	...	...	...	...	...	...	...
Nicobars	152	1	81	...	2	1	...	...	6	...	...	...	...	...	...	...
Total...	9,989	118	6,379	119	409	13	24	2	1,144	8	...	...	30	1	8	...

Table showing the Admissions and Deaths under different Orders of Diseases at each Station, during the year 1869.

STATIONS.	INJURIES.																				
	Conditions.		Poisons.		Battle.		Accidental.		Homicidal.		Self-inflicted.		Judicial.		Surgical Operations.		Not yet diagnosed.		No appreciable disease.		
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	
Madras ..	18		5				83	1			1	1	1					4			
Saint Thomas' Mount							14														
Palaveram	21	1					5											1			
Vellore ...	8						22														
Arcot ...							1														
Waltair ...	65	1					1														
Vizianagram							2						1								
Berhampore							6														
Cuttack...	4						17											1		1	
Sumbulpore	1						12				1										
Vizagapatam																					
Bangalore	19	1	2				159											1			
French Rocks			1				10														
Cannanore	17	2					39	2													
Mangalore	26	1	1				27														
Mercara ...	71						22														
Luckady...							24	1													
Bellary ...	21	1	2	1			51											1			
Kurnool ...	3						20														
Mysore ...							2														
Trichinopoly	4	1	3				31						1					1			
Quilon ...	3		3				16														
Trichoor			1				3														
Trevandrum			1				5														
Palamcottah	4						64														
Secunderabad	29						123	1										2		3	
Kamptee...	21	1					79											1	1	1	
Seetabuldee	2		1				15														
Hooshungabad	1		1				8						1								
Raepore ...	4						32														
Chandah...							6														
Seroncha							7														
Bangoon...	27	2	3	1			75											14		3	
Thayetmyoo	6						48											4			
Moulmein							19	1					1								
Tonghoo ...	18	1					31														
Shoaygheen	11						11														
Singapore	2						13	1													
Malacca ...							21														
Port Blair	1						7														
Nicobars	2	1					6														
Grand Total...	409	13	24	2			1,137	7			2	1	5					30	1	8	

JAIL RETURNS.

III.

Statement showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1869.

Diseases.	CENTRAL JAILS.																				
	European Prison, Cochin.			Coimbatore.			Rajahmundry.			Trichinopoly.			Salem.			Vellore.			Cannanore.		
	Admitted.	Died.	Strength.	Admitted.	Died.	Strength.	Admitted.	Died.	Strength.	Admitted.	Died.	Strength.	Admitted.	Died.	Strength.	Admitted.	Died.	Strength.	Admitted.	Died.	Strength.
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III.—(Continued.)

Statement showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1869.

DISTRICT JAILS.																		
	Madras Penitentiary.			Lawrence Asylum Works.			Madura.			Cuddalore.			Bellary.			Chittoor.		
	Average Strength ... 467 Daily Sick per 1,000 of Strength ... 40-8.			Average Strength ... 417 Daily Sick per 1,000 of Strength ... 45-0.			Average Strength ... 379 Daily Sick per 1,000 of Strength ... 16-8.			Average Strength ... 338 Daily Sick per 1,000 of Strength ... 21-3.			Average Strength ... 320 Daily Sick per 1,000 of Strength ... 80-3.			Average Strength ... 317 Daily Sick per 1,000 of Strength ... 36-9.		
Diseases.	Admitted.	Died.	Admitted per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhus Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Typhoid Fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Continued Fever ..	86	184-1	175-0	73	175-0	175-0	2	175-0	175-0	18	8	53-2	95	1	206-8	1	..	3-1
Intermittent Fever ..	9	19-2	151-0	63	151-0	151-0	26	151-0	151-0	7	..	20-7	43	1	134-3	64	..	201-8
Remittent Fever ..	..	..	..	5	11-9	11-9	1	11-9	11-9	16	8	47-3	6	..	18-7	1	..	3-1
Cholera ..	4	8-5	..	..	..	..	1	..	..	2	1	5-8	..	..	..	..	..	..
Rheumatism ..	7	14-9	155-0	65	155-0	155-0	2	155-0	155-0	1	..	2-9	22	3	68-7	6	..	18-9
Pituitis Pulmonalis ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Scoury ..	8	17-1	..	..	..	..	6	..	..	2	..	5-8	12	1	37-5	1	..	3-1
Atrophy and Anemia ..	5	10-7	2-3	1	2-3	2-3	..	..	..	5	4	14-7	9	3	25-1	..	..	..
Dropsies ..	1	2-1	..	10	23-9	23-9	..	..	..	..	..	..	..	..	..	..	..	..
Apoplexy ..	..	..	..	..	..	..	..	..	..	3	2	8-8	..	..	..	..	..	..
Heart Diseases ..	1	2-1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Respiratory Diseases ..	42	89-9	98-3	41	98-3	98-3	8	98-3	98-3	37	5	109-4	11	1	24-3	10	..	31-5
Dysentery ..	32	160-5	184-6	77	184-6	184-6	5	184-6	184-6	14	5	40-4	7	..	21-8	15	..	47-3
Diarrhoea ..	75	160-5	175-0	73	175-0	175-0	6	175-0	175-0	..	..	..	16	1	50-0	4	..	12-6
Spleen Diseases ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Veneral Diseases ..	38	81-3	11-9	5	11-9	11-9	6	11-9	11-9	2	..	5-8	9	..	28-1	20	..	63-0
Dracunculus ..	13	27-8	11-9	5	11-9	11-9	3	11-9	11-9	..	..	..	65	1	203-1	..	..	..
Abscess ..	10	21-4	143-8	60	143-8	143-8	8	143-8	143-8	2	..	5-8	97	..	84-8	1	..	3-1
Skin Diseases ..	38	81-3	201-4	84	201-4	201-4	14	201-4	201-4	3	..	8-8	112	1	350-0	117	..	369-0
Wounds and Accidents ..	12	24-6	282-9	118	282-9	282-9	14	282-9	282-9	27	..	5-8	27	..	84-3	12	..	37-8
All other causes ..	104	222-6	153-4	64	153-4	153-4	28	153-4	153-4	24	8	71-0	63	1	190-3	33	..	104-1
Total...	4035	1038-5	1788-9	746	1788-9	1788-9	125	1788-9	1788-9	142	39	420-1	524	14	1637-5	285	1	899-0
																		3-1

(III.—Continued.)

Statement showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1863.

DISTRICT JAILS.																									
Diseases.	Vizagapatam.				Palamcottah.				Trichinopoly.				Calicut.				Ootacamund.				Cuddapah.				
	Average Strength...305 Daily Sick per 1,000 of Strength ...36.7				Average Strength...287 Daily Sick per 1,000 of Strength ...21.6				Average Strength...219 Daily Sick per 1,000 of Strength ...11.8				Average Strength ... 215 Daily Sick per 1,000 of Strength ...37.6				Average Strength...212 Daily Sick per 1,000 of Strength...37.2				Average Strength...203 Daily Sick per 1,000 of Strength ...81.2				
	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	18	4	59.0	13.1	3	10.4	18.2	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Intermittent Fever	13	...	42.6	...	1	3.4	...	...	14	...	65.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Remittent Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	1	1	4.5	4.5	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism	2	...	6.5	...	2	6.0	...	...	3	...	13.6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis Pulmonalis	1	1	3.2	3.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy and Anæmia	7	1	22.9	3.2	15	52.2	31.3	...	3	...	13.6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dropsical	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Heart Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Respiratory Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	15	...	49.1	...	27	94.1	20.9	...	1	...	4.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea	21	2	28.8	6.5	13	45.2	20.9	...	20	3	91.3	13.6	...	...	...	...	...	...	...	...	...	...	...	...	...
Spleen Diseases	2	...	6.5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dracunculæ	8	...	26.2	...	8	27.8	...	...	4	...	18.2	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abscess	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Skin Diseases	13	...	39.3	...	11	38.3	...	...	7	...	32.6	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wounds and Accidents	11	...	36.0	...	3	10.4	...	...	18	...	83.7	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes	19	3	62.2	9.8	9	31.3	10.4	...	10	1	45.6	4.5	...	...	...	...	...	...	...	...	...	...	...	...	...
Total...	143	11	465.5	30.0	110	24	383.5	83.6	66	7	301.3	31.9	259	23	1,204.6	102.3	144	12	679.2	50.6	505	15	2,487.6	73.8	

III.—(Continued.)

Statement showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1869.

