

REPORT
OF THE
SANITARY COMMISSIONER

FOR
MADRAS,

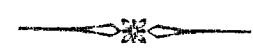
1873.

WITH
APPENDICES

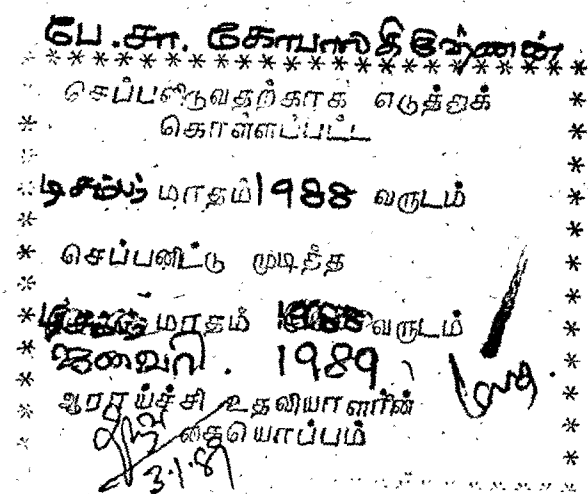
CONTAINING

AN INQUIRY REGARDING THE ALLEGED IMPROVEMENT IN THE
VALUE, FOR ASSURANCE PURPOSES, OF
EUROPEAN LIFE IN INDIA, BY W. R. CORNISH, SURGEON-MAJOR, F.R.C.S.,
SANITARY COMMISSIONER FOR MADRAS,
REPORTS ON CHOLERA IN HER MAJESTY'S 45TH REGIMENT AND
F BATTERY, 20TH BRIGADE, R.A., THAYETMYO,
BY DRS. HUNGERFORD AND ROBERTSON,
STATISTICAL TABLES OF SICKNESS AND MORTALITY AMONG
EUROPEAN AND NATIVE TROOPS, AND
VITAL STATISTICS OF THE GENERAL POPULATION.

2626



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REPORT

OF THE

SANITARY COMMISSIONER FOR MADRAS

FOR

1873.

PART I. MILITARY.

SECTION I.

SICKNESS AND MORTALITY AMONG BRITISH TROOPS.

THE number of men of the British Army in the Madras Presidency on the 1st January 1873 was 12,273, and on the 31st December 1873 there remained 12,172, or 101 less than in the beginning of the year. The mean strength of the troops during the year was 12,222.

2. In the period under review the army recruited 41 men in India, and received drafts from England of 1,177 men, and 245 from corps in other Presidencies; 7 men joined after desertion, so that the total increase was 1,470.

3. The losses of the army during the same period amounted to 1,571 men, and are thus specified in the Adjutant-General's return:—

Time-expired or pensioned	...	...	...	...	76
Invalided...	...	...	...	...	414
Discharged by purchase...	...	...	...	...	13
Do. by Court-martial	...	...	...	...	7
Do. otherwise	...	...	...	...	41
Deserted	...	...	...	...	32
Transferred to corps in other Presidencies	...	...	...	...	84
Do. to Unattached List	...	...	...	...	10
Embarked for England	...	...	...	...	683
Died	...	...	...	...	211

Total ... 1,571

In the beginning of 1873 H. M.'s 10th Regiment left Rangoon for England. No regiment arrived in the Presidency during this period, but two batteries of Royal Artillery arrived in February.

4. The number of Europeans of the old Indian forces stood at 9 in the beginning of 1873, and at 10 on the 1st January 1874.

Indian army.

5. The mean strength of the European forces actually present at the several stations, calculated from the weekly returns, and including the establishment of Veterans, who are not shown in the return of the British effective troops, was 11,418. This strength is below that shown in the strength of the British army, but the explanation of difference is that, at the end of the year, some corps and batteries of Artillery, were in movement to join the Camp of Exercise at Bangalore, and will be included under the head of troops marching.

Mean strength of the army calculated from station returns.

6. The total hospital admissions were 14,339, and deaths 206. There were 670 men on the average in hospital every day during the year.

Besides the mortality recorded at the various stations of the Madras army, 10 men died in marching, or before the invalids had left the Bombay Presidency.* The total deaths, therefore, of the European troops of the Presidency was 216.

7. The proportions of sickness, mortality, and invaliding for the last 16 years are shown below. It will be observed that the sick and death rates for 1873 have been on the whole favorable, and that there has been a perceptible reduction in mortality.

Comparison of sickness, mortality, and invaliding with previous years.

—	Years.	Strength.	Ratio per Mille of Strength.						
			Admissions.	Deaths			Invalided		
				In Hospital	Out of Hospital.	Total.	For Discharge.	For Change of Climate.	Total.
Inspector-General's Returns, Indian Medical Department.	1858-59	15,482	1880.8	42.3	6.4	48.7	...	...	...
	1859-60	16,921	1628.01	15.9	2.5	18.4	...	...	...
	1860	10,741	1693.4	19.1	2.04	21.2	8.1	49.6	57.7
	1861	15,051	1361.7	14.5	1.8	16.5	13.3	22.2	35.5
	1862	13,920	1291.1	17.09	1.7	18.8	9.5	18.7	28.3
	1863	12,586	1232.4	16.5	3.01	19.5	11.5	28.5	40.09
	1864	13,280	1521.08	16.5	3.6	20.1	14.0	51.02	65.03
	1865	13,623	1426.4	19.5	2.9	22.5	4.9	32.9	38.8
	1866	11,498	1460.6	20.2	1.5	21.7	10.5	46.1	56.6
	1867	10,928	1353.2	15.7	2.3	18.1	10.5	44.1	54.6
Stational Returns...	1868	9,234	1388.2	16.3	3.0	19.3	9.5	52.8	62.4
	1869	10,330	1253.6	21.0	2.3	23.4	8.2	47.4	55.7
	1870	11,035	1436.2	16.9	2.3	19.2	6.6	70.4	77.05
	1871	10,802	1183.2	18.7	2.1	20.8	12.5	29.7	42.3
	1872	11,303	1344.5	16.6	3.1	19.8	11.2	26.5	37.8
	1873	11,418	1255.8	15.5	2.5	18.0	13.1	49.6	62.7

8. The past year has been on the whole a healthy season in Southern India. The abnormal and excessive rainfall of 1872 seems to have influenced the production of malarious fevers amongst the native population; but with the well-housed and well-clothed European soldier there has been no particular manifestation of fevers of the paroxysmal type. Small-pox has been very widely diffused throughout the country, but there were only six cases and one death from this cause in the European army, which is on the whole excellently protected by vaccination. Epidemic cholera had happily quite disappeared from the peninsula of India throughout the year, but on the opposite coast of Burmah it seems to have been severe, and in the province of Burmah only, did the Madras troops suffer from this disease. In the stations of Thayetmyo and Tonghoo there were 23 cases and 12 deaths, and a Commissioned Officer died of the malady in Rangoon. There were also two casualties out of hospital from cholera in Burmah. I have not before me sufficient information to trace

Remarks on the general health of the army.

Fevers, small-pox, and cholera.

* One other death occurred out of the Madras Command, at Durn-Durn, from hepatitis.

the progress of the epidemic in Burmah, but its course was manifestly in a southern direction, and late reports show that the disease has advanced to Siam, Cochin-China, Singapore, and Sumatra. The great freedom of Southern India from this pest is sufficiently manifest, when it is mentioned that in collecting the troops for the Camp of Exercise near Bangalore not a single case was heard of in any of the villages or districts through which the troops passed.

9. The curious epidemic of dengue fever, which added so much to the sick list of the European troops in 1872, re-appeared in Saint Thomas' Mount, Trichinopoly, Bangalore, and Rangoon, and extended its ravages to Kamptee and Seetabuldee in the Central Provinces. There were in all 311 admissions from this disease in seven stations. It had disappeared by the end of the year.

10. Enteric fever appears to have been less prevalent than usual. There are recorded 51 cases and 10 deaths. More than one-half of these cases occurred at Cannanore in H. M.'s 43rd Regiment, composed chiefly of recruits, and only a few months resident in India. Some cases occurred also in H. M.'s 67th at Rangoon, a regiment newly arrived from Home. At Bangalore there were 9 cases altogether in the Artillery and Hussars, and at Wellington (the hill sanitarium) the disease appears to have been introduced by a body of convalescents and weakly recruits from Cannanore. In three other stations, *i.e.*, Secunderabad, Thayetmyo, and Tonghoo, there occurred isolated cases of the disease.

11. The outbreak of typhoid fever at Cannanore formed the subject of a special investigation on the part of Dr. Massy, Deputy Surgeon-General, Mysore Division, and myself, in consultation. We could not find any positive evidence to enable us to say conclusively that local insanitary conditions had anything to do with the outbreak. The barracks and surroundings were not perfect, and suggestions were made for the remedying of the more obvious of the sanitary defects observable, which were approved by the military authorities, and are in course of execution. And, as regards importation, there were no facts to show that the disease had arisen in this way. The evidence of the medical officers of the regiment showed that there had been no typhoid at the station last occupied by the troops in Ireland; but, as raw recruits had joined in large numbers a few days prior to embarkation, of whose history nothing was known, there was a faint probability that the germs of the epidemic might have been conveyed to this country in the clothing of the recruits; but on this point nothing definite could be ascertained.

12. It was shown in the case of the 67th Regiment coming to Burmah that the germinal matter of diphtheria may be brought to this country by a body of troops; and, if diphtheria can be so conveyed, there is nothing improbable in the supposition that typhoid fever may occasionally be introduced in like manner. It is important to bear in view that regiments of young men are prone to suffer from this disease immediately on, or shortly after, arrival in India; and that whatever the causes of the malady may be, the liability to it appears to decrease when the constitutions of the men have undergone the process of seasoning, which we term acclimatization.

13. As regards the Cannanore outbreak of enteric fever, we could not say

that impure water or faecal poisoning had been the causes, but the wells were uncovered, and the sea face of the cliff on which the barracks were built was much defiled by the native inhabitants of an adjoining village. But so far as could be ascertained on careful inquiry, there was no fever of this description amongst the native community, whose sanitary surroundings were infinitely more unsatisfactory than those of the regimental barracks.

14. Some of the cases of typhoid at Bangalore I had an opportunity of seeing through the courtesy of Dr. Massy, Deputy Surgeon-General. They were severe and well marked as regards all the essential features of the disease. No assignable cause could be given, and the barracks and surroundings were all in good sanitary condition.

15. The water-supply was derived from the dhobies' wells; but, as these wells did not yield sufficient for the troops, about one-third of the filtered Ulsoor tank water was added. The only filter-bed in use at this time was acting badly, and the water coming through it was quite milky and opaque. The mixed water was supplied to the 89th Regiment, as well as to the Artillery and Hussars; but, in the former regiment, there were no cases of typhoid, so that, however much the water impurity might be suspected as a source of disease, there was no convincing proof that it had any effect. Under the circumstances, however, we thought it prudent to recommend that the imperfectly filtered tank water should not be mixed with that from a purer source, and that other arrangements should be made for watering the horses, supplying baths, &c.

16. Venereal diseases during the year under review have again slightly diminished, the ratio of admissions being 147.8 per mille, against 157.3 in the previous year. In the station of Bellary, after the arrival of a new regiment from England, there was a large increase in this class of affections, and the admissions have continued high throughout the year. In Trichinopoly also the admissions have increased, but in Secunderabad, Bangalore, and the larger cantonments, to which the rules regarding prostitutes are applicable, there has been a gratifying diminution of disease.

17. The principal diseases causing mortality are shown in the following table, compared with the results of four previous years :—

Year.	Small-pox.	Typing Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis.	Scurvy.	Anæmia.	Dropsies.	Stroke and Heart Apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhea.	Hepatic Diseases.	Venereal Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence.	Other Diseases.	Total.
1869	3	1	9	4	1	13	25	...	10	1	...	1	29	15	3	15	15	57	2	2	1	11	18	13	255
1870	...	...	14	1	...	8	39	...	8	...	...	6	19	18	6	24	1	35	2	2	...	4	17	9	213
1871	...	...	13	5	...	8	36	2	14	...	...	9	27	6	23	...	39	1	1	...	7	18	16	225	
1872	...	...	26	6	...	3	2	1	14	...	...	3	29	23	3	25	3	41	3	1	1	4	13	21	224
1873	1	...	10	3	...	4	12	...	11	...	...	...	11	26	6	32	2	54	1	...	...	1	21	11	266

18. This table shows that fevers have been less fatal than usual, and the deaths from insolation and apoplexy below the average. There has been, however, a large mortality from diseases of the heart and blood-vessels, from

dysentery and hepatic diseases, while violent deaths (principally accidental drowning and suicide) have been higher than usual. While there is some evidence indicating improvement in regard to malarious and other diseases incidental to tropical service, it is unsatisfactory to note how common are diseases of the great blood-vessels and heart; and how constantly these affections add to the mortality bills and invaliding of the army. In the past year no fewer than 20 men died of aneurism of the large blood-vessels, and 6 of organic disease of the heart, while 51 were invalided for change of climate, and 23 for discharge, owing to functional or organic disease of the circulatory organs.