DISEASES.	DISTRICT JAILS.																							
	Tanjore.			Kurnool.			Chingleput.			Berhampore.			Vellore.			Nellore.								
	Average Strength... 196 Daily Sick per 1,000 of Strength ... 8.1	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Average Strength... 176 Daily Sick per 1,000 of Strength... 17.6						
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Typhoid Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Continued Fever ...	2	10.2	5.1	65	345.7	35	1	5.3	20	108.1	...	...	...	...	...	...	...	...	...					
Intermittent Fever ...	1	5.1	5.1	29	154.2	1	...	5.3	2	10.8	...	...	...	...	...	...	...	...	...					
Remittent Fever ...	1	5.1	5.1	2	10.6	9	...	32.2	19	13	102.7	...	...	...	...	...	...	...	...					
Cholera ...	2	10.2	...	...	...	16	...	86.4	...	...	...	...	...	...	...	...	...	...	...					
Rheumatism ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Phthisis Pulmonalis ...	...	...	...	...	...	5	1	26.8	1	1	5.4	...	...	...	...	...	...	...	...					
Scurvy ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Atrophy and Anæmia ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Dropsies ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Apoplexy ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Heart Diseases ...	4	1	20.4	5	26.5	6	1	1	2	10.8	...	...	...	...	...	...	...	...	...					
Respiratory Diseases ...	15	8	76.5	11	58.5	21	1	5.3	27	145.9	...	...	...	...	...	...	...	...	...					
Dysentery ...	7	1	35.7	16	85.1	35	...	187.0	68	9	307.5	...	...	...	...	...	...	...	...					
Diarrhoea ...	...	...	...	...	...	...	...	5.3	...	...	...	...	...	...	...	...	...	...	...					
Spleen Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Veneral Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Dracunculæ ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Abscess ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...					
Skin Diseases ...	4	1	20.4	38	202.1	50	...	268.8	9	9	48.6	...	...	...	...	...	...	...	...					
Wounds and Accidents... ..	1	...	5.1	11	58.5	15	...	80.6	7	3	37.8	...	...	...	...	...	...	...	...					
All other Causes ...	...	...	...	14	74.4	25	2	134.4	23	3	124.3	...	...	...	...	...	...	...	...					
Total...	47	8	239.7	40.8	241	12	1281.9	63.8	230	6	1236.5	32.2	199	30	1075.6	162.1	76	7	413.0	38.0	112	12	636.3	68.1

III.—(Continued.)
Statement showing Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1869.

DISEASES.	DISTRICT JAILS.											
	Coimbatore.			Mangalore.			Tranquebar.			Guntoor.		
	Average Strength... 165 Daily Sick per 1,000 of Strength ... 38.7	Average Strength... 143 Daily Sick per 1,000 of Strength ... 55.9	Average Strength... 143 Daily Sick per 1,000 of Strength ... 52.4	Average Strength... 143 Daily Sick per 1,000 of Strength ... 55.9	Average Strength... 143 Daily Sick per 1,000 of Strength ... 52.4	Average Strength... 143 Daily Sick per 1,000 of Strength ... 55.9	Average Strength... 143 Daily Sick per 1,000 of Strength ... 52.4	Average Strength... 143 Daily Sick per 1,000 of Strength ... 55.9	Average Strength... 143 Daily Sick per 1,000 of Strength ... 52.4	Average Strength... 143 Daily Sick per 1,000 of Strength ... 55.9	Average Strength... 143 Daily Sick per 1,000 of Strength ... 52.4	Average Strength... 143 Daily Sick per 1,000 of Strength ... 55.9
Small-pox ...	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Intermittent Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism ...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis Pulmonalis ...	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy ...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy and Anæmia ...	...	...	...	...	...	...	...	...	...	...	...	...
Dropsies ...	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy ...	...	...	...	...	...	...	...	...	...	...	...	...
Heart Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...
Respiratory Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	...	...	...	...	...	...	...	...	...	...	...	...
Spleen Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...
Dracunculus ...	...	...	...	...	...	...	...	...	...	...	...	...
Abscesses ...	...	...	...	...	...	...	...	...	...	...	...	...
Skin Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...
Wounds and Accidents ...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes ...	...	...	...	...	...	...	...	...	...	...	...	...
Total...	179	4	1084.8	24.2	152	14	1062.9	97.9	132	12	928.0	83.9

III.—(Concluded.)
Statement showing Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1869.

DISEASES.	DISTRICT JAILS.											
	Rajahmundry.			Tellicherry.			Cannanore.			Masulipatam.		
	Average Strength... 89 Daily Sick per 1,000 of Strength ... 57.9	Average Strength... 82 Daily Sick per 1,000 of Strength ... 58.6	Average Strength... 79 Daily Sick per 1,000 of Strength ... 26.5	Average Strength... 82 Daily Sick per 1,000 of Strength ... 58.6	Average Strength... 79 Daily Sick per 1,000 of Strength ... 26.5	Average Strength... 74 Daily Sick per 1,000 of Strength ... 13.5	Average Strength... 74 Daily Sick per 1,000 of Strength ... 13.5	Average Strength... 74 Daily Sick per 1,000 of Strength ... 13.5	Average Strength... 74 Daily Sick per 1,000 of Strength ... 13.5	Average Strength... 74 Daily Sick per 1,000 of Strength ... 13.5	Average Strength... 74 Daily Sick per 1,000 of Strength ... 13.5	Average Strength... 74 Daily Sick per 1,000 of Strength ... 13.5
Small-pox ...	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.	Admitted.	Died.	Admitted per 1,000 of Strength.	Died per 1,000 of Strength.
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Intermittent Fever ...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism ...	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis Pulmonalis ...	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy ...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy and Anæmia ...	...	...	...	...	...	...	...	...	...	...	...	...
Dropsies ...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	...	...	...	...	...	...	...	...	...	...	...	...
Spleen Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...
Dracunculus ...	...	...	...	...	...	...	...	...	...	...	...	...
Abscesses ...	...	...	...	...	...	...	...	...	...	...	...	...
Skin Diseases ...	...	...	...	...	...	...	...	...	...	...	...	...
Wounds and Accidents ...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes ...	...	...	...	...	...	...	...	...	...	...	...	...
Total	100	1	1136.3	11.3	95	10	1158.5	121.9	52	3	658.2	37.9

Table showing the prevalence of Cholera at each Jail of the Madras Presidency in each month of the year 1869.

JAILS.	Average Strength for the year.	NUMBER OF ADMISSIONS AND DEATHS IN EACH MONTH.												Total Admissions.	Total Deaths.	RATIO PER 1,000 OF STRENGTH.					
																Admissions.	Deaths.				
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.								
European Prison, Ootacamund ...	27	A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	...	...	...	...
Central Jails. Coimbatore ...	969																	...	...	...	...
Rajahmundry ...	896																	...	...	...	...
Trichinopoly ...	656																	...	...	...	...
Salem ...	506																	...	...	...	...
Vellore ...	451																	...	...	...	...
Cannanore ...	301																	...	...	...	...
District Jails. Madras Penitentiary	467											4	1					4	1	8.5	2.1
Lawrence Asylum Works ...	417																	...	...	...	...
Madura ...	379							1										1	...	2.6	...
Cuddalore...	338			2	1													2	1	5.9	2.9
Bellary ...	320																	...	...	...	...
Chittoor ...	317																	...	...	...	...
Vizagapatam ...	305																	...	...	...	...
Palamcottah ...	287																	...	...	...	...
Trichinopoly ...	219																1	1	1	4.5	4.5
Calicut ...	215																	...	...	...	...
Ootacamund (Native Jail.)	212																	...	...	...	...
Cuddapah ...	203											3	2					3	2	14.7	9.8
Tanjore ...	196											1	1					1	1	5.1	5.1
Kurnool ...	188	1	10	4	17	7	1											29	11	154.2	58.6
Chingleput ...	186									1								1	...	5.8	...
Berhampore ...	185										16	10	3	3				19	13	102.7	70.2
Vellore ...	184										6	2						8	2	32.6	10.8
Nellore ...	176												22	11				22	11	125.0	62.5
Coimbatore ...	165																	...	...	...	...
Mangalore ...	143																	...	...	...	...
Tranquebar ...	143																	...	...	...	...
Guntoor ...	140																	...	...	...	...
Paumben ...	105																	...	...	...	...
Russelcondah ...	90																	...	...	...	...
Rajahmundry ...	88																	...	...	...	...
Tellicherry ...	82																	...	...	...	...
Cannanore ...	79																	...	...	...	...
Masulipatam ...	74																	...	...	...	...
Guindy ...	74																	...	...	...	...
H. M.'s Jail, Madras ...	33																	...	...	...	...
Cochin ...	17																	...	...	...	...
Total ...	9,833	1	12	5	17	7	1	1	1	23	12	33	18	1	1	89	43	90	43	9.0	4.3

Table showing the general Statistics of Sickness and Mortality at each Jail of the Madras Presidency, and the average number of Daily Sick per 1,000 of Strength in each month of the year 1869.