What the special circumstances of a soldier's life may be that tend to the production of this form of disease is a subject that might well occupy the attention of regimental medical officers who have the means of observation at hand.

19. Dysentery again is still a very common, and often fatal, disease amongst European soldiers. In former times the mortality from this disease averaged about seven per cent. of the cases treated; but, after the general adoption of the use of large doses of ipecacuanha and opium, as recommended by the late Surgeon Docker in 1858, the mortality suddenly fell from seven to two per cent. But of late years the proportion of recoveries from dysentery has been less than was the case ten or twelve years ago, and it becomes a question of some interest to consider whether this is the result of a change in medical practice, or of a change of type of the disease. In 1873 there were 32 deaths in 1,038 cases treated, that is, the mortality was rather more than three per cent. The disease was more prevalent at Secunderabad than in any other station, and more than one-half of the deaths occurred in the Hyderabad Subsidiary Force.

The regimental surgeons who adopted the ipecacuanha treatment of dysentery in 1859, and who almost unanimously testified to the marvellous power of the remedy in their hands, have passed away from India, and with a constant succession of officials new to the country, seeing a class of diseases with which they are unfamiliar, there is always the danger that the traditions and experience of the past may be forgotten, or ignored in favor of newer suggestions. I have no means of knowing whether the ipecacuanha treatment of dysentery is still practised so freely as it was twelve years ago; but, in regard to the apparently increasing mortality from the disease, I think it would be well if the subject were duly investigated.

20. Hepatic affections amongst the troops of this Presidency do not appear to be diminishing either in number or fatality. During the year there were 54 deaths from diseases of the liver, the most of them being from abscess. Why men of soldiers' ages, and frequently of short periods of service, should be so liable to suffer from liver abscess is not at all clear. Causes which favor dysentery seem also to favor abscess of the liver, and the latter disease is not unfrequently the sequel of repeated ulcerations of the lower bowel. The prompt and early treatment of dysentery, therefore, appears, so far as we can see at present, to be the most certain means of diminishing the losses of the army by hepatic abscess. In making this remark, I do not mean to imply that there are not forms of hepatic disease unconnected with dysentery,

but merely that in seasons and places where dysentery is prevalent, there liver abscesses are almost certain to be prevalent too, and that there is a general correspondence in the degree of prevalence of the two diseases.

21. I am indebted to Dr. Currie, C.B., Surgeon-General, British Medical Service, for the returns of invaliding in the army; and the tables refer to those men only who have been passed by Medical Boards within the year.

It appears that the total number of troops invalided was 717; of these, 150 were considered to be unfit for further service, and were invalided for discharge; while, as regards 567 men, a "change of climate" was the reason assigned for sending them to Europe. There has been a very great increase in numbers under the latter description of invaliding. The troops at Cannanore, Secunderabad, Bangalore, and Madras furnished the greater number of invalids.

The main causes of invaliding have been dysentery 121 cases, debility 124 cases, hepatitis 95 cases, phthisis 83 cases, secondary syphilis 40 cases, rheumatism 32 cases, diseases of heart and blood-vessels 74 cases.

22. The stations furnishing invalids are indicated in the following abstract:—

Stations.	Number invalided for			Ratio per Mille of Strength of Station.		
	Discharge.	Change of Climate.	Total.	Discharge.	Change of Climate.	Total.
Madras...	31	75	106	44.03	106.53	150.56
Saint Thomas' Mount...	10	20	30	23.40	56.82	85.22
Trichinopoly...	2	10	12	6.87	34.36	41.23
Bangalore...	11	111	122	6.07	61.23	67.30
Cannanore...	20	73	93	31.10	113.53	144.63
Bellary...	11	25	36	11.69	26.57	38.26
Kamptee...	11	27	38	11.01	27.02	38.03
Secunderabad...	35	153	193	14.36	64.86	79.22
Rangoon...	7	21	28	7.31	21.94	29.25
Tonghoo...	5	6	11	10.72	12.88	23.60
Thayetmyo...	7	41	48	11.99	70.20	82.19

23. The invaliding for a series of years is shown below:—

Ratio per 1,000 of Strength according to Medical Returns.

Invalided.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.
For discharge.	8.1	13.3	9.5	11.5	14.0	4.9	10.5	10.5	9.5	8.2	6.6	12.54	11.29	13.32
For change of climate...	49.6	22.2	18.7	28.5	51.0	33.9	45.1	44.1	52.8	47.4	70.4	29.76	26.53	49.90

EUROPEAN TROOPS IN MOVEMENT.

24. During the year there were 128 officers, 4,807 men, 405 women, and 747 children in movement from station to station for various periods of time, the medical history of whom is not included in the stational statistics.

25. Among these persons there were admitted for treatment 3 officers, 198 men, 12 women, and 14 children, and 10 of the men and 1 child died.

26. The causes of death in the men were abscess of liver three, cholera two, sunstroke one, dysentery one, unknown one, and drowning two.

One fatal case of cholera occurred in a detachment of the 45th Regiment moving from Tonghoo to Rangoon in British Burmah on the 25th November, and another on the 16th December in a detachment of H. M.'s 67th Regiment proceeding from Rangoon to the Andamans. Cholera prevailed epidemically in Burmah for many months of the year. The death of the child was due to "convulsions."

The following table shows the particulars of marches made by the various bodies of troops:—

Regiments.	From.	To.	No. of Days in Motion.	Strength.			Sickness and Mortality.					
				Officers.	Men.	Women.	Officers.		Men.		Children.	
							A.	P.	A.	D.	A.	D.
54th Regiment, Left Wing	Tonghoo	Rangoon	19	8	394	57	109	...	...	...	...	...
Detachment, 44th Regiment and H. A.	Bucharies	Kanpetee	7	4	145	...	...	...	...	...	...	...
Do. 67th Regiment	Port Blair and Rangoon.	Rangoon and Port Blair.	26	8	207	19	29	...	...	...	...	...
Do. 48th do.	Wellington and Delbury	Delbury and Wellington	9	3	120	8	18	...	...	...	...	...
Do. 43rd Light Infantry & Invalids.	Chennais, Mysore, Malabar, &c.	Wellington, Coimbatore, Calicut, &c.	28	6	524	21	23	...	...	...	...	...
Convalescents, 74th Regiment.	Burgham, &c.	Wellington	8	1	56	9	14	...	...	...	...	...
Detachment, 1-21st Fusiliers	Madras	Kulavaram	16	4	181	16	25	...	...	...	...	...
Volunteers, H. M.'s 2-24th Regiment	Secunderabad	Secunderabad	6	...	20	...	...	...	...	...	...	...
Do.	Madras	Bangalore	13	5	117	...	...	...	...	...	...	...
Detachment 45th Brigade R. A.	Tonghoo	Kanpetee	38	...	123	...	...	...	...	...	...	...
C-29th do.	Kanpetee	Bangalore	11	...	126	...	...	...	...	...	...	...
C-29th do.	Secunderabad	Secunderabad	19	...	21	...	...	...	...	...	...	...
A-29th do.	Secunderabad	Secunderabad	15	...	147	...	...	...	...	...	...	...
H.C. do.	Secunderabad	Secunderabad	5	...	42	...	...	...	...	...	...	...
Head-Quarters C-Brigade R. A.	Poonah	Bangalore	6	...	127	...	...	...	...	...	...	...
C.C. Brigade R. A.	Bombay	Secunderabad	54	...	127	...	...	...	...	...	...	...
P-29th do.	Bangalore	Bangalore	46	...	123	...	...	...	...	...	...	...
P-29th do.	Kanpetee	Do.	21	...	123	...	...	...	...	...	...	...
G-29th do.	Secunderabad	Do.	21	...	123	...	...	...	...	...	...	...
R-29 do.	Secunderabad	Do.	22	...	119	...	...	...	...	...	...	...
Details 1-21st Regiment	Secunderabad	Do.	15	...	43	...	...	...	...	...	...	...
Do. 16th Lancers	Wellington	Secunderabad	1	...	1	...	...	...	...	...	...	...
Do. R. A., 18th Hussars, & 69th Regt.	Wellington	Wellington	1	...	27	...	...	...	...	...	...	...
Do. British Troops and Invalids	Madras, &c.	Wellington, Madras, &c.	...	48	1,222	181	384	...	57	...	8	91
Unexpired men...	Madras	Gooburgan	...	2	40	3	3	...	...	...	...	...
Total				128	4,807	295	747	3	155	16	14	1

a Abscess of liver
 b Sandstrake
 c Dysentery
 d Hepatitis
 e Unknown
 f Asphyxia from drowning
 g Convulsions

WOMEN.

27. The number of women coming under observation during the year as wives of Non-commissioned Officers and Soldiers was 1,652; the number of hospital admissions was 1,716; the daily sick 61; and the total deaths during the year 23—2 of these having occurred out of hospital.

Comparison with former years.

28. The ratio of admissions and deaths for the past five years are shown below:—

	1869.	1870.	1871.	1872.	1873.
Admissions per mille ...	1031.5	976.6	849.81	1116.82	1038.74
Deaths per mille in hospital ...	25.2	19.5	16.27	12.84	12.71
Deaths out of hospital ...	*	*	1.87	0.61	1.21

It will be observed that the results of the past year have been on the whole very favorable, the death-rate being not quite 14 per thousand. There were three cases of cholera (two fatal) in Burmah (Thayetmo); but the epidemic did not extend to any other station, and there appears to have been no special prevalence of disease at any of the stations.

Table showing the Admissions and Deaths among the Women belonging to the European Corps stationed in the Madras Presidency during the year 1873.

	Stations.																			Grand Total.	
	Madras.	Saint Thomas Mount.	Poonamallee.	Wellington.	Palavaram.	Vizagapatam.	Trichinopoly.	Bangalore.	Canmore.	Calicut.	Malappooram.	Ramandiroog.	Bellary.	Secunderabad.	Kannore.	Seetabuldee.	Bangorn.	Tbetyemyo.	Tongchoo.		Port Blair.
Strength	113	34	28	66	148	26	36	295	82	6	7	5	124	285	147	...	105	86	58	1	1,652
Admitted	159	78	57	66	20	11	35	232	108	4	9	1	94	361	220	...	109	77	75	...	1,716
Died in hospital	2	...	1	...	2	...	...	2	1	...	...	...	...	4	4	...	2	3	...	...	21
Do. out of hospital	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	2
Daily sick	704	205	215	211	110	035	118	765	271	018	260	013	298	1281	611	...	344	371	275	...	6105
Diseases.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	A.	D.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	D.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	D.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	D.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	D.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	D.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	A.
	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	D.
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4
Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	212
Dengue	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
Diseases of the brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Do. of the eye	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	10
Do. of the lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	78
Do. of the heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	37
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2
Diarrhea	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	56
Diseases of the liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	76
Abortion	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	38
Other diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24
Total	159	278	57	66	20	211	35	232	2108	14	9	1	94	361	4220	4	109	277	375	...	1,716
Ratio per 1,000 of strength...	1407.07	2294.11	2035.70	35.71	1000.0	135.18	972.22	786.44	1317.07	666.66	1285.71	200.0	758.06	1266.66	1428.57	27.21	1038.09	895.84	1293.16	...	1038.74

CHILDREN.

29. The mean strength of children of the European troops during the year was 3,218. There were 1,939 admissions into hospital, and a total mortality of 152. Of the deaths, 21 occurred out of hospital.

Comparison with former years.

30. The ratio of admissions and mortality are shown for the past five years below :—

	1869.	1870.	1871.	1872.	1873.
Admissions per mille	672.7	547.8	646.8	727.9	602.5
Deaths do. in hospital...	74.4	48.8	48.5	57.3	40.71
Died out of hospital	*	*	4.3	2.8	6.52

From this we see that there has been a lower ratio of sickness and mortality in 1873 than in any other year of the series. Including the deaths of children who were not entered in the hospital records, the mortality ratio for the past year has been 47.2 per mille.

31. Cholera appeared epidemically at Thayetmyo, and six deaths from that disease occurred amongst the children, but all other stations escaped the visitation, and there appears to have been nothing unusual in the type of disease. Of the total mortality of 152 children, 121 deaths occurred below two years of age. Measles was fatal in 8 cases, fevers in 10, diphtheria in 4 (this disease appeared in the families of the 67th Regiment before and after landing in Burmah), but the greater part of the deaths occurred from teething, convulsions, and diarrhoea.

In my Annual Report for 1872 (page 11) I alluded to the need of endeavouring to improve the milk-supply of soldiers' families, but I am not aware that any measures have been as yet sanctioned to bring about the reform.

Table showing the Admissions and Deaths among the Children belonging to the European Corps stationed in the Madras Presidency during the year 1873.

	Stations.																	Grand Total.				
	Madras.	Saint Thomas.	Ponnammallee.	Wellington.	Palaturnam.	Vizagapatnam.	Tritchinopoly.	Bangalore.	Channarayana.	Calicut.	Malappuram.	Bannardroog.	Bellary.	Secunderabad.	Kamptee.	Soelabuldeo.	Rangoon.		Thayetoingy.	Tongbo.	Port Blair.	
Strength ...	242	145	78	185	321	70	578	124	6	4	11	220	555	211	...	159	178	171	1	3,218		
Admitted ...	246	87	87	55	17	66	279	59	2	...	4	186	422	266	...	50	91	53	...	1,939		
Died in hospital ...	12	4	4	3	2	3	19	3	...	...	1	11	23	12	...	4	14	4	...	131		
Do. out of do. ...	...	...	...	...	...	...	5	...	...	...	...	1	4	4	...	...	...	8	...	21		
Daily sick...	1375	259	301	178	101	282	872	168	0.60	...	0.71	391	1467	682	...	1.06	3.69	1.63	...	6894		
Diseases.	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.		
Small-pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Fever ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Dengue ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diseases of the brain	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Do. of the eye	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Do. of the lungs	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Do. of the heart	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Dysentery...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diarrhoea ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Diseases of the liver	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Teething ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Other diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total ...	24612	87	487	433	317	219	136	3	2791959	31	4	13611	42223	26612	...	5013914	53	4	...	1932131	60234	
Ratio per 1,000 of strength	101.63	49.58	53.63	398.56	38.33	31.19	47.80	24.19	33.33	...	...	618.18	760.86	1260.66	...	314.46	81.76	80.92	...	477.47	36.03	40.71

Mortality among the Children belonging to European Corps for 1873 according to Age.

Diseases.	Ages of Children.								Total.
	Under 1 year.	1 to 2.	2 to 3.	3 to 4.	4 to 5.	5 to 10.	10 to 15.	Above 15 years	
Measles ...	...	6	1	1	...	...	...	...	8
Simple continued fever	...	3	...	...	...	...	...	...	4
Remittent fever	...	...	1	...	...	1	...	...	3
Typhoid do.	...	...	...	...	...	...	...	1	1
Intermittent do.	...	...	...	...	...	...	1	...	1
Febricula	...	...	1	...	...	...	...	...	1
Cholera	...	...	1	1	...	2	1	...	6
Scrofula	...	...	...	...	...	1	...	...	2
Diphtheria	...	2	...	...	...	1	...	...	4
Anæmia	...	...	...	...	...	...	...	...	1
Dropsy	...	...	...	1	...	...	...	...	1
Hæmorrhage	...	...	...	...	...	...	...	...	1
Inflammation of brain	...	...	...	...	...	...	...	...	1
Tetanus	...	...	...	...	...	...	...	...	1
Convulsions	12	5	...	1	...	...	...	...	19
Teething	5	2	1	...	...	...	...	...	8
Meningitis	2	...	...	...	...	...	...	...	2
Marasmus	...	1	...	...	...	...	...	...	1
Cyanosis	1	...	...	...	...	...	...	...	1
Bronchitis	2	...	...	...	...	...	...	...	2
Bronchial catarrh	1	...	...	...	...	...	...	...	1
Pneumonia	1	...	...	...	...	...	...	...	1
Croup	1	2	...	...	...	...	...	...	3
Diarrhoea	12	7	1	...	...	...	...	...	20
Dysentery	1	7	3	1	1	1	1	...	15
Peritonitis	1	...	...	...	...	...	...	...	1
Intussusception	...	...	...	...	...	1	...	...	1
Dentition	4	3	...	...	...	...	...	...	9
Enteritis	1	...	...	...	...	...	...	...	1
Tonsillitis	...	...	...	...	...	1	...	...	1
Acute synovitis	...	...	1	...	...	...	...	...	1
Tabes mesenterica	3	3	...	1	...	...	...	...	7
Still-born	1	...	...	...	...	...	...	...	1
Debility	15	5	2	...	...	...	...	...	22
Total ...	72	49	12	6	1	8	3	1	152

VENEREAL DISEASES.

32. The following return shows the amount of venereal disease in the troops and registered women at the several stations during the year 1873. From it we see that in the whole British force of the Presidency there were 706 cases of primary syphilis, 275 admissions from secondary affections, and 707 from gonorrhœal affections, or in all 1,688 admissions, giving a ratio of 147.82 per mille to the average strength of the force. The ratio of admissions for primary syphilis was more than five times higher in Bellary than in Madras, where the Contagious Diseases' Act is in operation. In the station of Bellary it is quite evident that the disease was not contracted entirely from the registered women, for out of an average of 76 women on the register there were only 42 treated for primary disease during the year, whereas in Bangalore, out of an average of 77 on the register, there were 202 admissions for primary syphilis, or, in other words, each registered woman was nearly three times in hospital during the year for this particular form of disease.

Primary syphilis was prevalent in the troops at Bangalore, Kamptee, Wellington, and Calicut, and in two of these stations it was prevalent amongst the registered women. At Calicut the increase in primary syphilis is stated to have been due to one diseased woman, who, owing to the non-inclusion of the station in those to which the section of the cantonment regulations bearing on prostitutes are applicable, could not be molested.

In Madras and Rangoon the operations of the Contagious Diseases' Act appear to have been effective in controlling disease amongst the troops.

33. The average number of registered women in the several stations was 1,626, and amongst these were treated 962 cases of primary syphilis, 200 of secondary affections, and 1,423 of gonorrhoeal affections, total 2,585.

The records of the several Lock Hospitals show that a good deal of disease has been prevented, but they also show that the regulations are worked with extreme difficulty, and that in a very large number of cases it has been impracticable to deal with the disseminators of disease. It might have been expected that the soldiers, for whose benefit the regulations affecting prostitutes were mainly instituted, would have seconded the efforts of the administration for the control of the disease by acting in some degree as their own police, but in practice this has not been the case, and many instances are given in which the men, instead of helping in the detection of diseased women, have sought to screen them from the operations of the cantonment rules. And, as regards the women themselves, there can be no doubt but that a large number do succeed in evading the requirements of the rules, and that the difficulties of police supervision are aggravated by the carelessness and indifference of the soldiers to measures instituted for their own protection.

34. It is a constant source of complaint that professional prostitutes are allowed to reside and ply their trade just where they please, and that being scattered over a wide area, effective supervision of them becomes impossible. It has frequently been suggested that the practice of the old Mahomedan rulers of the country, of locating women of this description in certain quarters of the town (lall bazaars), should be revived, if it be desired to exercise efficient police control over them; and on the low ground of public decency alone there is much to be said in favor of such a scheme.

Those who are practically acquainted with the subject are aware that public women, with whom the soldiers consort, are for the most part miserably housed, and that the dens they inhabit are prolific sources of disease, beyond the specific ailments for which the cantonment rules are maintained. A large number of these women, moreover, pursue their avocations after nightfall in the neighbourhood of barracks and places of public resort in such a manner that public decency is outraged. The promiscuous intercourse of the sexes is beyond the power of legislation, but it is not too much to expect that those who traffic in such things should be compelled to pursue their occupations in certain defined localities where their habits should not be an offence to the decency and propriety of respectable and modest people.

I have long been of opinion that the regulations for the control of prostitution in military stations must remain incomplete, and to a great extent ineffective, so long as this important question of the location of public women remains

unsettled. I would advocate defined quarters being assigned to them within cantonments, and visit with penalties all infringements of the regulation compelling women of the prostitute class to reside within certain limits; and, as regards regimental bazaars, huts should be provided for women who attach themselves thereto, in suitable localities, where their presence would not be an offence to other people.

Table showing the Relative Prevalence of Primary and Secondary Syphilis and Gonorrhoea amongst the British Troops and Registered Prostitutes of the Military Stations in the Madras Presidency during the year 1873.

Stations.	Troops.				Prostitutes.			
	Strength.	Primary Syphilis.	Secondary Syphilis.	Gonorrhoeal Diseases.	Total Venereal Diseases.	Primary Syphilis.	Secondary Syphilis.	Gonorrhoeal Diseases.
		Ratio per 1,000 of	Ratio per 1,000 of	Ratio per 1,000 of	Ratio per 1,000 of	Ratio per 1,000 of	Ratio per 1,000 of	Ratio per 1,000 of
Madras	704	26	18	39	83	189	102	503
Bangalore	1,811	133	27	137	281	202	66	151
Belary	911	191	59	96	347	42	3	35
Cananore	643	7	4	49	61	8	3	54
Kamptee	999	101	31	65	197	8	2	117
Rangoon	957	64	12	42	118	90	7	164
Secunderabad	2,434	81	51	135	267	283	4	164
St. Thomas' Mount	352	8	7	36	51	42	2	98
Thayemyo	584	8	6	11	23	18	...	61
Trichinopoly	291	10	2	35	47	50	11	32
Wellington	454	31	13	28	69	26	1	52
Sectahallee	47	1	...	...	5	22	3	93
Poonahallee	133	2	20	7	28	18	...	33
Palavram	82	3	...	7	10	18	...	33
Calicut	80	6	...	2	12	18	...	33
Mallapooram	50	1	...	2	4	50	...	33
Ramandroog	80	...	2	2	7	40	...	33
Tonghoo	463	32	11	16	59	26	...	33
Port Blair	102	1	1	1	3	22	...	33
European Veterans.	...	...	...	...	...	...	...	...
Palavram	120	...	...	...	...	...	...	...
Vizagapatnam	66	...	...	...	...	...	...	...
Total	11,418	706	275	707	1,688	962	200	1,423
						1,626		
						501		
						375		
						158		

The women of these stations are sent to the St. Thomas' Mount Hospital.

There are no Lock Hospitals at these stations.

SECTION II.

STATIONAL STATISTICS—EUROPEAN TROOPS.

Madras.

(Fort Saint George.)

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

Mean temperature 82°.

Average rainfall 47·18 inches.

Rainfall in 1873, 54·92 do.

35. The 7-5th Brigade Royal Artillery and 1-21st Fusiliers occupied the station throughout the year. The strength, moreover, was increased by various details of other corps sent to Madras for change, or passing through the station.

The mean strength of the force was 704, the hospital admissions 785, the daily sick 45·3, and deaths 10. Two deaths occurred out of hospital—one from drowning and one from aneurism of the coronary arteries of the heart, the man being found dead in bed :—

Comparison with former years.				36. The proportions of sickness and mortality are compared in the margin with the results of the previous seven years. The ratios for the past year are decidedly favorable :—
Mean of 7 years ending 1873.	Admissions.	Daily Sick.	Died.	
1593·2	796	20·5		
1873 ...	1115·0	64·4	14·2	

37. In the following table the sickness and mortality are shown separately for each corps :—

	Corps.						Ratio per 1,000 of Strength.					
	Details attached to 1-21st Fusiliers.		7-5th Brigade R. A.		1-21st Fusiliers.		Details attached to 1-21st Fusiliers.		7-5th Brigade R. A.		1-21st Fusiliers.	
No. of weeks resident.	52		52		52							
Strength ...	21		88		595							
Total admissions...	25		86		674		119·47		977·27		1132·77	
Daily sick...	4·63		4·94		35·82		220·47		56·13		60·20	
Died in hospital...	4		...		4		190·47		...		6·72	
Died out of do. ...	...		...		2		...		...		3·36	
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	...	...	2	...	53	...	...	...	22·72	...	89·07	...
Dengue ...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	6	1	3	...	19	1	285·69	47·61	34·09	...	31·93	1·68
Diarrhoea ...	3	...	2	...	9	...	142·84	...	22·72	...	15·12	...
Hepatitis ...	4	1	8	...	35	1	190·47	47·6	90·88	...	58·82	1·68
Venereal diseases...	2	...	5	...	76	...	95·23	...	56·81	...	127·73	...

38. Of the 10 fatal cases, four occurred in details of various corps who had been transferred to Madras from Burmah or the Hills, and six in 1-21st Fusiliers. There was no casualty in the

Royal Artillery. Of the deaths, two were due to phthisis, dysentery two, scrofula one, aneurism two, hepatic disease two, and drowning one.

39. The admissions from venereal diseases have again diminished. However imperfectly the Contagious Diseases' Act may be worked, its effects have been manifest in a diminished ratio of ineffectives in the military in garrison. The ratios of admissions are noted in the margin.

40. Measles prevailed at one time amongst the families, but there has not been any great amount of sickness. Two women and 12 children died during the year, the ratios of mortality to strength being respectively 17·6 and 49·5 per mille.

41. Madras has been free of epidemic cholera throughout the past year. Some cases were landed from the S.S. *Assyria*, and sent to the Native Infirmary in September; and on a former occasion, a canal steamer from Calcutta landed a man at the General Hospital who died of cholera, but fortunately in neither instance did the pestilence take root in the town. There were, however, two or three suspicious cases in the town following upon the landing of cholera patients from the *Assyria*, but, notwithstanding the absence of cholera, the death-rate of the town has been very high. Small-pox prevailed with an intensity greater than had occurred since 1862.

In 1873 this epidemic disease swept away 1,062 persons, the greater number of whom were young children unprotected by vaccination.

Deaths from fevers were not so prevalent as in 1872, but bowel-complaints were more fatal than usual. The total of deaths registered was 14,609, giving a ratio to population of 36·4 per mille—a rate somewhat above the average of the previous 12 years, and due probably to increasing accuracy in registration.