Jails.	Average Strength for the year.	DAILY SICK PER 1,000 OF AVERAGE STRENGTH IN EACH MONTH.												Daily Sick per 1,000 of Average Strength for the year.	Admitted into Hospital per 1,000 of Average Strength for the year.	DIED PER 1,000 OF AVERAGE STRENGTH.	
		January.	February.	March.	April.	May.	June.	July.	August.	Septem. ber.	October.	Novem. ber.	Decem. ber.			Cholera.	All Causes.
		11.5	11.6	13.9	29.6	52.0	135.7	50.0	76.0	58.3	69.2	62.0	33.3	49.1	1629.6	...	...
European Prison, Ootacamund ...	27	15.5	16.6	16.6	13.3	18.7	17.4	23.9	18.7	19.4	21.9	15.0	10.6	16.6	587.2	...	22.7
Central Jails. Coimbatore ...	969	16.4	16.6	16.6	14.6	11.3	11.8	17.6	21.5	16.4	19.9	19.6	20.6	16.7	531.2	...	15.6
Rajahmundry ...	896	14.5	19.6	16.8	19.4	17.7	14.9	15.9	14.2	19.1	15.7	22.2	14.8	17.3	321.6	...	53.3
Trichinopoly ...	656	34.2	24.8	33.6	29.7	42.9	38.6	33.3	20.6	18.0	21.0	21.0	20.3	28.2	683.7	...	7.9
Salem ...	506	39.2	31.2	27.7	18.6	19.7	14.9	12.3	12.0	13.6	13.9	19.1	19.9	19.7	410.1	...	42.1
Vellore ...	451	36.7	39.9	36.0	42.5	45.1	41.6	53.0	52.7	57.3	47.8	46.4	38.7	41.1	1095.3	...	69.7
Cannanore ...	301	28.0	28.8	25.5	23.9	44.2	38.6	44.8	54.9	52.3	61.7	40.4	51.5	40.8	1038.5	...	10.7
Madras Penitentiary ...	467	58.5	72.8	75.4	87.5	46.9	32.3	20.1	19.1	23.5	22.4	26.3	31.8	45.0	1788.9	...	33.5
Lawrence Asylum Works ...	417	15.5	11.7	10.5	16.3	16.9	28.5	24.6	15.2	12.0	15.8	17.1	23.1	16.8	829.8	...	15.8
Madura ...	379	35.3	26.3	23.2	12.1	19.6	9.6	21.8	15.8	25.9	36.2	23.3	15.4	21.3	420.1	...	115.3
Bellary ...	320	58.8	81.0	79.0	82.8	110.0	122.2	106.8	71.1	61.1	70.9	73.3	56.8	80.3	1637.5	...	40.6
Chittoor ...	317	36.0	42.0	38.3	29.8	21.2	36.1	34.7	40.2	36.0	35.0	29.8	31.2	36.7	899.0	...	3.1
Vizagapatam ...	305	22.0	25.8	34.2	29.3	84.3	33.5	41.4	63.0	48.7	47.2	29.8	11.7	21.6	465.5	...	86.0
Palamcottah ...	287	42.0	41.7	51.6	36.8	5.7	15.1	13.3	16.2	17.6	13.1	13.2	11.7	11.8	383.5	...	83.6
Trichinopoly ...	219	9.9	6.4	8.5	13.2	8.7	7.3	8.8	8.0	14.2	25.0	16.2	17.4	37.6	1204.6	...	31.9
Ootacamund (Native Jail) ...	212	28.2	50.9	45.8	65.7	58.8	63.0	35.6	45.1	34.3	63.2	21.3	54.0	37.6	679.2	...	102.3
Cuddapah ...	203	79.1	111.5	89.7	91.3	92.8	83.7	75.7	71.2	71.0	91.3	75.5	49.5	81.2	2487.6	...	56.6
Tanjore ...	196	5.9	5.8	11.3	5.5	4.0	8.2	4.5	16.5	8.0	14.6	9.4	8.0	8.1	239.7	...	73.8
Kurnool ...	188	24.1	44.3	68.7	78.6	86.5	68.1	51.7	47.1	19.0	27.5	28.5	28.4	45.2	1231.9	...	40.8
Chingleput ...	186	21.6	13.8	46.4	64.5	78.8	81.3	65.5	61.3	60.0	59.4	60.8	50.2	54.8	1236.5	...	33.2
Berhampore ...	185	21.0	7.8	19.2	20.0	22.6	31.7	69.1	76.9	62.2	22.2	31.1	32.7	36.2	1075.6	...	38.0
Vellore ...	184	13.3	16.0	13.7	14.8	19.2	26.9	33.6	22.3	94.6	18.2	14.6	15.0	17.6	418.0	...	68.1
Nellore ...	176	61.1	57.5	55.0	40.3	38.4	39.3	66.6	37.3	30.5	32.2	41.2	48.7	38.7	636.3	...	62.5
Coimbatore ...	165	21.6	51.6	41.4	30.3	64.8	67.1	52.7	46.1	60.3	61.5	45.3	71.6	55.9	1032.9	...	24.2
Mangalore ...	143	44.8	59.0	60.2	65.1	36.4	47.7	52.7	31.8	92.3	32.4	33.7	17.8	52.4	933.0	...	97.9
Tranquebar ...	140	13.5	22.1	11.5	13.4	16.3	13.0	15.6	17.1	25.6	17.7	11.8	23.3	16.4	507.1	...	88.9
Paumben ...	105	49.5	52.5	33.9	33.3	25.6	43.1	61.8	74.0	92.5	68.6	37.7	47.1	51.4	1819.0	...	19.0
Russelcondah ...	90	48.9	51.8	71.5	64.9	49.4	41.5	24.7	49.4	14.2	20.0	29.0	46.7	36.5	1011.1	...	44.4
Rajahmundry ...	88	52.2	55.9	60.6	69.0	83.5	40.9	61.4	55.5	63.4	56.0	81.0	75.3	58.5	1186.3	...	11.3
Tellicherry ...	82	37.1	24.3	39.5	24.3	292.6	43.2	32.5	25.3	18.9	18.6	20.2	30.7	26.5	658.2	...	121.9
Cannanore ...	79	17.0	25.1	31.0	51.9	21.9	1.8	1.9	15.3	23.8	13.6	7.4	9.8	13.5	188.6	...	37.9
Masulipatam ...	74	17.5	23.5	51.0	59.2	67.7	67.3	62.6	77.5	74.3	63.3	35.2	40.0	55.4	1932.4	...	...
Guindy ...	74	22.0	45.4	59.2	71.4	67.7	67.3	62.6	77.5	74.3	63.3	35.2	40.0	55.4	1932.4	...	27.0
H. M.'s Jail, Madras ...	33	36.8	9.0	64.5	85.7	25.0	32.3	41.4	36.5	81.8	56.6	64.5	50.9	48.4	1272.7	...	...
Cochin ...	17	135.0	107.6	100.0	153.8	90.9	142.8	85.7	6.0	45.4	62.5	100.0	50.0	86.3	3235.2	...	...
Total ...	9,833	1154.9	1359.3	1559.7	1655.7	1737.2	1636.9	154.5	1436.6	1570.8	1509.4	1315.2	1335.6	31.2	804.7	4.3	41.8

Table showing the Sickness and Mortality among each Class of Prisoners in the Madras Presidency during the year 1869.

JAILS.	CONVICTS.				PRISONERS AWAITING, OR UNDER TRIAL.				CIVIL DEBTORS.			
	Average Strength.	Admissions.	Deaths.	Average Daily Sick.	Average Strength.	Admissions.	Deaths.	Average Daily Sick.	Average Strength.	Admissions.	Deaths.	Average Daily Sick.
European Prison, Ootacamund	27	44	...	1.3	...	...	...	...	...	...	...	...
Central Jails.												
Coimbatore	969	569	22	16.1	...	...	...	...	...	...	...	...
Rajahmundry	895	476	14	15.0	1	...	...	...	...	...	...	...
Trichinopoly	656	211	35	11.4	...	...	...	...	...	...	...	...
Salem	494	339	4	14.2	5	3	...	...	7	4	...	0.1
Vellore	451	185	19	8.9	...	...	...	...	...	...	...	...
Cannanore	301	330	21	13.4	...	...	...	...	...	...	...	...
District Jails.												
Madras Penitentiary	458	477	5	18.9	9	8	...	0.2	...	...	...	...
Lawrence Asylum Works...	417	746	14	18.8	...	...	...	...	...	...	...	...
Madura	306	112	6	5.2	10	6	...	0.9	63	7	...	0.3
Cuddalore	311	137	37	6.9	22	4	1	0.3	5	1	1	...
Bellary	299	521	14	25.6	9	...	...	...	12	3	...	0.1
Chittoor	292	279	1	11.4	18	6	...	0.3	7	...	...	...
Vizagapatam	290	139	11	11.1	11	2	...	...	4	1	...	...
Palamcottah	258	106	24	6.2	17	4	...	...	12	...	...	...
Trichinopoly	208	64	7	2.5	8	2	...	...	3	...	...	...
Calicut	186	247	21	7.8	19	10	1	0.2	10	2	...	...
Ootacamund (Native Jail)...	211	142	11	7.9	...	...	...	...	1	2	1	...
Cuddapah	176	492	15	16.4	9	8	...	...	18	5	...	...
Tanjore	180	47	8	1.6	10	...	...	...	6	...	...	...
Kurnool	176	237	12	8.5	7	4	...	...	5	...	...	...
Chingleput	175	222	5	9.5	8	8	1	0.7	3	...	...	...
Berhampore	182	191	28	6.4	3	8	2	0.3	...	...	...	...
Vellore	184	76	7	2.7	...	...	...	...	...	...	...	...
Nellore	168	110	12	3.0	6	1	...	...	2	1	...	...
Coimbatore	148	178	4	6.4	9	...	...	...	8	1	...	...
Mangalore	131	146	14	7.9	8	6	...	...	4	...	...	...
Tranquebar	118	129	12	7.4	15	1	...	...	10	2	...	...
Guntoor	133	71	...	2.3	6	...	...	...	1	...	...	...
Paumben	105	191	2	5.4	...	...	...	...	...	...	...	...
Russelcondah	90	91	4	3.2	...	...	...	...	...	...	...	...
Rajahmundry	76	97	1	4.5	10	3	...	0.5	2	...	...	...
Tellicherry	63	86	9	4.1	7	6	1	0.6	12	3	...	...
Cannanore	79	52	3	2.1	...	...	...	...	...	...	...	...
Masulipatam	74	11	...	1.0	...	...	...	...	...	...	...	...
Guindy	74	143	2	4.1	...	...	...	...	...	...	...	...
Her Majesty's Jail, Madras	...	...	...	...	...	...	...	...	33	42	...	1.6
Cochin	15	54	...	1.5	1	1	...	...	1	...	...	...
Total	9,376	7,748	404	300.6	228	91	6	4.0	229	74	2	2.1

Table showing the Ratio of Admissions, Deaths, and Daily Sick among each Class of Prisoners in the Madras Presidency during 1869.