42. The deaths for a series of years are shown in the following table :—

Return showing the Births and Deaths in the Town of Madras for the past 14 years.

Years.	Deaths in the Town of Madras.							Total Births.	Ratio per 1,000 of Population.	
	Small-pox.	Fevers.	Dysentery.	Diarrhoea.	Cholera.	Other Diseases.	Total.		Births.	Deaths.
1860 ...	245	2,459	1,326	1,012	2,580	5,876	13,498	...	...	33·95
1861 ...	655	2,169	1,353	981	2,776	5,435	13,370	...	...	35·63
1862 ...	1,033	2,235	1,171	1,032	3,635	5,625	14,731	...	...	37·05
1863 ...	112	2,117	1,240	914	1,684	5,791	13,358	...	...	29·82
1864 ...	173	2,083	1,103	893	574	5,533	10,499	...	...	26·18
1865 ...	44	2,190	1,159	1,062	944	5,817	11,216	...	...	25·21
1866 ...	103	2,256	1,318	947	2,984	6,273	13,381	...	...	34·91
1867 ...	623	2,456	1,420	946	614	6,286	12,245	...	...	30·30
1868 ...	799	2,232	1,019	812	13	7,327	12,203	...	...	30·68
1869 ...	38	2,015	888	668	563	7,035	11,262	4,612	11·60	28·32
1870 ...	18	2,296	896	692	861	7,121	11,885	5,799	14·53	29·89
1871 ...	234	2,474	964	932	493	7,937	13,034	8,505	21·39	32·78
1872 ...	658	2,848	903	1,132	5	8,472	14,018	8,166	20·54	35·26
Total ...	4,735	29,820	14,760	11,924	17,731	84,629	163,609	27,082	68·11	411·48
Average ...	338·2	2130·7	1054·3	851·7	1266·5	6044·9	11686·3	6770·5	17·02	102·87
1873 ...	1,062	2,569	1,037	1,133	6	8,802	14,609	9,382	23·59	36·49
Increase ...	723·8	435·3	...	281·3	...	2757·1	2922·7	2611·5	6·56	7·35
Decrease ...	...	...	17·3	...	1260·5	...	...	...	...	...

43. There has been some improvement in the registration of births during the year. 9,382 births were reported, or in the ratio of 23·5 per mille of population, but this branch of the Registration Department of the Municipality is still too imperfectly worked to afford results on which any dependence may be placed.

44. The water-supply has been maintained pretty well from the Red Hill reservoir throughout the year. In August the water in the lake got very low, owing, I believe, to the reckless waste of it by the cultivators, and the tank weed perished to a great extent, giving a bad odour to the water and discoloring it. At the same time there was a great development of insect life which preyed on the decaying vegetation. The early rains of September and October had the effect of remedying this condition of the water, and for some months past the supply has been ample and pure. Some arrangements are needed to shut up the irrigation sluices for those months when, under the old system, no supply would be withdrawn from the tank, and the reservoir should never be allowed to run so low as it was in August last. If this precaution be attended to, I do not think that there will be any grounds for complaining of the quality of the water in the hot months of the year.

45. The absence of cholera in the two years since the new water-supply has been available is a noteworthy fact, though too much prominence must not be given to it. Madras, in common with almost the whole of Southern India, has enjoyed a remarkable immunity from cholera during 1872 and 1873. Although the new source of supply is available for large sections of the population, it is quite certain that many of the people still draw their water from the old sources. The distributing fountains and reservoirs are not yet numerous enough to bring the water within ready reach of all, and one complete municipal division of the town with 65,547 inhabitants, and sections of some other divisions, have had no water brought to them. And again the Fort, the Penitentiary, and General Hospital are still supplied from the "seven wells;" and these localities have been just as free of cholera as those supplied with the new water. The influence of the new water-supply will be better shown, probably, when the next epidemic of cholera invades this part of the country; and there will, I trust, be plenty of time for the Municipality to complete their distribution works in the more densely inhabited portion of the town before this happens.

46. The next table is drawn up in accordance with Dr. Goodeve's suggestions, and compares the ratios of sickness and mortality of European and Native troops and prisoners in jail:—

Health of troops and prisoners compared.

	Sickness.	Per Mille Ratio of Mortality.			Invaliding.
		In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 704.					
Fevers	88.12	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	39.77	2.84	...	2.84	7.10
Diarrhoea	19.88	...	...	...	1.42
Hepatitis	66.76	2.84	...	2.84	25.56
Cholera	...	...	...	...	...
Venereal diseases	117.89	...	...	...	31.42
All diseases	1115.05	11.86	2.84	14.20	150.56
<i>Native Troops.</i>					
Average Strength, 2,636.					
Fevers	182.70	0.49	0.98	1.47	...
Dengue	93.32	...	...	...	...
Dysentery	28.48	0.98	...	0.98	...
Diarrhoea	39.78	...	...	...	...
Hepatitis	1.47	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	26.52	...	...	...	...
All diseases	836.93	4.42	2.40	6.82	17.68
<i>Prisoners.</i>					
Average Strength, 590.					
Fevers	142.37	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	11.86	...	...	...	...
Diarrhoea	120.33	1.69	...	1.69	...
Hepatitis	1.69	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	54.23	...	...	...	...
All diseases	764.40	5.07	...	5.07	...

Saint Thomas' Mount.

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

Height above sea 40 feet.

Mean temperature 81°.

Average rainfall 41·7 inches.

Rainfall in 1873, 41·49 do.

47. The strength of the British troops at this station was 352; the number admitted into hospital was 437; the daily sick 20·6; and deaths 4. One of the fatal cases occurred out of hospital.

Strength, sickness, and mortality.

Composition of force.

48. The following table shows the sickness in each battery:—

	Corps.				Ratio per 1,000 of Strength.							
	Head-Quarters 5th Brigade R. A. and Details.	A-25th Brigade R. A.	7-6th Brigade R. A.	C. Battery 20th Brigade R. A.	Head-Quarters 5th Brigade R. A. and Details.	A-20th Brigade R. A.	7-6th Brigade R. A.	C. Battery 20th Brigade R. A.				
No. of weeks resident.	52	52	52	45								
Strength	24	134	78	134								
Total admissions.	22	137	95	183	916.66	1022.38	1217.94	1365.67				
Daily sick	1.30	7.21	4.95	8.36	54.16	53.80	63.46	62.38				
Died in hospital.	...	1	1	1	...	7.46	12.82	7.46				
Died out of hospital.	...	...	...	1	...	...	...	7.46				
	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.	A. D.				
Fevers	6	10	10	28	250	74.62	125.20	208.94				
Dengue	...	4	...	11	...	29.84	...	82.08				
Cholera	...	...	...	...	...	...	...	...				
Dysentery	1	9	15	10	41.66	67.16	192.30	74.62				
Diarrhoea	2	6	11	14	83.33	44.76	141.02	104.47				
Hepatitis	...	14	1	11	...	104.47	12.82	82.08				
Venereal diseases.	1	23	12	15	41.66	171.64	153.84	111.94				

Comparison with previous years.			
Admissions.	Daily Sick.	Deaths.	
Mean of 7 years ending 1872.	1319.4	67.2	26.1
1873.	1241.4	58.7	11.3

49. Compared with the averages of seven previous years the ratios of sickness and mortality have been low. There appears to have been but little serious sickness amongst the troops.

50. The only fatal cases were two of aortic aneurism, and two of drowning.

51. Venereal affections have been somewhat less frequent during the year than in 1872.

52. The women and children of the station enjoyed good health. There was no death amongst the former; and of the latter, the ratio of mortality was 27.39 per mille.

53. The inhabitants of the bazaars have been fairly healthy, but small-pox prevailed in the early months of the year. The bazaars are kept clean, and the roads and drainage are attended to. There is a sufficiency of latrines for the population.

54. The medical officer, R.A., recommends an enlargement of the boundaries of the cantonment in certain directions, so as to include some Pariah settlements which are neglected, and also a separate removal of urine from the barracks and hospitals.

55. The following table compares the sickness and mortality of the European and Native troops, and of the prisoners in Guindy Jail, two miles distant:—

	Sickness.	Per Mille Ratio of Mortality			Invaliding
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 352.					
Fevers	153.41	..	...	...	2.84
Dengue	42.61	...	...	...	...
Dysentery	99.43	...	...	...	11.36
Diarrhoea	93.75	...	...	...	...
Hepatitis	73.86	...	...	...	2.84
Cholera •	...	...	...	...	...
Venereal diseases	144.89	...	...	...	11.36
All diseases	1241.48	8.52	2.84	11.36	85.22
<i>Native Troops.</i>					
Average Strength, 135.					
Fevers	66.66	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	7.40	...	...	...	...
Diarrhoea	7.40	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	22.22	...	...	...	...
All diseases	244.44	14.81	...	14.81	...
<i>Prisoners.</i>					
Average Strength, 62.					
Fevers	403.22	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	16.12	...	...	...	...
Diarrhoea	...	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	48.38	...	...	...	...
All diseases	967.74	...	...	...	...

Palaveram.

Latitude 12° 53' North. Longitude 80° 15' East.

Height above sea 60 feet.

Mean temperature 80°.

Average rainfall 41.7 inches.

Rainfall in 1873 41.49 do.

56. The effective troops at this station consist merely of detachments of the regiment quartered in Fort Saint George, residing here for rifle practice.

The mean strength of the detachment was 95, and there were 59 admissions to hospital, and no death.

57. The European Artillery Veteran Company is quartered also at Palaveram. The strength of the company was 120; the hospital admissions were 47; the daily sick 1.66; and deaths 3. One of the deaths occurred out of hospital.

58. The admission and death rates are below the mean of four previous years, as shown in the margin. All the men composing this Veteran Company are of advanced age, and the wonder is, considering the habits and training of their youth, that the rate of mortality should be so low. The admissions from delirium tremens were fewer than in former years.

Causes of death.

59. The causes of death were heart disease one, diarrhoea one, unknown one.

Women and children.

60. Of 148 women, there were two deaths, and of 321 children, two deaths, the ratio of mortality being 13.5 and 6.2 respectively.

Sanitary works.

61. The buildings, &c., are in fair sanitary condition, and the cantonment is kept clean.

Health of European and Native troops compared.

62. The following table compares the prevalence of disease in the European and Native troops:—

	Sickness.	Per Mille Ratio of Mortality.			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 215.					
Fevers	69.76	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	4.65	...	...	...	...
Diarrhoea	13.95	4.65	...	4.65	...
Hepatitis	37.20	...	...	...	...
Cholera	...	...	...	...	...
Veneral diseases	46.51	...	...	...	...
All diseases	493.02	9.30	4.65	13.95	...
<i>Native Troops.</i>					
Average Strength, 429.					
Fevers	165.49	...	...	...	...
Dengue	30.30	...	...	...	...
Dysentery	32.63	2.33	...	2.33	...
Diarrhoea	53.61	2.33	...	2.33	...
Hepatitis	2.33	...	...	...	...
Cholera	...	...	...	...	...
Veneral diseases	48.95	...	...	...	...
All diseases	983.68	16.31	6.99	23.30	...

Poonamallee.

(Depôt.)

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

Mean temperature 80°.

Average rainfall 51.7 inches.

Rainfall for 1873 40 do."

Strength, sickness, and mortality.

63. The mean strength of troops at this invalid depôt was 138; the total admissions were 352; the average daily sick 49.2; and deaths 8.

Mean of	Comparison with former years.		
	Admissions.	Daily Sick.	Died.
7 years ending 1872.	2751.7	192.2	65.4
1873.	2550.7	356.8	67.9

64. The results for the year are compared with the mean ratios of sickness and mortality for the previous seven years in the margin, and they appear to show a diminished prevalence of serious diseases amongst the invalids during the year.

65. The deaths were due to phthisis four, sunstroke two, dysentery two. Many cases of severe bowel and hepatic diseases were received at the depôt. Ophthalmia prevailed to some extent in August and September.

66. The strength of the women was 28, and one death occurred. The children were 73 in number, and four deaths occurred, the ratio of mortality being 35.7 per mille among the former, and 54.7 among the latter.

67. A special committee was appointed by Government to report upon the new barrack accommodation required for the depôt.

Vizagapatam.

European Veterans—Strength, sickness, and mortality.

68. This station was garrisoned only by the European Veteran Company. The strength was 66; the hospital admissions were 39; the daily sick 1.7; and deaths 2.

The company consists entirely of old men, who have passed many years of existence in India.

Causes of death.

69. The causes of death in the two fatal cases were cancer one and jaundice one.

Trichinopoly.

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

Height above sea 250 feet.

Mean temperature 83°.

Average rainfall 35 inches.

Rainfall in 1873 29.66.

Composition of force.

70. The composition of the European force at this station is shown in the following table:—

	Corps.		Ratio per 1,000 of Strength.			
	B-20th Bri- gade R. A.	Detachment 1-21st Fusil- liers.	B-20th Brigade R. A.	Detachment 1-21st Fusiliers.		
No. of weeks resident	50	52				
Strength	133	163				
Total admissions	154	270	1157.89	1656.44		
Daily sick	10.01	14.40	75.26	88.34		
Died in hospital	1	4	7.51	24.53		
Died out of do.	...	2	...	12.26		
	A.	D.	A.	D.	A.	D.
Fevers	26	19	195.48	116.56	...	...
Dengue	3	78	22.53	478.52	...	...
Cholera	...	...	...	...	...	...
Dysentery	7	20	52.57	122.69	...	...
Diarrhoea	2	2	15.02	12.26	...	...
Hepatitis	8	14	60.08	85.82	6.13	...
Venereal diseases	4	43	30.04	263.80	...	...

Strength, sickness, and
mortality.

71. The mean strength was 291; the hospital admissions were 421; the daily sick 24; and deaths 7. Two deaths occurred out of hospital.

72. The ratios of sickness and mortality were considerably higher in 1873 than is usual at this station. The increased admissions were due, in some measure, to the prevalence of dengue and venereal in detachments of 1-21st Fusiliers. The sickness was higher in the Fusiliers than in the Royal Artillery, and it is recorded by the medical officer that a good deal of disease was attributable to intemperance. The fatal cases nearly all occurred in men of intemperate habits.

73. The assigned causes of death were sunstroke two, pneumonia one, abscess of liver one, delirium tremens one, aneurism of aorta one, and drowning one. In the latter case the man had gone into the plunge-bath while drunk, and was discovered subsequently to be drowned.

74. The admissions from venereal diseases were higher than usual, but not in the Royal Artillery. The increase was limited to the detachment of 1-21st Fusiliers.

75. The strength of the European women was 36, and no death occurred. In an average strength of 70 children there were three deaths, the ratio of mortality to strength being 8.42 per mille.

76. The sanitary condition of the barracks, hospitals, &c., is reported to be good. The station was generally healthy, but small-pox prevailed amongst the native population. One case of this disease occurred amongst the European troops. No special sanitary works have been executed in the cantonment or barracks.

77. The following table compares the sickness and mortality of European and Native troops and prisoners. The jail mortality from bowel-complaints, dropsies, and diseases of innutrition were very high:—

Health of troops and
prisoners compared.

78. The average strength of the troops at this station was 454; the hospital admissions 673; the average daily sick 41.3; and deaths 10.

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 291.					
Fevers	154.64	...	...	...	6.87
Dengue	278.35	...	...	...	...
Dysentery	92.78	...	...	...	6.87
Diarrhoea	13.75	...	...	...	...
Hepatitis	75.60	3.43	...	3.43	...
Cholera	...	...	...	...	...
Venereal diseases	161.51	...	...	...	...
All diseases	1457.05	17.18	6.78	23.96	41.23
<i>Native Troops.</i>					
Average Strength, 1,883.					
Fevers	238.97	0.53	...	0.53	...
Dengue	337.22	0.53	...	0.53	...
Dysentery	31.33	...	...	...	...
Diarrhoea	27.61	1.06	0.53	1.59	...
Hepatitis	1.06	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	16.91	...	...	...	...
All diseases	1089.75	3.71	1.59	5.30	16.99
<i>Prisoners.</i>					
Average Strength, 1,013.					
Fevers	42.44	1.97	...	1.97	...
Dengue	...	...	...	...	...
Dysentery	64.16	16.78	...	16.78	...
Diarrhoea	44.42	11.84	...	11.84	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	15.79	...	...	...	...
All diseases	364.26	58.24	...	58.24	...

Wellington.

(Hill Depot and Sanitarium.)

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

Height above sea 6,000 feet.

Mean temperature 64°.

Average rainfall 31 inches.

Rainfall in 1873 48½ do.

78. The average strength of the troops at this station was 454; the hospital admissions 673; the average daily sick 41.3; and deaths 10.

79. The ratios of sickness and mortality are contrasted in the margin with the results of previous years. There has been more sickness than usual, and the mortality has also been higher. In the early part of the year a large detachment of weakly recruits and

convalescents from typhoid fever joined the dépôt from the 43rd Regiment at Cannanore, and many of these recruits continued sickly for some months. In March two cases of enteric fever appeared in this detachment, and in May another case occurred in an Artillery man, which proved fatal. It is worthy of note that the detachment of H. M.'s 43rd had been nearly three weeks at Wellington before the two cases of typhoid fever occurred. The medical officer remarks, "These two young soldiers have been ailing ever since they arrived from Cannanore, and I have satisfied myself that they contracted the fever before they left that station."

Measles appeared also in a detachment arriving from Secunderabad. Small-pox was epidemic in the neighbouring stations and in the bazaar at Wellington, but no case occurred in the dépôt.

80. Venereal diseases were much more prevalent than usual, and the increase was observable also in Ootacamund amongst the civil population. The registration of public women is maintained, but it seems to be clear that there are many of the class who escape registration.

81. The causes of death were fevers two, phthisis two, aneurism two, pneumonia one, dysentery one, and abscess of liver two.

82. The strength of the women at this station was 66. There was no casualty amongst them. The children averaged 138, and there were five deaths amongst them, or in the ratio of 36.2 per mille. Measles prevailed amongst the families, but they were protected from small-pox by vaccination.

83. The barracks, married quarters, and hospital are described as in good sanitary state, and the station is kept clean. An ample water-supply from a mountain stream is brought in a channel from some three miles distance.

Calicut.

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

Mean temperature 78°.

Average rainfall 113 inches.

Rainfall in 1873 115.35 do.

84. A detachment of one company of the 43rd Regiment L. I. occupied the station throughout the year.

85. The strength of the troops was 82; the hospital admissions, 125; and the daily sick 6. No death occurred at Calicut.

86. The ratio of sickness has been higher than usual, as will be seen from the marginal table. The troops suffered a good deal from bowel and hepatic diseases and venereal. The medical officer remarks, "Five cases of venereal were traced to one prostitute living at the foot of the hill, who could not be removed, as the provisions of the Contagious Diseases' Act did not apply to the station."

Comparison with previous years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	857.4	37.9	19.8
1873	1524.3	73.2	...

It is worthy of note, however, that there were no cases of enteric fever, which disease affected the head-quarters at Cannanore so severely.

87. There were only six women and six children at this station, and no casualty amongst them.

88. The married quarters have been re-floored and some repairs executed. The barrack-rooms, verandahs, and solitary cells are also to be re-floored. The medical officer reports that a public latrine for native followers is required at the foot of the hill.

89. The following table shows the sickness, &c., amongst European troops and prisoners at the station :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 82.					
Fevers	195.12	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	121.95	...	...	...	...
Diarrhoea	170.73	...	...	...	...
Hepatitis	109.75	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	146.34	...	...	...	...
All diseases	1524.39	...	...	...	...
<i>Prisoners.</i>					
Average Strength, 129.					
Fevers	232.55	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	85.27	...	...	...	...
Diarrhoea	108.52	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	15.50	...	...	...	...
All diseases	875.96	15.50	...	15.50	...

Malliaipooram.

90. This station was occupied for the whole year by a detachment of the 43rd Light Infantry.

91. The strength of the troops was 80; the hospital admissions 114; the daily sick 5.19; and 1 man died.

92. The ratios of sickness were much above the average, though the mortality was lower than usual. The troops newly arrived from Europe suffered severely from bowel-complaints and hepatitis; but, as was the case with Calicut, the detachment escaped enteric fever.

93. The fatal case was one of hepatitis.

Comparison with previous years.			
	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	885.5	40.4	17.7
1873	1415.0	64.3	12.5

Cause of death.

94. There were only seven women and four children at the station, and there was no mortality amongst them.

95. The hospital verandah has been floored with asphalt, and a new gymnasium built. The medical officer reports that the cells and guard-room require to be ventilated, and that representations to this effect have already been made.

Bangalore.

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

Height above sea 3,000 feet.

Mean temperature 75° 40'.

Average rainfall 25 inches.

Rainfall in 1873 29·16 do.

96. The following table shows the composition of the force at Bangalore in 1873 :—

	Corps.							Ratio per 1,000 of Strength.						
	Garrison.	H. M's 18th Hussars.	E Battery 20th Brigade R. A.	89th P. V. Regiment.	4th Brigade R. A.	C. O. Brigade R. A.	Head-Quarters C. Brigade R. A.	Garrison.	H. M's 18th Hussars.	E Battery 20th Brigade R. A.	89th P. V. Regiment.	4th Brigade R. A.	C. O. Brigade R. A.	Head-Quarters C. Brigade R. A.
No. of weeks resident ...	52	52	45	52	45	43	43							
Strength ...	85	419	139	922	148	171	19	200	752·78	1552·95	967·46	1439·18	1871·34	1315·78
Total admissions ...	7	338	216	192	218	320	55	7·14	41·42	81·67	49·91	79·93	98·96	78·54
Daily sick ...	0·25	13·60	11·27	45·10	11·83	16·53	1·50	...	2·004	14·38	5·43	6·75	17·54	...
Died in Hospital ...	...	1	2	5	1	3	...	...	...	...	...	...	...	...
Died out of Ho. ...	...	1	...	2	...	...	...	...	2·004	...	2·16	...	...	...
Diseases.														
Fever ...	2	36	21	179	40	54	...	57·14	80·17	151·07	194·14	270·27	315·78	...
Dengue ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hepatitis ...	2	23	7	41	216	9	1	57·14	48·99	100·76	13·01	114·86	131·28	...
Veneral diseases ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

97. The strength of the troops was 1,811 ; the hospital admissions 2,011 ; the average daily sick 98·8 ; and deaths 15. Three of the fatal cases occurred out of hospital.

98. The ratios of sickness and mortality are contrasted in the margin with the mean results of the previous seven years, and it will be observed that there has been a considerable diminution in the mortality in 1873, the death-ratio being but a little more than eight per mille.

99. Cases of dengue fever occurred in the Royal Artillery, chiefly among newcomers to the station. A good many cases of malarious fever occurred in the 89th Regiment, contracted on the march across a jungly district from Cannanore, but this corps had no enteric fever. Nine cases of the latter disease were admitted in the Royal Artillery and Hussars ; some of them very severe, but there were no deaths from it. Small-pox prevailed in the cantonment throughout the year,

but the troops were well protected by vaccination, and not a single case occurred among them. The admissions from venereal disease were highest in E Battery 20th Brigade and C-C Brigade Royal Horse Artillery, both newly arrived at the station. The mortality was only about one-half of that of the previous year.

100. The causes of death were apoplexy one, heart disease one, bronchitis one, dysentery two, hepatic diseases five, Bright's disease one, drowning two, fracture of skull one, and gun-shot wound (self-inflicted) one.

101. The strength of the women at Bangalore was 295, and there were two deaths amongst them, giving a ratio of 6·7 per mille. The children numbered 578, and 24 died, the ratio being 41·5 per thousand. There was one case of small-pox amongst the women and two in the children. The mortality amongst the latter was mainly due to diseases incidental to childhood.

102. The following is a list of the more important works executed in the year by the Municipality :—

(1) A covered stone-built sewer, 2,100 feet long, to intercept the sewage flowing into the Choolay tank ; (2) a box drain, 300 feet long, along the south side of the grass-cutters' lines ; (3) two under-ducts and three sewage traps across the main channel into the main sewer, to intercept the sewage flowing into the Ulsoor tank ; (4) a box drain with stone slabs from Ulsoor across the main channel, to intercept the sewage from the milkmen's quarters ; (5) 25,633 feet of side drains with stone slabs, and 433 squares of the bed of the main channel have been flagged to prevent the lodgment of stagnant water. Several new wells were sunk and others cleared out ; and five latrines were built.

103. The water-supply works had made some progress during the year, but the distributing cistern in the Commissariat square was not completed. One of the filters at the Ulsoor lake was repaired, but would not hold water after much money had been expended on it by the Public Works Department. It remains in a useless condition. The supply from the dhobies' wells alone is not sufficient for the wants of the military, and the Ulsoor water, even after filtration, can scarcely be considered a safe source of supply. It is to be hoped that ere long Government may be pleased to sanction a scheme for the supply of the whole of this important station with good water.

104. The following table exhibits the sickness, mortality, and invaliding of the European troops, compared with the Native troops at the station :—

Health of European and Native troops compared.

	Sickness.	Per Mille Ratio of Mortality.			Invaliding.
		In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 1,811.					
Fever	183.81	...	...	...	1.10
Dengue	14.90	...	...	...	...
Dysentery	75.64	1.10	...	1.10	8.28
Diarrhoea	48.04	...	...	...	0.55
Hepatitis	54.11	2.20	...	2.20	8.88
Cholera	...	...	...	...	...
Veneral diseases	163.99	...	...	...	4.43
All diseases	1110.43	6.62	1.66	8.28	67.30
<i>Native Troops.</i>					
Average Strength, 2,080.					
Fever	162.02	2.88	...	2.86	...
Dengue	112.02	0.48	...	2.86	...
Dysentery	15.38	0.96	...	0.96	...
Diarrhoea	12.08	...	...	...	...
Hepatitis	2.88	...	...	...	...
Cholera	...	...	...	...	...
Veneral diseases	17.30	...	...	...	...
All diseases	833.65	9.13	2.40	11.53	26.44

Cannanore.