Jails.	CONVICTS.			PRISONERS AWAITING OR UNDER TRIAL.			CIVIL DEBTORS.		
	Admissions.	Deaths.	Average Daily Sick.	Admissions.	Deaths.	Average Daily Sick.	Admissions.	Deaths.	Average Daily Sick.
European Prison, Ootacamund	1629.6	...	48.1	...	...	...	...	...	...
Central Jails.									
Coimbatore	587.2	22.7	16.6	...	...	...	...	...	...
Rajahmundry	531.8	15.6	16.7	...	...	...	...	...	...
Trichinopoly	321.6	53.3	17.3	...	...	...	...	...	...
Salem	686.2	8.0	28.7	600.0	...	...	571.4	...	14.2
Vellore	410.1	42.1	19.7	...	...	...	...	...	...
Cannanore	1096.3	69.7	41.1	...	...	...	...	...	...
District Jails.									
Madras Penitentiary	1041.4	10.9	41.2	888.8	...	22.2	...	...	...
Lawrence Asylum Works	1788.9	33.5	45.0	...	...	...	...	...	...
Madura	366.0	19.6	16.9	600.0	...	90.0	111.1	...	4.7
Cuddalore	440.5	118.9	22.1	181.8	45.4	13.6	200.0	200.0	...
Bellary	1742.4	46.8	85.6	...	...	...	250.0	...	8.3
Chittoor	955.4	3.4	39.0	333.3	...	16.6	...	...	...
Vizagapatam	479.3	37.9	38.2	181.8	...	...	250.0	...	...
Palamcottah	410.8	93.0	24.0	235.2	...	...	...	...	...
Trichinopoly	307.6	33.6	12.0	250.0	...	...	...	...	...
Calicut	1327.9	112.9	41.9	526.3	52.6	10.5	200.0	...	...
Ootacamund (Native Jail)	672.9	52.1	37.4	...	...	...	2000.0	100.0	...
Cuddapah	2795.4	85.2	93.1	888.8	...	...	277.7	...	...
Tanjore	261.1	44.4	8.8	...	...	...	...	...	...
Kurnool	1346.5	68.1	48.3	571.4	...	...	...	...	...
Chingleput	1268.5	28.5	54.2	1000.0	125.0	87.5	...	...	...
Berhampore	1049.4	153.8	35.1	2666.6	666.6	100.0	...	...	...
Vellore	413.0	38.0	14.6	...	...	...	...	...	...
Nellore	654.7	73.2	17.8	166.6	...	...	500.0	...	...
Coimbatore	1202.7	27.0	43.2	...	...	...	125.0	...	...
Mangalore	1114.5	106.8	60.3	750.0	...	...	...	...	...
Tranquebar	1093.2	101.6	62.7	66.6	...	...	200.0	...	...
Guntoor	533.9	...	17.2	...	...	...	...	...	...
Paumben	1.19.0	19.0	51.4	...	...	...	...	...	...
Russelcondah	1011.1	44.4	35.5	...	...	...	...	...	...
Rajahmundry	1276.3	13.1	59.2	300.0	...	50.0	...	...	...
Tellicherry	1335.0	142.8	65.0	857.1	142.8	85.7	250.0	...	...
Cannanore	658.2	37.9	26.5	...	...	...	...	...	...
Masulipatam	148.6	...	13.5	...	...	...	...	...	...
Guindy	1932.4	27.0	55.4	...	...	...	...	...	...
H. M.'s Jail, Madras	...	...	...	...	...	...	1272.7	...	48.4
Cochin	3600.0	...	100.0	1000.0	...	0.0	...	...	...
Total	826.3	43.0	32.0	399.1	26.3	17.5	323.1	8.7	9.4

Table showing the Admissions and Deaths among the Jail Population of the Madras Presidency during the year 1869, according to Age and Length of Confinement.

		AGE.												LENGTH OF CONFINEMENT.											
		Under 15 years.	15 to 20 years.	20 to 25 years.	25 to 30 years.	30 to 35 years.	35 to 40 years.	40 to 45 years.	45 to 50 years.	50 to 55 years.	55 to 60 years.	Above 60 years.	Total.	Under 1 year.	1 to 2 years.	2 to 3 years.	3 to 4 years.	4 to 5 years.	5 to 6 years.	6 to 7 years.	7 to 10 years.	10 to 15 years.	15 to 20 years.	Above 20 years.	Total.
Strength	...	86	912	1,772	1,977	1,597	1,275	837	606	368	296	158	9,884	2,760	1,249	1,138	684	902	559	604	963	715	167	123	9,884
Admissions	...	29	534	1,416	1,807	1,546	1,058	557	378	254	220	144	7,913	2,794	1,259	864	557	556	342	485	523	384	54	95	7,913
Deaths	...	...	12	47	53	69	58	45	25	36	29	38	412	113	72	62	28	36	18	21	30	19	5	8	412
RATIO PER 1,000 OF STRENGTH.																									
Admissions	...	337.2	585.5	799.0	914.0	968.0	839.8	665.4	623.7	608.6	743.2	911.3	900.5	1005.0	1008.0	759.2	814.3	616.4	611.8	802.9	543.0	537.0	323.3	772.8	800.5
Deaths	...	...	13.1	26.3	26.8	43.2	45.4	53.7	41.2	97.8	97.9	240.5	41.6	40.6	57.6	54.4	40.9	39.9	32.2	34.7	81.1	26.5	29.9	65.0	41.6

VITAL STATISTICS OF THE DISTRICTS OF THE MADRAS PRESIDENCY.