Latitude 11° 59' North. Longitude 75° 30' East.

Height above sea 15 to 30 feet.

Mean temperature 78°.

Average rainfall 121 inches.

Rainfall in 1873 70 do.

Composition of force.

105. The following table shows the strength and constitution of the force :—

	Corps.				Ratio per 1,000 of Strength.							
	1.5th Brigade R. A.	43rd Light Infantry.	Detachment 88th Regt.	Garrison.	1.5th Brigade R. A.	43rd Regiment L. I.	Details 88th Regiment.	Garrison.				
No. of weeks resident	52	52	3	52								
Strength	71	563	9	9	1478.87	1802.84	...	333.33				
Total admissions	105	1,015	...	3	57.04	68.59	135.55	31.11				
Daily sick	4.05	38.62	1.22	0.28	14.03	26.64	...	...				
Died in hospital	1	15	...	...	...	...	...	...				
Died out of do.	...	...	...	...	...	...	...	...				
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fever	13	1	141	5	183.09	14.08	250.44	8.88	...	...	111.11	...
Dengue	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	10	161	1	...	14.08	...	255.96	1.77	...	...	...	...
Diarrhoea	1	106	...	...	...	...	188.27	...	...	...	...	...
Hepatitis	26	114	7	...	366.18	...	202.48	12.43	...	...	...	...
Veneral diseases	7	53	...	...	98.59	...	94.13	...	...	...	...	...

Strength, sickness, and mortality.

106. The mean strength for the year was 643 men; the hospital admissions 1,123; the daily sick 43.01; and deaths 16.

107. The ratios of admissions, daily sick, and mortality are compared in the margin with the results of seven previous years.

Comparison with previous years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1169.9	51.5	15.6
1873	1746.5	66.8	24.8

It will be observed that sickness and mortality have been very heavy during the past year, and this result has been due, I think, in a great measure to the fact that the 43rd Regiment on arrival consisted mainly of raw recruits of immature frames, who began to suffer immediately on arrival from enteric fever, diarrhoea, dysentery, and subsequently hepatic diseases. Upwards of a 100 of the most immature of the recruits were selected by Dr. Massy to be sent up to Wellington; but, notwithstanding the increased space given to the remaining men in barracks, the sickly condition of the men continued throughout the two first quarters of the year. A portion of the corps was moved into tents, but without any effect on the proportion of admissions from fever. Throughout the third quarter of the year the corps continued sickly, the mortality including several cases of hepatic abscess. In December the regiment marched to join the Camp of Exercise at Bangalore. With regard to enteric fever the disease was confined to H. M.'s 43rd Regiment. One man of the Artillery, in hospital for another disease, was attacked and died, but no other case occurred in the Royal Artillery.

108. The causes of death were fever (enteric) six, phthisis two, dysentery one, abscess of liver six, and cirrhosis of liver one. The large number of cases of liver abscess in a regiment during its first year of service is unusual, and is to be explained probably in the great prevalence of diarrhoea and dysentery.

109. The general ill-health of the troops was not so noticeable among soldiers' wives. Of a strength of 82, only one died, the ratio of mortality being 12 per thousand. Of 124 children, three died, the ratio of mortality being 24.1 per mille.

110. An important sanitary measure was decided upon by Government, viz., to bring within municipal limits all the portions of the cantonment forming the "Karar," or private estate of the Beebee of Cannanore. Hitherto these lands were exempted from municipal control and management, and the sanitary condition of a settlement near the barracks had been the subject of constant anxiety to the local authorities. During the year steps were taken to improve the cleanliness of this suburb, and to provide latrines for the accommodation of the people.

The barracks of the Infantry Regiment at Cannanore are old, and in some respects unsatisfactory, and suggestions were made to Government for their improvement, and the proposals made were generally sanctioned and ordered to be carried out. They include the following :—

(1) The boarded flooring of the barracks to be carefully relaid, with the space underneath the boards so arranged as to allow of a current of air circulating between the earthen floor and the boards; (2) removal to some other spot of the objectionable buildings, latrines, cook-rooms, canteen, liquor godowns, and a bazaar shop situated on the sea-face of the barracks, as obstructing the pure sea

and the earth or other flooring of the latrines to be taken up and renewed with well-rammed laterite clay, and that dry earth be used in the latrines, tubs, &c., kept clean and well tarred; (3) removal of a row of buildings near of the barracks, formerly the Serjeants' quarters, but at present used as living rooms, as obstructing the breeze on the land side of the building and the barrack square hotter and closer than need be; (4) improvement of drainage of the barrack square and subsidiary buildings by putting down earthen-ware pipes to carry off to the sea the wash-water of cook-rooms, latrines, &c.; (5) proper conservancy and covering in of the wells used for drinking purposes; (6) removal further back of the guard-room and prison cells near respective latrines, at present objectionably close to the main building on the north-west side of the barrack square, their tendency being to block the breeze and bring nuisances close to the men sleeping on that side of the barracks; (7) an arched opening to be made on the sea-face side of the barracks to allow admission of the sea breeze into the interior of the square, with a similar opening on the north-east side also; and (8) the wash-houses, which are of old and insufficient in accommodation, to be replaced by better and more commodious ones, and a fresh-water plunge-bath, to accommodate the Artillery and Cavalry.

1. The following table shows the sickness, mortality, and invaliding among the European and Native troops and the prisoners in the jail. The contrast as regard fevers and bowel-complaints between the natives and Europeans is very marked:—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 643.					
...	241.06	9.33	...	9.33	1.55
...	...	...	...	...	...
y	265.94	11.56	...	11.56	26.43
...	166.40	...	...	...	...
...	217.72	10.88	...	10.88	24.88
...	...	...	...	...	...
diseases	83.31	...	...	...	1.55
ses	1746.50	24.88	...	24.88	144.63
<i>Native Troops.</i>					
Average Strength, 1,280.					
...	30.46	...	...	...	...
...	...	...	...	...	...
y	10.93	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
...	...	...	...	...	...
diseases	7.81	...	...	...	...
ses	240.62	0.78	3.12	3.90	39.06
<i>Prisoners.</i>					
Average Strength, 582.					
...	44.67	...	...	...	...
...	...	...	...	...	...
ry	39.51	1.71	...	1.71	...
a	13.74	1.71	...	1.71	...
...	...	...	...	...	...
...	...	...	...	...	...
diseases	6.87	...	...	1.890	...
ses	225.08	18.90	...	...	...

Bellary.

Latitude 17° North. Longitude 97° East.

Height above sea 1,500 feet.

Mean temperature 80°.

Average rainfall 16.83 inches.

Rainfall in 1873 20.48 do.

112. The composition of the force at Bellary is shown in the following table:—

	Corps.		Ratio per 1,000 of Strength.			
	G-18th Brigade Royal Artillery.	H. M.'s 48th Regiment.	G-18th Brigade Royal Artillery.	H. M.'s 48th Regiment.		
No. of weeks resident ...	52	52				
Strength ...	135	806				
Total admissions ...	127	806	940.74		1000.0	
Daily sick ...	7.85	51.98	58.14		64.49	
Died in hospital ...	2	10	14.81		12.40	
Do. out of hospital ...	...	2	...		2.48	
	A.	D.	A.	D.	A.	D.
Fevers ...	13	...	127	2	96.29	157.56
Dengue ...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...
Dysentery ...	4	...	12	1	29.62	14.88
Diarrhoea ...	5	...	23	...	37.04	28.53
Hepatitis ...	5	1	16	2	37.04	19.84
Venereal diseases ...	34	...	307	1	251.85	380.89

113. The strength of the troops was 941; the hospital admissions 933; the daily sick 59.8; and deaths 14. Two of the latter occurred out of hospital.

114. The ratios of sickness and mortality for the past year are contrasted in the margin with the results of the seven previous years. The mortality has been above the average, but the admissions were fewer than usual. The increase in daily sick is attributable to the large proportion of venereal cases coming under treatment.

There has been no special prevalence of disease at Bellary, with the exception of venereal, and the admissions from this cause have continued high all through the year. It is well ascertained that the men do not contract it from the registered women, but from villagers who prowl about the cantonment at night, and whom the police apparently are unable to detect.

115. The causes of death were fevers two, phthisis one, disease of brain two, heart disease two, dysentery one, abscess of liver three, stricture of urethra one, and accidental drowning two.

116. The average strength of the women was 124, and 94 were treated in hospital during the year. There was no death.

The strength of the children was 220; the hospital admissions 136; and

deaths 12, the ratio of mortality to strength being 54.5 per mille. Ophthalmia was prevalent during the monsoon months amongst the families.

117. The barracks and hospitals are reported to be in an efficient sanitary condition. The cantonment is under the control of the Municipality, and as regards the native town improvements are in progress. During the year a new feeder to the principal tank was constructed, so as to enlarge the water-supply of Brucepettah.

Health of troops and prisoners compared.

118. The following table shows the sickness, &c., among the European and Native troops and prisoners in jail :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 941.					
Fevers	148.77	2.12	...	2.12	...
Dengue	...	...	...	...	...
Dysentery	17.00	1.06	...	1.06	2.12
Diarrhoea	29.75	...	...	...	1.06
Hepatitis	22.31	3.18	...	3.18	4.25
Cholera	...	...	...	...	...
Venereal diseases	362.38	1.06	...	1.06	3.18
All diseases	921.49	12.75	2.12	14.87	38.26
<i>Native Troops.</i>					
Average Strength, 1,548.					
Fevers	116.91	0.64	...	0.64	...
Dengue	13.56	...	...	...	...
Dysentery	14.85	...	...	...	...
Diarrhoea	14.21	...	...	...	...
Hepatitis	1.29	0.64	...	0.64	...
Cholera	...	...	...	...	...
Venereal diseases	10.98	...	...	...	...
All diseases	477.89	3.22	2.58	5.80	35.53
<i>Prisoners.</i>					
Average Strength, 363.					
Fevers	55.09	2.75	...	2.75	...
Dengue	...	...	...	...	...
Dysentery	2.75	...	...	...	...
Diarrhoea	5.50	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	24.79	...	...	...	...
All diseases	374.65	13.77	...	13.77	...

Ramandroog.

(Convalescent Depôt.)

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

Height above sea 3,400 feet.

Mean temperature 73°.

Average rainfall 36 inches.

Rainfall in 1873 21.83 do.

Strength, sickness, and mortality.

119. The average strength of the troops at this depôt was 50. There were 48 hospital admissions, and the daily sick averaged 2.5.

None of the convalescents transferred to this depôt died.

The chief admissions were from fevers.

Women and children.

120. There were 5 women and 11 children at the depôt, and of the latter, one died.

Secunderabad and Trimulgherry.

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

Height above sea 1,800 feet.

Mean temperature 79°.

Average rainfall 28 inches.

Rainfall in 1873 21.83. do.

Composition of force.

121. The following table shows the composition of, and the principal causes of sickness in, the several bodies of troops :—

Corps.	Ratio per 1,000 of Strength.											
	Ratio per 1,000 of Strength.											
107th Regiment.	Garrison.	...										
		...										
	Her Majesty's 16th Lancers.	...										
		...										
	G-9th Brigade R. A.	...										
		...										
	Head-quarters 20th Brigade R. A.	...										
		...										
	107th Regiment.	...										
		...										
B. Battery C Brigade R. A.	Garrison.	...										
		...										
	Her Majesty's 16th Lancers.	...										
		...										
	G-9th Brigade R. A.	...										
		...										
	Head-quarters 20th Brigade R. A.	...										
		...										
	107th Regiment.	...										
		...										
A. Battery 9th Brigade R. A.	Garrison.	...										
		...										
	Her Majesty's 16th Lancers.	...										
		...										
	G-9th Brigade R. A.	...										
		...										
	Head-quarters 20th Brigade R. A.	...										
		...										
	107th Regiment.	...										
		...										
B. Battery C Brigade R. A.	Garrison.	...										
		...										
	Her Majesty's 16th Lancers.	...										
		...										
	G-9th Brigade R. A.	...										
		...										
	Head-quarters 20th Brigade R. A.	...										
		...										
	107th Regiment.	...										
		...										

* One case of scarlet fever admitted.

122. The mean strength of the force was 2,436; the hospital admissions numbered 3,114; the daily number of men inefficient from sickness averaged 124.6; and 54 men died during the year. Of these 5 occurred out of hospital.

123. The ratios of sickness and mortality in this large force for 1873 contrast favorably with the mean results of the preceding seven years, as shown in the margin. The year has been on the whole a healthy one, though a good deal of dysentery and hepatic disease prevailed amongst the European troops. The hepatic disease appears in almost all the cases to have followed upon dysentery, and a large number of fatal cases of hepatic abscess are recorded.

124. Venereal diseases were not at all prevalent during the year, and the proportion of admissions from this cause was lower than usual.