I.
Return showing the Deaths in the Districts of the Madras Presidency during the year 1869.

Total Population of each District.	Districts.	Population for which Returns were received.	Total Deaths.	DETAILS OF DEATHS.				RATIO PER 1,000 of POPULATION.			
				Cholera.	Small-pox.	Fevers.	All other causes.	Cholera.	Small-pox.	Fevers.	All other causes.
1,235,790	Ganjam District...	1,068,992	16,437	981	284	8,451	6,721	0.9	0.2	7.9	6.3
14,686	M. T. Chicacole ...	14,686	277	12	2	115	148	0.8	0.1	7.6	10.7
20,570	M. T. Berhampur ...	20,570	300	40	...	201	59	1.9	...	9.7	2.8
1,505,045	Vizagapatam District ...	1,079,926	22,226	567	566	9,226	11,867	0.5	0.5	8.5	10.9
16,867	M. T. Vizagapatam ...	16,867	619	8	1	162	448	0.4	0.05	9.6	26.5
5,192	M. T. Rimpilapatam ...	5,192	56	3	4	13	36	0.5	0.7	2.5	6.9
14,046	M. T. Vizianagram ...	14,046	366	56	...	104	206	3.9	...	7.4	14.6
8,335	M. T. Paleondah ...	8,335	129	4	21	36	68	0.4	2.5	4.3	8.1
1,427,472	Godavery District ...	1,427,472	31,939	...	915	17,200	13,824	...	0.6	12.0	9.6
16,167	M. T. Cocanada ...	16,167	294	...	3	125	166	...	0.1	7.7	10.2
19,940	M. T. Ellore ...	19,940	475	...	10	122	343	...	0.6	7.5	17.2
17,498	M. T. Rajahmundry...	17,498	349	...	3	159	187	...	0.1	9.8	10.6
1,296,652	Kistna District ...	1,246,852	2,2656	3	1,431	3,397	17,825	0.002	1.1	2.7	14.2
15,184	M. T. Guntur ...	15,184	201	...	5	23	173	...	0.3	1.5	11.3
27,902	M. T. Masulipatam ...	27,510	324	...	6	59	259	...	0.2	2.1	9.4
1,168,664	Nellore District ...	1,134,757	21,246	1,054	1,715	2,318	16,159	0.9	1.5	2.0	14.2
22,861	M. T. Nellore ...	22,851	268	64	10	44	150	2.8	0.4	1.9	6.5
1,144,759	Cuddapah District ...	1,144,759	21,370	1,859	1,127	9,272	9,112	1.6	0.9	8.0	7.9
14,685	M. T. Cuddapah ...	14,685	174	22	...	69	83	1.5	...	4.7	5.6
1,304,944	Bellary District ...	1,257,147	27,387	3,424	1,536	8,503	13,924	2.7	1.2	6.7	11.07
37,015	M. T. Bellary ...	37,015	425	21	19	250	135	0.5	0.5	6.7	3.6
17,828	M. T. Adony ...	17,828	389	178	8	139	61	9.9	0.4	7.7	3.5
4,097	M. T. Ghooty ...	4,097	88	21	...	29	38	5.1	...	7.0	9.2
4,426	M. T. Anantapur ...	4,426	85	8	3	12	62	1.8	0.6	2.7	14.08
770,857	Kurnool District ...	7,70,318	18,781	2,817	1,440	8,160	6,364	3.6	1.8	10.5	8.2
23,816	M. T. Kurnool ...	23,816	764	323	30	291	120	13.5	1.2	12.2	5.03
7,983	M. T. Cumbum ...	7,983	169	...	1	128	40	...	0.1	16.0	5.01
1,254,283	Madras District ...	1,208,007	26,532	1,127	421	4,646	20,338	0.9	0.3	3.8	16.8
450,000	M. T. Madras ...	450,000	11,262	568	38	2,015	8,641	1.2	0.08	4.4	19.2
31,939	M. T. Conjeevaram ...	31,939	471	110	1	78	222	3.4	0.03	2.4	8.8
1,781,125	North Arcot District ...	1,775,506	34,842	2,605	969	8,454	22,814	1.4	0.5	4.8	12.8
30,529	M. T. Vellore ...	30,529	483	7	4	150	322	0.2	0.1	4.8	10.5
10,993	M. T. Wallajah ...	10,993	167	21	...	34	112	1.9	...	3.0	10.1
1,261,846	South Arcot District ...	1,092,958	16,839	544	761	3,252	12,282	0.4	0.6	2.9	11.2
28,421	M. T. Cuddalore ...	27,424	338	27	12	47	252	0.9	0.4	1.7	9.1
1,731,703	Tanjore District ...	1,717,268	41,425	4,563	1,491	7,151	28,220	2.6	0.8	4.1	16.4
86,941	M. T. Tanjore ...	36,941	1,068	157	22	209	680	4.2	0.5	5.6	18.4
29,283	M. T. Combaconum ...	29,283	676	125	5	152	394	4.2	0.1	5.1	13.4
17,025	M. T. Mayaveram ...	17,025	524	16	11	106	391	0.9	0.6	6.2	22.9
33,095	M. T. Negapatam ...	33,095	761	62	26	159	514	1.8	0.7	4.8	15.5
19,447	M. T. Manargooly ...	19,447	552	44	9	88	411	2.2	0.4	4.5	21.1
1,006,826	Trichinopoly District ...	990,037	15,094	522	305	2,689	11,578	0.5	0.3	2.7	11.6
53,623	M. T. Trichinopoly ...	53,623	985	89	11	203	682	1.6	0.2	3.7	12.7
1,946,389	Madura District ...	1,901,774	18,688	72	875	4,882	12,859	0.03	0.4	2.5	6.7
39,872	M. T. Madura ...	...	...	No returns received.				...	...	...	...
8,951	M. T. Dindigul ...	8,951	189	1	1	57	130	0.1	0.1	6.3	14.5
1,524,019	Tinnevely District ...	1,082,301	21,808	80	1,536	2,960	17,332	0.7	1.4	2.7	15.9
21,553	M. T. Tinnevely ...	21,553	389	2	4	36	347	0.09	0.1	1.6	16.09
13,315	M. T. Palamcottah ...	13,315	259	...	2	24	233	...	0.1	1.8	17.4
9,544	M. T. Taticorin ...	9,544	247	1	15	52	179	0.1	1.5	5.4	18.7
1,393,582	Coimbatore District ...	1,393,582	16,525	204	585	3,483	12,253	0.1	0.4	2.4	8.7
25,324	M. T. Coimbatore ...	25,324	354	3	...	94	258	0.07	...	3.7	10.1
1,619,233	Salem District ...	1,619,233	24,839	297	686	9,271	14,585	0.1	0.4	5.7	9.0
33,072	M. T. Salem ...	33,072	245	20	...	100	125	0.6	...	3.0	3.7
83,6,019	South Canara District ...	83,4,425	18,151	184	77	5,596	12,294	0.2	0.09	6.7	14.7
23,668	M. T. Mangalore ...	23,668	524	10	11	90	413	0.4	0.4	3.8	17.4
1,849,671	Malabar District ...	1,849,671	34,331	131	619	13,026	20,555	0.07	0.3	7.0	11.1
17,726	M. T. Tellicherry ...	17,726	459	...	...	100	359	...	...	5.6	20.2
36,602	M. T. Calicut ...	36,602	1,037	26	1	270	740	0.7	0.02	7.3	20.2
27,533	M. T. Palghat ...	27,533	430	...	1	178	251	...	0.03	6.4	9.1
9,940	M. T. Cochin ...	9,940	264	...	3	36	225	...	0.3	3.6	22.6
88,142	Neilgherry District ...	38,142	865	...	109	409	347	...	2.8	10.7	9.09
2,60,97,021	General Total {Districts. { M. Towns.	2,46,33,127	4,51,981	21,034	17,448	1,32,346	2,81,153	0.8	0.7	5.3	11.4
13,17,484		12,76,223	27,436	2,048	303	6,359	18,726	1.6	0.2	4.9	14.6

Return showing the Deaths in each District and Municipality in the Madras Presidency for the months of April, May, and June.

Districts.	APRIL.				MAY.				JUNE.						
	Population for which Returns were received.	Details of Deaths.			Population for which Returns were received.	Details of Deaths.			Population for which Returns were received.	Details of Deaths.					
		Cholera.	Small-pox.	Fever.		All other causes.	Cholera.	Small-pox.		Fever.	All other causes.	Cholera.	Small-pox.	Fever.	All other causes.
Gajum District	11,93,760	1,368	55	45	714	554	1,392	25	31	703	633	160	16	604	567
M. T. Chicacole	14,686	10	...	...	3	7	17	...	...	8	9	1	...	5	11
M. T. Berhampore	20,570	36	...	...	30	6	42	...	...	33	9	13	...	13	4
Vizagapatam District	6,92,006	1,498	10	99	588	801	1,499	13	50	603	830	37	54	640	1,002
M. T. Vizagapatam	16,867	53	...	...	15	38	38	...	...	12	26	3	...	12	27
M. T. Bimlipatam	5,192	3	...	...	...	3	6	...	...	2	4	...	...	...	3
M. T. Vizianagram	14,046	18	...	...	10	8	23	...	...	12	11	...	...	...	13
M. T. Palcondah	Included in the General District Return.	...	...	...	...	...	...	...	...	...	...	...	...	...	7
Godavery District	14,27,472	1,849	...	163	603	1,953	14,27,472	...	164	597	1,244	...	107	515	1,129
M. T. Cocanada	16,167	17	...	1	5	11	16,167	18	2	2	14	...	...	1	17
M. T. Ellore	19,940	29	...	3	12	14	19,940	43	2	12	20	...	...	3	23
M. T. Rajahmundry	17,498	25	...	1	8	16	17,498	24	...	9	15	...	2	15	22
Kistna District	12,50,673	1,345	...	135	137	1,023	12,54,729	...	149	161	1,447	...	145	173	1,458
M. T. Guntoor	15,184	15	...	3	3	9	15,184	...	...	4	13	...	1	1	10
M. T. Musulipatam	27,902	32	...	2	3	27	27,902	31	...	11	17	...	...	3	15
Nellore District	11,35,174	1,323	...	136	142	1,045	11,36,682	...	135	107	1,363	...	118	152	1,234
M. T. Nellore	22,851	23	...	2	5	16	22,851	17	...	5	11	...	...	3	12
Cuddapah District	11,44,759	1,452	8	91	711	612	11,44,759	...	108	642	892	...	131	531	559
M. T. Cuddapah	14,085	10	...	...	4	6	14,685	28	...	7	21	...	...	5	10
Bellary District	13,04,845	2,315	1	244	970	1,100	13,04,845	248	258	791	1,185	1,219	196	558	1,175
M. T. Bellary	37,015	31	...	6	14	11	37,015	43	...	25	12	...	2	23	15
M. T. Adony	17,828	9	...	...	6	3	17,828	36	...	23	11	...	1	11	...
M. T. Ghody	...	...	...	...	...	...	4,097	11	...	2	7	...	...	...	8
M. T. Anantapore	...	...	...	...	...	...	4,426	9	...	1	7	...	...	...	7
Kurnool District	7,70,857	1,716	249	171	773	532	7,70,857	1,557	103	756	557	709	185	560	557
M. T. Kurnool	23,816	68	43	4	12	9	23,816	28	...	20	8	121	3	16	6
M. T. Cumbum	7,983	19	...	...	15	4	7,983	8	...	4	...	...	...	9	...