125. The recorded causes of death are as follow :—Remittent fever 2, phthisis 1, apoplexy 1, aneurism of aorta 2, heart disease 1, pneumonia 2, dysentery 18, abscess of liver 22, narcotic poison 1, drowning 2, and gun-shot wound (suicide) 2.

The following table continues the experience in regard to the health of troops at Trimulgherry and Secunderabad for the year 1873. The sickness and mortality, as usual, has been much the heaviest in the 16th Lancers occupying the old barracks at Secunderabad. During the year a portion of the regiment was moved out to North Trimulgherry, to the new barracks in course of erection, and with manifest advantage to the health of the men. It is hoped that the progress of the works will soon permit of the whole regiment being accommodated in the new barracks :—

	Ratio per Mille of Strength.										
	1860 to 1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.
(Secunderabad old barracks.)											
Admissions...	1837.4	1573.7	1605.0	1981.9	1777.7	1157.7	1478.7	1297.4	1628.5	1533.5	1411.9
Deaths ...	23.4	13.7	18.9	43.2	26.04	41.7	25.09	16.3	124.6	38.3	33.04
(Trimulgherry new barracks.)											
Admissions...	1259.2	1549.6	1419.0	1353.2	1395.4	1434.3	1098.8	1046.4	1197.1	1051.06	1305.7
Deaths ...	12.04	7.6	23.1	25.8	32.9	24.9	31.05	19.1	22.02	20.4	20.8

126. The strength of the women at Secunderabad was 285; six women died, the ratio of deaths to strength being 16.67. The strength of children was 555, and 27 died, the rates being 48.64 per mille. There appears to have been no epidemic disease, but bowel-complaints and teething caused most of the mortality amongst the children.

127. The following remarks are quoted from the Sanitary Report for the year :—

"The work commenced in 1864, and which has never yet ceased, viz., opening out, as funds and opportunity permit, crowded portions of the bazaars by removing dwellings, forming communications, and laying out lines of drain, has been carried on with the same perseverance during the last year.

"Amongst the works of last year was the opening out of one large area by the purchase and removal of the old distillery from what was formerly a very unhealthy neighbourhood.

"Six latrines were constructed and completed during the year 1873; six more are in course of construction.

"A main drain in Chetmce bazaar also is in course of construction.

"The usual attention has been paid to the conservancy of the bazaars.

"A scheme for the supply of water to the town has been elaborated, but is deferred, pending orders from the Local Government.

"A dhoby ghant has been constructed, and several new military communications were opened.

"Nothing has been done to drainage since last report.

"Water-supply of 2nd Regiment completed and ready for the service of regiment from 1st April 1874, when funds for working will be available. Some additional taps have still to be supplied as lately recommended, and will be supplied by that date.

"No further improvements have been made."

128. The following table shows the sickness and mortality among the

Health of European and Native troops at the station. Malarious fevers have been prevalent among the Native troops:—

				Sickness.	Per Mille Ratio of Mortality			Invaliding.
					In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>								
Average Strength, 2,436.								
Fevers	...	...	...	183.49	0.82	...	0.82	...
Dengue	...	...	...	0.82	...	...	...	...
Dysentery	...	...	...	113.30	7.39	...	7.39	24.63
Diarrhoea	...	...	...	108.87	...	...	...	0.82
Hepatitis	...	...	...	94.00	9.03	...	9.03	9.03
Cholera	...	...	...	...	...	...	...	...
Veneral diseases	...	...	...	109.60	...	...	...	4.51
All diseases...	...	...	...	1278.32	20.11	2.05	22.16	79.22
<i>Native Troops.</i>								
Average Strength, 3,239.								
Fevers	...	...	...	578.25	1.22	0.60	1.82	...
Dengue	...	...	...	...	...	...	...	...
Dysentery	...	...	...	15.74	...	...	...	...
Diarrhoea	...	...	...	19.14	0.30	...	0.30	...
Hepatitis	...	...	...	2.16	0.30	...	0.30	...
Cholera	...	...	...	...	...	...	...	...
Veneral diseases	...	...	...	13.27	...	...	...	...
All diseases...	...	...	...	1086.75	6.17	1.85	8.02	13.89

Kamptee.

Latitude 21° 16' North. Longitude 79° 14' East.

Height above sea 900 feet.

Mean temperature 80°.

Average rainfall 41.8 inches.

Rainfall in 1873 31.53 do.

Composition of force.

129. The troops stationed at Kamptee during the year are shown below:—

	Corps.			Ratio per 1,000 of Strength.								
	H. M.'s 44th Regi- ment.	D-20th Bri- gade R. A.	G Battery 20th Bri- gade R. A.	H. M.'s 44th Regiment.	D-20th Bri- gade R. A.	G Battery 20th Brigade R. A.						
No. of weeks resident ...	52	47	46									
Strength	767	124	136									
Total admissions ...	1,545	181	249	2014.34	1459.67	1830.88						
Daily sick	46.95	7.81	8.87	61.21	62.98	65.22						
Died in hospital ...	4	1	1	5.21	8.06	7.35						
Died out of do....	5	...	1	6.5	...	7.35						
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.		
Fevers	870	1	51	1	67	...	1134.28	1.30	411.29	8.06	492.64	...
Dengue... ..	14	...	14	...	30	...	18.25	...	112.90	...	220.58	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	13	...	10	...	8	...	16.94	...	80.64	...	58.82	...
Diarrhoea	59	...	3	...	4	...	76.92	...	24.18	...	29.41	...
Hepatitis	12	...	2	...	11	1	15.64	...	16.12	...	80.88	7.35
Venereal diseases ...	178	...	10	...	9	...	232.07	...	80.64	...	66.17	...

130. The mean strength of the force was 999; the hospital admissions were 1,975; the daily average of sick 61.72; and deaths 12. Of the deaths, six occurred out of hospital, and three were the result of accidental causes occurring under the influence of liquor.

131. The ratios of sickness and mortality for the past year are contrasted in the margin with the mean results of the previous seven years. The admissions have been a little in excess of the average, and the mortality has been less. The principal causes of admission into hospital were ague, dengue, and venereal diseases. Small-pox prevailed epidemically in the station in the early months of the year. Four cases occurred and one death. It is recorded that all the men attacked had good vaccine marks.

132. The recorded causes of death are as follow:—Small-pox one, remittent fever two, sunstroke one, aneurism of the aorta three, abscess of liver one, alcoholic poisoning two, drowning one, and overlaid when drunk one.

133. The strength of the women was 147; there were 220 admissions into hospital and four deaths, the death-ratio being 27.2 per mille.

134. The children numbered 211, and 16 deaths were recorded, 4 out of hospital; the ratio of mortality was 75.8 per mille. Fever and ophthalmia were the most prevalent diseases in the families.

135. The drainage of the bazaar is being gradually carried out. The sanitary officer complains of swampy ground to the south of the part occupied by European troops which was noticed by the

Sanitary Commissioner five years since as emergently requiring to be drained. Nothing appears to have been done to remedy the evil.

Health of European and Native troops compared.

136. The following table compares the sickness, mortality, and invaliding of the European and Native troops at the station :—

							Sickness.	Per Mille Ratio of Mortality			Invaliding.
								In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>											
Average Strength, 999.											
Fevers	...	...	...	...	...	...	988.97	2.00	...	2.00	2.00
Dengue	...	...	...	...	...	...	57.05	...	...	...	...
Dysentery	...	...	...	...	...	...	31.03	...	...	...	2.00
Diarrhoea	...	...	...	...	...	...	66.06	...	...	...	1.00
Hepatitis...	...	...	...	...	...	...	25.62	1.00	...	1.00	5.00
Cholera	...	...	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	...	...	197.19	...	...	...	6.00
All diseases	...	...	...	...	...	...	1876.98	6.006	6.006	12.01	38.03
<i>Native Troops.</i>											
Average Strength, 1,203.											
Fevers	...	...	...	...	...	...	295.92	0.83	...	0.83	...
Dengue	...	...	...	...	...	...	458.85	0.83	...	0.83	...
Dysentery	...	...	...	...	...	...	12.45	...	...	...	...
Diarrhoea	...	...	...	...	...	...	12.45	0.83	...	0.83	...
Hepatitis...	...	...	...	...	...	...	3.32	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	...	...	9.96	...	...	...	...
All diseases	...	...	...	...	...	...	1158.76	10.80	2.49	13.29	19.95

Sectabuldee.

Latitude 2°11' North. Longitude 79° 9' East.

Height above sea 939 feet.

Mean temperature 80°.

Average rainfall 46.5 inches.

Rainfall in 1873 38.93 do.

137. The station was occupied by a detachment of the 44th Regiment, whose head-quarters are at Kamptee.

138. The strength of the detachment was 47; the hospital admissions were strength, sickness, 61; and daily sick 1.08.

Dengue and malarious fevers were prevalent. There was no death.

139. There were no women or children at the station.

Sanitary works.

140. None.

Health of European and Native troops compared.

141. The following table shows the sickness and mortality among the European and Native troops :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 47.					
Fevers	297.87	...	...	...	...
Dengue	468.09	...	...	...	...
Dysentery	42.55	...	...	...	...
Diarrhoea... ..	...	...	...	...	...
Hepatitis... ..	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	106.38	...	...	...	...
All diseases	1297.87	...	...	...	...
<i>Native Troops.</i>					
Average Strength, 426.					
Fevers	720.65	...	...	...	...
Dengue	1380.28	...	...	...	...
Dysentery	32.86	...	...	...	...
Diarrhoea... ..	7.02	...	...	...	...
Hepatitis	4.68	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	30.51	...	...	...	...
All diseases	2997.65	2.34	4.69	7.03	...

Rangoon.

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

Height above sea 80 feet.

Mean temperature 80°.

Average rainfall 80 inches.

Rainfall in 1873 124 do.

Composition of force.

142. The following table shows the strength and composition of the force :—

	Corps.						Ratio per 1,000 of Strength.									
	Garrison.	2-10th Regiment.	6-5th Brigade R. A.	2-5th Brigade R. A.	H. M.'s 67th Regiment.	Detachment 45th Regiment S. F.	Garrison.	2-10th Regiment.	6-5th Brigade R. A.	2-5th Brigade R. A.	H. M.'s 67th Regiment.	Detachment 45th Regiment S. F.				
No. of weeks resident ...	52	2	52	52	52	5										
Strength ...	39	472	73	74	729	257										
Total admissions.	16	1	58	62	865	37	410.25	2.11	794.52	837.33	1186.55	143.96				
Daily sick ...	0.60	6.78	3.27	3.67	28.08	15.38	15.38	14.36	44.79	49.59	38.51	59.84				
Died in hospital..	...	...	1	2	9	4	...	...	13.69	27.02	12.34	15.56				
Died out of do.	...	...	...	1	...	1	...	...	...	13.51	...	3.89				
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	3	1	...	2	88	1	76.92	2.11	...	...	27.02	...	120.71	1.37	3.89	...
Dengue ...	...	...	...	...	106	...	...	...	...	...	...	...	145.40	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	3	...	...	...	56	1	76.92	...	...	...	...	...	76.81	1.37	19.45	11.57
Diarrhoea ...	...	...	1	2	99	2	...	...	13.69	...	...	...	135.80	...	7.78	...
Hepatitis ...	1	...	10	1	7	2	25.64	...	136.98	13.69	94.59	13.51	89.78	2.74	7.78	...
Venereal diseases.	...	...	9	6	97	6	...	...	123.23	...	81.08	...	135.05	...	23.84	...

143. The mean strength of the troops was 957; the hospital admissions 1,039; the average daily sick 37.3; and deaths 18. Two deaths occurred out of hospital.

144. The ratios of sickness and mortality for the past year are compared in the margin with the results of seven previous years. The admissions into hospital have been below the average, and the mortality somewhat higher. The 67th Regiment had newly arrived from England, and the admissions and casualties from bowel-complaints and liver disease were high. Three cases of enteric fever occurred in the first week of residence of the 67th Regiment, and a few other cases later in the year. Epidemic cholera prevailed for some months in Rangoon, but the only case occurring in the regiment was that of the Paymaster, who died of the disease.

145. The arrangements for the control and registration of public women in this large port and garrison are working well, and the admissions, considering that a new regiment has been occupying the station, are but few.

146. The causes of death were enteric fever one, phthisis one, sunstroke and apoplexy two, aneurism of aorta three, dysentery four, abscess of liver four, fracture of skull one, rupture of urethra one, and gun-shot wound (self-inflicted) one.

147. The strength of the women was 105, and two died during the year, the ratio being 19.04 per mille. The children numbered 159, and of these 17 died, the ratio of mortality being 106.0 per mille. It will be remembered that diphtheria broke out amongst the families on board the transport *Malabar* before they were landed in Rangoon. The disease continued to prevail for some weeks after the arrival of the corps, and the mortality from this cause has added considerably to the death-rate.

148. The sanitary works executed during the year consisted in the formation of one tank, and deepening others. One well was also sunk, and others cleaned out.

Health of European and Native troops compared.