Madras District	12,54,233	1,323	2	48	302	1,171	12,15,405	1,939	6	33	369	1,532	8	25	1,896	12,26,197	1,896	8	25	357	1,506	
M. T. Madras	4,50,000	715	2	9	152	532	4,50,000	843	5	4	155	679	8	...	874	4,50,000	874	8	...	176	687	
M. T. Conjeevaram	31,939	26	...	1	6	19	31,939	22	...	...	5	17	...	...	30	31,939	30	...	...	4	26	
North Arcot District	17,77,554	2,071	...	86	514	1,471	17,78,125	2,387	2	74	584	1,727	86	58	2,358	17,78,742	2,358	86	58	493	1,721	
M. T. Vellore	30,529	37	...	...	7	30	30,529	40	...	...	14	25	...	...	48	30,529	48	...	...	8	39	
M. T. Wallajah	10,993	10	...	...	3	7	10,993	9	...	...	...	9	5	...	22	10,993	22	5	...	4	13	
South Arcot District	12,22,403	817	3	64	134	616	12,38,039	1,134	5	47	226	856	4	52	1,400	12,49,014	1,400	4	52	283	1,151	
M. T. Cuddalore	28,421	11	...	1	2	8	28,421	29	...	...	4	25	...	...	21	28,421	21	...	...	4	17	
Tanjore District	17,17,268	2,580	13	167	557	1,843	17,17,268	2,743	13	165	547	2,018	26	114	2,348	17,17,268	2,348	26	114	532	2,176	
M. T. Tanjore	36,941	85	...	2	22	61	36,941	70	...	...	12	58	2	2	68	36,941	68	2	...	14	50	
M. T. Combaconum	29,283	34	1	...	16	17	29,283	44	...	...	11	32	1	...	50	29,283	50	1	...	10	39	
M. T. Mayavaram	17,025	33	...	4	7	22	17,025	37	...	3	...	31	...	...	33	17,025	33	...	...	6	27	
M. T. Negapatam	33,095	33	...	...	9	29	33,095	39	...	...	5	28	...	...	62	33,095	62	...	...	15	44	
M. T. Manargoody	19,447	42	...	1	7	34	19,447	44	...	1	15	28	...	...	44	19,447	44	...	...	11	33	
Trichinopoly District	9,86,154	1,130	4	29	174	923	9,82,688	1,185	...	25	234	926	6	28	1,092	9,94,577	1,092	6	28	187	871	
M. T. Trichinopoly	49,410	56	...	1	9	46	55,730	67	...	2	14	51	...	1	88	55,730	88	...	...	14	73	
Madura District	19,05,094	1,285	8	69	327	831	18,97,715	1,373	4	49	375	945	7	78	1,422	18,96,134	1,422	7	78	429	908	
M. T. Madura	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
M. T. Dindigul	8,951	8	...	...	3	5	8,951	6	...	...	2	...	1	...	14	8,951	14	1	...	3	10	
Tinnevelly District	9,73,717	1,552	4	107	206	1,235	10,50,565	1,602	5	135	237	1,225	9	108	1,512	10,11,538	1,512	9	108	213	1,182	
M. T. Tinnevelly	21,553	30	...	1	1	28	21,553	30	...	...	1	29	...	...	24	21,553	24	...	...	2	22	
M. T. Palanacottah	13,315	18	...	...	...	13	13,315	14	...	...	1	13	...	...	46	13,315	46	...	...	4	40	
M. T. Tuticorin	9,544	29	...	2	6	21	9,544	16	...	1	3	12	...	...	9	9,544	9	...	...	2	6	
Coimbatore District	13,93,582	1,226	1	45	288	892	13,83,582	1,276	1	97	269	909	1	34	1,296	13,93,582	1,296	1	34	244	1,017	
M. T. Coimbatore	25,324	28	...	...	12	16	25,324	30	...	...	9	21	...	...	27	25,324	27	...	...	6	21	
Salem District	16,19,233	1,680	17	62	621	980	16,19,233	1,922	...	100	648	1,174	2	90	1,893	16,19,233	1,893	2	90	602	1,199	
M. T. Salem	33,072	23	...	...	9	14	33,072	23	...	...	7	16	...	...	23	33,072	23	...	...	8	15	
South Canara District	8,36,019	1,072	15	6	313	738	8,36,019	1,172	5	3	817	847	9	2	1,667	8,36,019	1,667	9	2	549	1,107	
M. T. Mangalore	23,668	33	...	...	31	8	23,668	23	1	1	7	14	1	1	41	23,668	41	1	1	6	33	
Malabar District	18,49,671	2,566	19	58	976	1,513	18,49,671	3,465	18	52	1,227	2,168	5	13	4,411	18,49,671	4,411	5	13	1,653	2,722	
M. T. Tellicherry	17,726	24	...	...	6	18	17,726	49	...	...	10	39	...	...	43	17,726	43	...	...	12	31	
M. T. Calicut	36,692	64	...	...	19	45	36,692	93	...	...	35	58	...	...	139	36,692	139	...	...	89	100	
M. T. Palghat	27,533	23	...	...	16	9	27,533	46	...	1	23	22	...	...	47	27,533	47	...	...	17	80	
M. T. Cochin	9,940	19	...	...	6	14	9,940	19	...	...	1	18	...	...	25	9,940	25	...	...	7	17	
Neilgherry District	38,142	88	...	23	87	28	38,142	93	...	17	45	31	...	...	102	38,142	102	...	...	14	47	
General Total { Districts ... }	2,44,92,671	30,406	400	1,898	9,087	19,021	2,43,90,438	34,373	467	1,863	9,534	23,509	2,386	1,586	36,576	2,50,72,674	36,576	2,386	1,586	9,322	23,282	
M. Towns ... }	12,56,541	1,786	46	45	470	1,225	12,71,384	2,032	10	31	529	1,462	189	23	2,298	12,79,531	2,298	189	23	502	1,584	

Return showing the Deaths in each District and Municipality in the Madras Presidency for the months of July, August, and September.

DISTRICTS.	JULY.				AUGUST.				SEPTEMBER.			
	Total Deaths.		Details of Deaths.		Population for which Returns were received.	Total Deaths.		Details of Deaths.		Population for which Returns were received.	Total Deaths.	
	Cholera.	Small-pox.	Fevers.	All other causes.		Cholera.	Small-pox.	Fevers.	All other causes.		Cholera.	Small-pox.
Ganjam District	299	24	677	688	10,16,842	1,795	199	10	855	731	1,513	109
M. T. Chicacole	21	...	13	8	14,686	42	5	...	14	23	28	2
M. T. Berhampore	35	13	11	6	20,570	38	6	...	18	14	20	1
Vizagapatam District	2,074	36	790	1,063	13,40,834	2,591	122	39	974	1,456	2,233	72
M. T. Vizagapatam	76	5	18	53	16,807	60	...	1	20	39	55	...
M. T. Bimlipatam	4	2	1	1	5,192	13	...	2	...	11	6	...
M. T. Vizianagram	90	52	10	28	14,046	51	4	...	13	34	38	...
M. T. Palcondah	8	...	2	6	8,410	26	...	...	7	19	11	...
Godavary District	1,909	75	531	1,393	14,27,472	2,409	...	71	561	1,777	2,274	47
M. T. Cocanada	23	...	3	20	16,107	26	...	...	8	18	35	...
M. T. Ellore	44	...	8	36	19,940	52	...	...	6	46	43	...
M. T. Rajahmundry	29	...	8	21	17,498	32	...	...	13	19	24	...
Kistna District	1,950	85	188	1,677	12,37,132	2,483	...	109	257	2,117	2,058	76
M. T. Guntoor	17	...	1	16	15,184	32	...	...	1	31	28	...
M. T. Masulipatam	27	1	5	21	27,902	40	...	...	7	33	31	...
Nellore District	1,949	138	196	1,461	11,21,687	2,055	219	135	188	1,313	2,109	92
M. T. Nellore	32	1	6	22	22,851	39	28	1	2	8	45	33
Cuddapah District	2,281	715	513	980	11,44,759	2,230	533	97	831	749	2,160	37
M. T. Cuddapah	17	...	3	2	14,685	36	10	...	15	11	21	...
Bellary District	3,865	1,295	781	1,583	13,04,845	2,941	532	121	772	1,516	2,319	87
M. T. Bellary	52	17	16	19	37,015	58	2	...	44	12	35	...
M. T. Adony	173	153	10	7	17,828	28	2	...	12	14	17	...
M. T. Ghooty	20	10	3	7	4,097	5	2	...	...	3	11	...
M. T. Anantapoor	11	2	3	6	4,426	17	1	2	...	13	15	2
Kurnool District	2,694	1,015	712	748	7,70,609	1,731	305	88	643	695	1,380	41
M. T. Kurnool	60	21	28	10	23,816	62	...	2	40	20	59	...
M. T. Cumbum	15	1	9	5	7,983	10	...	...	3	7	15	...

Madras District	12,33,292	2,270	170	385	1,689	12,44,711	2,560	266	22	355	1,917	2,747	218	426	2,085
M. T. Madras	450,000	1,015	80	184	750	450,000	1,200	236	2	159	813	1,102	147	181	778
M. T. Conjeevaram	31,939	43	3	8	32	31,939	41	...	...	5	36	30	...	7	23
North Arcot District	17,72,588	3,423	705	650	2,008	17,71,953	3,223	339	65	704	2,115	3,551	549	750	2,182
M. T. Vellore	30,529	42	5	12	25	30,529	39	1	...	17	21	42	1	13	28
M. T. Wallajah	10,993	22	13	2	7	10,993	15	3	...	1	11	16	...	3	13
South Arcot District	12,56,828	1,837	14	386	1,356	12,61,846	1,712	3	77	287	1,345	1,719	21	318	1,331
M. T. Cuddalore	28,421	37	...	8	28	28,421	26	...	3	3	20	31	...	5	26
Tanjore District	17,17,268	3,350	13	612	2,608	17,17,268	3,736	138	146	634	2,818	4,130	281	754	2,996
M. T. Tanjore	36,941	57	...	13	43	36,941	168	75	3	22	68	128	25	4	78
M. T. Combaconum	29,283	68	...	14	53	29,283	58	...	...	17	39	51	2	...	37
M. T. Mayavaram	17,025	44	...	10	34	17,025	48	1	1	12	34	45	...	5	40
M. T. Negapatam	33,095	51	...	12	38	33,095	51	...	1	11	39	92	...	28	63
M. T. Manargoody	19,447	41	...	9	32	19,447	52	2	...	3	47	52	2	1	41
Trichinopoly District	978,407	1,234	...	154	1,055	985,846	1,265	8	12	194	1,051	1,471	6	21	1,200
M. T. Trichinopoly	55,730	104	...	23	78	55,730	58	...	1	13	44	63	...	15	47
Madura District	18,77,504	1,565	5	402	1,070	19,06,517	1,719	8	61	418	1,232	1,760	6	392	1,277
M. T. Madura	8,951	17	...	...	...	No returns received.	11	...	...	...	...	...	...	...	...
M. T. Dindigul	...	...	...	...	...	8,951	...	...	...	5	6	...	...	1	17
Tinnevely District	10,86,760	1,683	7	220	1,345	10,36,043	1,690	5	122	211	1,352	1,926	5	149	1,504
M. T. Tinnevely	21,553	32	...	1	31	21,553	35	...	...	4	31	30	...	1	26
M. T. Palamcottah	13,315	13	...	...	13	13,315	22	...	...	1	21	21	...	1	20
M. T. Tuticorin	9,544	12	...	...	8	9,544	12	...	...	2	10	26	...	2	19
Coimbatore District	13,93,582	1,575	4	309	1,208	13,93,582	1,642	8	47	337	1,255	1,684	8	39	1,337
M. T. Coimbatore	25,324	38	...	13	25	25,324	26	...	...	8	18	29	...	...	26
Salem District	16,19,233	2,262	2	684	1,498	16,19,233	2,334	...	81	818	1,435	2,531	20	53	1,617
M. T. Salem	33,072	23	...	8	15	33,072	20	...	...	10	10	24	3	...	13
South Canara District	832,608	2,756	13	1,060	1,679	8,36,019	2,241	8	3	823	1,407	1,712	14	1	1,173
M. T. Mangalore	23,668	68	...	11	57	23,668	66	...	1	10	55	55	...	...	40
Malabar District	18,49,671	4,338	1	1,652	2,647	18,49,671	3,551	13	27	1,396	2,115	2,795	32	38	1,664
M. T. Tellicherry	17,726	64	...	19	45	17,726	54	...	...	8	46	40	...	...	35
M. T. Calicut	36,602	141	...	25	116	36,602	100	9	...	22	69	113	15	...	67
M. T. Palghat	27,533	48	...	19	29	27,533	41	...	...	22	19	42	...	...	29
M. T. Cochin	9,940	31	...	2	28	9,940	24	...	...	5	19	28	...	...	27
Neigherry District	38,142	113	...	13	98	38,142	64	...	5	40	19	60	...	38	22
General Total {Districts ...	2,50,02,937	44,936	4,627	10,904	27,854	2,50,58,705	48,972	2,721	1,838	11,298	28,615	42,132	2,190	996	10,855
M. Towns...	12,79,531	2,765	398	558	1,795	12,79,794	2,884	379	20	584	1,851	2,615	234	13	592
															1,776

Return showing the Deaths in each District and Municipality in the Madras Presidency for the months of October, November and December.

Districts.	OCTOBER.				NOVEMBER.				DECEMBER.							
	Population for which Returns were received.	Total deaths.	Details of deaths.			Population for which Returns were received.	Total deaths.	Details of deaths.			Population for which Returns were received.	Total deaths.	Details of deaths.			
			Cholera.	Small Pox.	Fever.			Cholera.	Small Pox.	Fever.			Cholera.	Small Pox.	Fever.	
																All other causes.
Ganjam District...	10,02,984	1,238	9	4	709	516	1,040	16	2	603	419	1,249	20	9	839	381
M. T. Chicacole	14,686	37	2	...	15	20	24	2	...	8	14	23	...	1	17	5
M. T. Berhampore	20,570	13	...	...	12	1	11	...	...	11	...	13	...	...	7	6
Vizagapatam District	13,61,607	1,912	53	9	745	1,105	2,262	28	37	1,104	1,093	2,142	4	33	1,146	959
M. T. Vizagapatam	16,867	51	...	...	11	40	57	...	...	14	43	40	...	...	13	27
M. T. Bimlipatam	5,192	2	...	...	1	1	4	...	...	2	2	3	...	...	...	3
M. T. Vizianagram	14,046	26	...	...	9	17	14,046	...	...	2	12	5,192	...	...	...	3
M. T. Palcondah	8,410	11	...	...	4	7	8,410	...	...	7	12	14,046	...	...	...	6
Godavary District	14,27,472	1,936	...	20	564	1,352	9,354	...	8	8,336	1,010	4,165	...	12	3,401	752
M. T. Cocanada	16,167	28	...	...	8	20	59	...	...	47	12	16,167	...	...	25	2
M. T. Ellore	19,949	40	...	...	3	37	66	...	...	28	38	19,940	...	...	21	34
M. T. Rajahmundry	17,498	22	...	...	8	14	54	...	...	37	17	17,498	...	...	29	16
Kianna District ...	12,47,266	1,818	...	36	242	1,540	2,483	...	44	616	1,823	3,174	...	68	1,069	2,037
M. T. Guntoor	15,184	17	...	...	3	11	22	...	...	1	21	15,184	...	1	3	8
M. T. Masulipatam	27,902	30	...	...	3	27	33	...	...	7	26	27,902	...	...	5	31
Nellore District ...	11,31,370	2,095	173	83	255	1,574	2,137	39	120	238	1,740	2,077	106	102	256	1,618
M. T. Nellore	22,851	13	...	...	4	9	11	...	...	8	7	22,851	...	1	2	6
Cuddapah District	11,44,759	2,196	68	79	1,129	920	1,853	8	54	833	958	1,677	6	68	780	823
M. T. Cuddapah	14,685	15	...	...	8	7	12	...	...	6	4	14,685	...	...	10	10
Bellary District...	13,04,845	1,991	22	36	608	1,325	1,490	...	19	534	937	1,431	...	23	530	873
M. T. Bellary	37,015	21	...	...	13	8	18	...	...	7	11	37,015	...	...	10	6
M. T. Adony	17,828	16	...	...	5	11	8	...	...	4	4	17,828	...	...	1	1
M. T. Ghooty	4,097	13	...	...	10	3	10	...	...	9	1	4,097	...	...	3	...
M. T. Anantapoor	4,426	9	...	...	2	7	10	...	...	4	6	4,426	...	...	...	...
Kurnool District...	77,70,857	1,373	64	46	712	551	1,185	5	35	657	486	1,186	...	56	632	440
M. T. Kurnool	23,816	40	...	...	32	8	12	...	...	9	3	23,816	...	...	33	21
M. T. Cumbam	7,983	26	...	...	18	8	13	...	...	11	2	7,983	...	...	20	8

Madras District...	12,43,339	2,470	156	17	479	2,218	137	576	2,181	165	23	476	1,918
M. T. Madras	4,50,000	1,130	73	...	198	869	16	171	792	11	...	163	762
M. T. Conjeeveram	31,939	61	21	...	6	31	52	21	37	34	...	13	30
North Arcot District...	4,129	447	...	61	1,124	2,497	213	1,188	2,305	256	39	837	2,198
M. T. Vellore	30,529	14	...	...	16	26	...	6	10	...	...	10	48
M. T. Wallajah	10,993	11	...	...	7	7	...	...	...	...	...	...	10
South Arcot District...	1,813	31	...	69	362	1,351	63	467	1,370	392	84	397	1,590
M. T. Cuddalore	28,421	43	17	1	3	92	7	5	25	3	2	4	29
Tanjore District...	4,155	542	...	63	735	2,815	1,258	723	3,069	2,226	53	679	2,481
M. T. Tanjore	36,941	96	18	2	19	57	1	26	76	35	...	13	44
M. T. Combaconum	29,283	51	...	1	20	30	36	8	57	...	...	15	29
M. T. Mayavaram	7,035	46	...	1	11	34	...	...	40	...	...	13	38
M. T. Negapatam	33,095	101	19	1	17	64	11	14	58	...	...	11	33
M. T. Manargoody	19,447	63	15	13	13	35	64	7	45	14	2	8	32
Trichinopoly District...	10,03,060	1,413	7	26	253	1,127	69	344	1,124	405	28	426	1,166
M. T. Trichinopoly	55,730	72	...	...	19	53	...	14	54	89	...	25	44
Madura District...	10,06,517	1,926	2	94	489	1,841	3	409	1,238	1,997	91	607	1,286
M. T. Madura	...	36	...	...	...	25	...	...	15	...	...	...	...
M. T. Dindigul	8,951	...	...	...	...	...	...	...	...	...	...	...	...
Tinnevely District...	10,61,741	1,833	3	117	252	1,461	9	338	1,963	9	177	423	2,343
M. T. Tinnevely	21,553	25	...	...	3	22	41	3	37	...	...	6	24
M. T. Palancottah	13,815	11	...	...	1	10	...	...	17	...	...	4	27
M. T. Tuticorin	9,544	24	...	...	7	17	...	4	12	...	...	8	21
Coimbatore District...	13,93,582	1,414	64	25	284	1,041	60	348	1,166	60	16	400	1,102
M. T. Coimbatore	25,324	30	2	...	9	19	...	7	24	...	...	4	20
Salem District...	16,19,233	2,504	36	55	983	1,430	129	1,245	1,395	81	...	1,313	1,403
M. T. Salem	33,072	22	16	...	3	3	...	11	3	1	...	8	10
South Canara District...	8,29,968	1,472	33	5	398	1,036	19	6	878	9	...	310	922
M. T. Mangalore	23,068	37	3	...	4	30	4	4	34	...	...	4	35
Malabar District...	18,49,671	2,321	9	45	820	1,447	9	804	1,222	...	5	935	1,154
M. T. Tellicherry	17,726	39	...	...	8	31	...	9	33	...	...	8	29
M. T. Calicut	8,602	61	2	...	17	42	...	19	42	...	...	17	45
M. T. Palghat	27,533	33	...	...	7	26	...	17	18	...	...	12	21
M. T. Cochin	9,940	32	...	...	4	28	...	2	14	...	...	4	23
Neigherry District...	38,142	55	...	...	42	13	...	40	16	...	...	27	14
Grand Total... {Districts	250,74,747	40,454	1,710	890	11,182	26,660	2,065	19,803	26,395	45,473	960	15,483	25,273
{Munl. Towns.	12,79,794	2,499	188	6	572	1,733	143	613	1,700	2,449	17	563	1,558

Return showing the Births in each District, and Municipality in the Madras Presidency,
during the year 1869.

Total Population of each District.	Districts.	Population for which Returns were received.	DETAILS OF BIRTHS.			RATIO PER 1,000 OF POPULATION.		
			Males.	Females.	Total.	Males.	Females.	Total.
12,35,790	Ganjam District ...	10,68,992	9,800	8,159	18,259	9.1	7.7	17.08
14,683	M. T. Chicacole ...	14,686	84	57	141	5.7	3.8	9.6
20,570	M. T. Berhampore ...	20,570	114	71	185	5.5	3.4	8.9
15,05,045	Vizagapatam District ...	10,44,574	10,755	10,011	20,766	10.2	9.5	19.8
16,867	M. T. Vizagapatam ...	16,867	296	263	559	17.5	15.5	33.1
5,192	M. T. Bimlipatam ...	5,192	9	10	19	1.7	1.9	3.6
14,043	M. T. Vizianagram ...	14,046	39	38	77	2.7	2.7	5.4
8,335	M. T. Palacandah ...	8,335	28	25	53	3.3	2.9	6.3
14,27,472	Godavery District ...	14,27,472	11,488	11,126	22,614	8.0	7.7	15.8
16,167	M. T. Cocanada ...	16,167	138	121	259	8.5	7.4	16.0
19,910	M. T. Ellore ...	19,910	269	278	547	13.4	13.9	27.4
17,498	M. T. Rajahmundry ...	17,498	227	228	455	12.9	13.0	25.4
12,96,652	Kistna District ...	12,45,361	12,237	11,746	23,983	9.8	9.4	19.2
15,184	M. T. Gantoor ...	15,184	58	70	128	3.8	4.6	8.4
27,502	M. T. Masulipatam ...	27,510	196	185	381	7.1	6.7	13.8
11,68,664	Nellore District ...	11,34,757	8,869	8,276	17,145	7.8	7.2	15.1
22,851	M. T. Nellore ...	22,851	35	26	61	1.5	1.1	2.6
11,41,759	Cuddapah District ...	11,41,759	7,437	6,758	14,195	6.4	5.9	12.3
14,685	M. T. Cuddapah ...	14,685	36	21	57	2.4	1.4	3.8
13,01,911	Bellary District ...	11,30,263	12,088	11,414	23,502	10.1	9.5	19.7
37,015	M. T. Bellary ...	...	...	...	...	...	...	...
17,828	M. T. Adony ...	...	...	...	...	...	...	...
4,097	M. T. Ghooly ...	4,097	15	4	19	3.6	0.9	4.6
4,426	M. T. Anantapoor ...	4,426	35	28	63	7.9	6.3	14.2
7,79,857	Kurnool District ...	7,70,318	6,913	6,693	13,606	8.9	8.6	17.6
23,816	M. T. Kurnool ...	23,816	149	112	261	6.2	4.7	10.9
7,939	M. T. Cumbum ...	7,983	33	18	51	4.1	2.2	6.3
12,54,283	Madras District ...	12,04,946	11,248	10,450	21,698	9.3	8.6	18.0
4,50,000	M. T. Madras ...	450,000	2,475	2,137	4,612	5.5	4.7	10.2
31,939	M. T. Conjeeveram ...	31,939	124	110	238	4.007	3.4	7.4
17,80,616	North Arcot District ...	17,75,416	20,206	18,780	38,986	11.3	10.5	21.9
30,529	M. T. Vellore ...	30,529	210	190	400	6.8	6.2	13.1
10,993	M. T. Wallajahpet ...	10,993	71	66	137	6.4	6.003	12.4
12,61,846	South Arcot District ...	10,76,747	9,714	8,646	18,390	9.04	8.02	17.08
28,421	M. T. Cuddalore ...	26,969	161	136	297	5.9	5.04	11.01
17,31,703	Tanjore District ...	17,17,268	23,968	22,701	46,669	13.9	13.2	27.1
36,911	M. T. Tanjore ...	36,911	650	619	1,269	17.5	16.7	34.3
29,283	M. T. Combaconum ...	29,283	292	242	534	9.9	8.2	18.2
17,025	M. T. Mayavaram ...	17,025	267	259	526	15.6	15.2	30.8
33,095	M. T. Negapatam ...	33,095	248	261	509	7.4	7.8	15.3
19,417	M. T. Manargoody ...	19,447	330	326	656	16.9	16.7	33.7
10,06,826	Trichinopoly District ...	9,70,662	9,197	8,277	17,474	9.4	8.5	17.9
53,623	M. T. Trichinopoly ...	34,248	184	140	324	5.3	4.08	9.4
19,16,389	Madura District ...	19,02,053	13,085	11,808	24,893	6.8	6.2	13.08
39,872	M. T. Madura ...	...	Returns not received			...	...	...
8,951	M. T. Dindigul ...	8,951	204	136	340	22.7	15.1	37.8
15,24,019	Tinnevely District ...	9,83,965	13,632	12,621	26,253	...	...	...
21,553	M. T. Tinnevely ...	21,553	178	171	352	8.2	8.07	16.3
13,315	M. T. Palamecottah ...	13,315	96	79	175	7.2	6.08	13.1
9,544	M. T. Tuticorin ...	9,544	137	152	289	14.3	15.9	30.2
13,93,582	Coimbatore District ...	13,93,582	9,274	8,253	17,527	6.6	5.9	12.6
25,324	M. T. Coimbatore ...	25,324	231	250	481	9.1	9.8	18.9
16,19,233	Salem District ...	16,19,233	16,125	15,095	31,220	9.9	9.3	19.2
33,072	M. T. Salem ...	33,072	178	98	276	5.3	2.9	8.3
8,36,019	South Canara District ...	8,33,259	6,908	6,462	13,370	8.2	7.7	16.04
23,668	M. T. Mangalore ...	23,668	154	98	252	6.5	4.1	10.6
18,49,671	Malabar District ...	18,49,671	21,378	19,806	41,184	11.5	10.7	22.2
17,726	M. T. Tellicherry ...	17,726	217	201	418	12.2	11.3	23.5
36,002	M. T. Calicut ...	36,002	488	391	874	13.1	10.6	23.8
27,533	M. T. Palghat ...	27,533	229	190	428	8.3	7.2	15.5
9,940	M. T. Cochin ...	9,940	125	165	290	12.5	16.5	29.1
38,142	Neilgherry District ...	38,142	573	303	676	9.7	7.9	17.7
2,50,97,021	General Total { Districts ...	2,43,91,140	2,34,725	2,17,685	4,52,410	9.6	8.8	18.5
13,17,484	{ M. Towns ...	12,91,550	9,009	7,981	16,993	7.4	6.6	14.1

BIRTHS AND DEATHS IN PUBLIC INSTITUTIONS.

Table showing the Deaths registered in the Public Institutions of the Madras Presidency (Civil Hospitals and Dispensaries.)

[illegible]

the Public Institutions of the Madras Presidency (Civil Hospitals and Dispensaries)—Continued.

[illegible]

[illegible]

	K.	Me	Man.	Ongol	Salem.	Secundera	Vizagapatna	Cuddalore	Chingleput.	Coimbatore	Karnool.	Ootacam	Ponitent Madri	Palamcot	Tanjore.	Tellicherry
	M.F.	M.	F.M.	F.	M.	F.M.	F.	M.	F.M.	F.	M.	F.M.	F.	M.	F.M.	F.
Born Alive....	1	...	2	1	1	...	1	6	4	...	1	...	2	2	...	1
Still-Born	..	2	...	2	...	1	1	3	1	...	2	...	1	1	...	1
Total.....	1	2	...	2	3	1	1	...	2	7	7	1	...	1	...	1

Table showing the Births registered in the Public Institutions of the Madras Presidency (Lying-in-Hospitals, Lock Hospitals, and Orphan Asylums.)

	LYING IN HOSPITALS.				LOCK HOSPITALS.								ORPHAN ASYLUMS.			
	Madras.		Madura		Black Town, Madras,		Bangalore.		Bellary.		Secunderabad.		Military Male, Madras.		Military Female, Madras.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
Born Alive ..	505	437	25	35	2	...	...	1	...	...	1	...	...	...	...	1
Still-Born ...	47	42	4	3	...	...	...	...	2	...	...	...	...	1	...	...
Total...	552	479	29	38	2	...	...	1	2	...	1	...	...	1	...	1

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