149. The following table shows the comparative sickness and mortality of European and Native troops at the station:—

	/	Per Mille Ratio of Mortality			Invaliding.
		Sickness.	In Hospital.	Out of Hospital.	
<i>European Troops.</i>					
Average Strength, 957.					
Fevers	...	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	...	...	...	...	...
Diarrhoea	...	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	...	...	...	...	...
All diseases	...	...	...	...	...

							Sickness.	Per Mille Ratio of Mortality			Invaliding.
								In Hospital.	Out of Hospital.	Total.	
Native Troops.											
Average Strength, 1,733.											
Fevers ...	...	..	...	...	...	59.43	1.14	...	1.14	...	
Dengue ...	...	...	...	...	...	...	...	...	...	...	
Dysentery	...	...	...	...	...	25.38	...	...	...	...	
Diarrhoea	...	...	...	...	...	31.15	1.73	...	1.73	...	
Hepatitis	...	...	...	...	...	...	...	...	...	...	
Cholera ...	...	...	...	...	...	...	...	...	...	...	
Venereal diseases	...	...	...	...	...	16.15	...	...	...	...	
All diseases	...	...	...	...	...	378.53	10.38	1.15	11.53	...	

Thayetmyo.

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

Height above sea 240 feet.

Mean temperature 80°.

Average rainfall 48.3 inches.

Rainfall in 1873 43.42 do.

Composition of force.

150. The troops at the station included the 45th Regiment, Sherwood Foresters, and F. Battery, 25th Brigade, Royal Artillery.

	Corps.		Ratio per 1,000 of Strength.			
	Head-Quarters H. M.'s 45th Re- giment, S. F.	F Battery, 25th Brigade, R. A.	Head-Quarters H. M.'s 45th Regi- ment, S. F.	F Battery, 25th Brigade, R. A.		
No. of weeks resident ...	52	52				
Strength ...	412	142				
Total admissions ...	421	110	952.48	774.64		
Daily sick ...	17.76	4.46	40.18	31.41		
Died in hospital ...	16	4	36.19	28.16		
Died out of hospital ...	3	...	6.78	...		
	A.	D.	A.	D.	A.	D.
Fevers ...	52	2	6	...	117.64	4.52
Dengue ...	...	...	...	...	42.25	...
Cholera ...	14	8	6	4	31.64	18.09
Dysentery ...	12	...	6	...	27.12	...
Diarrhoea ...	30	...	6	...	67.86	...
Hepatitis ...	24	1	11	...	54.24	2.26
Venereal diseases ...	20	...	5	...	45.21	...

151. The strength of the force was 584; the hospital admissions were 531; the averagedaily sick 22.2; and the total deaths 23: three deaths occurred out of hospital.

152. The ratios of sickness and mortality for 1873 are compared marginally with the results of the previous seven years. It will be observed that the daily sick have been but few, but that the mortality has been considerably higher than in any other station of the army. This was due to an outbreak of epidemic cholera, in which 12 of the effective troops died. The portion of the station occupied by the European troops always suffers from cholera epidemics, when they prevail in Burmah. A minute account of the outbreak by the medical officers of the corps will be found in Appendix (II.)

153. The causes of death were enteric fever 2, cholera 12, aneurism and heart diseases 5, apoplexy 1, abscess of liver 1, Bright's disease 1, and asphyxia from drowning 1.

154. The cholera epidemic, so fatal amongst the men, left its mark also on the families; the strength of the women was 86, and of these three died, two from the cholera epidemic. Of 173 children 14 died, and six of the deaths were from cholera. The ratios of mortality of women and children respectively were 34.8 and 80.9 per mille.

Sanitary works. 155. None.

156. The following table shows the sickness and mortality among the European and Native troops:—

	Sickness.	Per Mille Ratio of Mortality.			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 584.					
Fever	99.30	3.42	...	3.42	...
Dengue	...	...	...	...	...
Dysentery	30.82	...	...	...	11.99
Diarrhoea	61.64	...	...	...	1.71
Hepatitis...	59.93	1.71	...	1.71	13.69
Cholera	34.24	20.59	...	20.59	...
Veneral diseases	42.80	...	...	...	3.42
All diseases	909.24	34.24	5.13	39.37	82.19
<i>Native Troops.</i>					
Average Strength, 588.					
Fever	124.15	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	37.41	...	...	...	...
Diarrhoea	17.00	...	...	...	...
Hepatitis...	3.40	3.40	...	3.40	...
Cholera	1.70	1.70	1.70	3.40	...
Veneral diseases	13.60	...	...	...	...
All diseases	471.08	11.90	1.69	13.59	...

Tonghoo.

Latitude 18° 47' North. Longitude 96° 57' East.

Height above sea 300 feet.

Mean temperature 79°.

Average rainfall 69.4 inches.

Rainfall in 1873 82.85 do.

157. The European troops at this station consisted of Left Wing Her Majesty's 45th Regiment and 4.5th Brigade Royal Artillery, but at the end of the year a detachment of the 67th Regiment had relieved the 45th Wing.

	Corps.			Ratio per 1,000 of Strength.		
	4.5th Brigade R. A.	H. M.'s 45th Regt. S. F.	H. M.'s 67th Regi- ment Left Wing.	4.5th Bri- gade R. A.	H. M.'s 45th Regt. S. F.	H. M.'s 67th Regi- ment Left Wing.
No. of weeks resident.	52	50	3			
Strength ...	79	392	178			
Total admissions ...	113	287	9	1,430.38	783.16	50.56
Daily sick ...	5.35	15.78	5.33	67.72	40.25	29.94
Died in hospital ...	...	6	...	...	15.31	...
Died out of do. ...	...	1	...	...	2.55	...

	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	10	...	16	...	...	...	126.71	...	40.81	...	...	...
Dengue ...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera ...	1	...	2	...	...	...	12.65	...	5.10	...	...	...
Dysentery ...	40	...	78	1	4	...	506.32	...	193.98	2.55	22.47	...
Diarrhoea ...	7	...	17	1	2	...	77.61	...	43.37	2.55	11.23	...
Hepatitis ...	21	...	55	4	...	...	265.82	...	140.30	10.20	...	...
Veneral diseases ...	15	...	44	...	...	...	189.87	...	112.25	...	...	...

158. The mean strength of the troops was 466; the hospital admissions were 409; the average daily sick was 20.8; and deaths 7. One death occurred out of hospital.

159. The ratios of sickness and mortality were below the average of the seven previous years. Epidemic cholera was prevailing for some weeks in the native town, and three cases occurred amongst the European troops. Dysentery and bowel-complaints were the most common diseases.

160. The causes of death were sunstroke one, dysentery and diarrhoea two, and abscess of liver four.

161. The strength of the women was 58, and of children 111. There were no deaths amongst the former, but of the children seven died, or in the ratio of 63.06 per mille.

162. Two new wells were built, and a large number of native huts were cleared, as, owing to their situation, it was difficult to keep the place clean.

Sanitary works.

Health of European and Native troops compared.

163. The following table shows the sickness and mortality among the European and Native troops :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 466.					
Fevers	55.78	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	261.80	2.14	...	2.14	8.58
Diarrhoea	55.79	2.14	...	2.14	...
Hepatitis	163.09	8.58	...	8.58	...
Cholera	6.43	...	...	...	...
Venereal diseases	126.61	...	...	...	2.14
All diseases	877.68	12.82	2.14	14.96	23.60
<i>Native Troops.</i>					
Average Strength, 510.					
Fevers	447.05	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	170.58	...	...	...	...
Diarrhoea	129.41	3.92	...	39.2	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	23.52	...	...	...	...
All diseases	1,245.09	7.84	1.96	9.80	1.96

Port Blair.

(Andamans.)

The European detachment at this station was kept up by the 67th Regiment, Head-quarters at Rangoon.

Strength, sickness, and mortality.

164. The average strength was 102; the total admissions 40; the daily sick 0.93; and deaths two. One death occurred out of hospital.

Comparison with previous years.			
Admissions.	Daily Sick.	Died.	
Mean of 7 years ending 1872.	1193.5	45.2	12.8
1873...	392.1	9.1	19.6

Causes of death.

166. One death occurred from aneurism of aorta, and one from accidental drowning.

Sanitary works.

167. Drainage on Ross Island was extended, and the water-supply increased by enlargement of the tanks, and other minor works were executed, tending to the general improvement of the station.

Health of European and Native troops compared.

168. The following table shows the sickness and mortality among the European and Native troops :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>European Troops.</i>					
Average Strength, 102.					
Fevers	58.82	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	...	...	...	...	...
Diarrhoea	9.80	...	...	...	...
Hepatitis	98.04	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	29.41	...	...	...	...
All diseases	392.15	9.80	9.80	19.60	...
<i>Native Troops.</i>					
Average Strength, 267.					
Fevers	632.95	3.74	...	3.74	...
Dengue	...	...	...	...	...
Dysentery	7.48	...	...	...	...
Diarrhoea	14.96	...	...	...	...
Hepatitis	3.74	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	...	...	...	...	...
All diseases	1011.23	11.23	...	11.23	...

SECTION III.

SICKNESS AND MORTALITY AMONGST NATIVE TROOPS.

169. The strength of the Native Army on the 1st January 1873 was 31,233. By recruiting and other causes it received during the year an addition of 1,365 men; and by invaliding, reduction of establishments, summary dismissals, Court-martials, deaths, and other causes it lost 1,583 men, so that the strength remaining on 31st December 1873 was 31,015, or 218 less than in the beginning of the year.

Increase and decrease.

170. The following abstract shows the particulars of the increase and decrease of the Native Army in 1873 :—

Increase.				Decrease.			
By recruits	1,336	By invaliding	963				
By transfers	8	By summary dismissal	173				
Joined from desertion	11	By Court-martial	54				
By other causes	10	By desertion	67				
		By deaths	308				
		By other causes	18				
Total	1,365	Total	1,583				

Invaliding and deaths
according to Adjutant-
General's Returns com-
pared with former years.

171. The following abstract shows the losses of the Native Army by deaths and invaliding for a series of years :—

	Ratio per 1,000 of Strength.					
	1868.	1869.	1870.	1871.	1872.	1873.
Deaths	16.12	16.5	13.8	11.08	13.02	9.8
Invaliding	18.16	25.8	25.8	22.3	31.5	30.9

It will be seen that the death-rate has been very low in 1873.

172. The above particulars relate to the Madras Army as a whole, but some portions of the force are serving in other Presidencies, and the following particulars relate only to the army that is within the Madras command.

173. The mean strength of Native troops at stations within the Madras command was 25,900; the total admissions to hospital were 22,975; the average daily number of sick was 811.9; and 215 men died during the year. Of these deaths 167 are recorded in the Medical Returns, and 48 are described as occurring out of hospital.

While there were 215 deaths amongst the 25,900 troops in the Madras Presidency, there remain 66 deaths to be accounted for in the mean strength of 5,224 men serving in other Presidencies. The mortality, therefore, appears to have been slightly lower in the limits of the Madras command than beyond.

174. In the table below the ratios of sickness and mortality are contrasted with the results of each of the previous five years :—

	Ratio per 1,000 of Strength.					
	1868.	1869.	1870.	1871.	1872.	1873.
Admissions	707.7	702.5	630.6	693.9	1067.9	883.20
Daily sick	29.0	29.3	26.4	26.9	34.7	31.3
Deaths in hospital ...	8.6	10.1	9.4	8.8	9.9	6.4
Do. out of do.	1.4	3.6	3.6	1.8	2.4	1.8

175. The increase in the portion of hospital admissions during the last two years of the series is due to the epidemic prevalence of dengue fever. In 1872 this disease prevailed in 15 stations of the Native Army, and was the cause of 7,448 admissions. In the present year it prevailed in 13 of our military stations, and was the cause of 3,424 admissions. In some of the stations, where this epidemic prevailed in 1872, it re-appeared in 1873, but its greatest prevalence was in stations affected for the first time, or in places to which troops from unaffected localities had recently arrived.

176. There was but a single recorded case of cholera during the whole of 1873 in the stations occupied by the Native Army. This case occurred in the Burmese station of Thayetmyo when the disease was rife amongst the civil population and European troops. There was also a death out of hospital in a sepoy dwelling in Burmah. The great exemption of the Native Army from cholera is a fact without precedent, I believe,

since the year 1818. The 31st Regiment N. I., in marching from Berhampore in Ganjam, to Raepore in the Central Provinces, was attacked by cholera on the 7th February 1873, and lost in a few days 5 men and 26 camp-followers. These deaths are accounted for in the table showing sickness and mortality of troops in movement.

177. A large number of modified cases of small-pox were under treatment, namely, 308; but, as only one fatal case occurred, it is clear that the malignancy of the natural disease had been much changed by vaccination. Small-pox prevailed almost universally in the south of India during 1873, and the escape of the Native Army from heavy mortality on this occasion, such as affected the civil population, is clearly attributable to the superior degree in which the troops are protected by vaccination.

178. This disease prevailed chiefly in the troops stationed at Bangalore, Trichinopoly, and Seetabuldee.

Malarious fevers were rather prevalent during the latter half of the year; but, with the exception of dengue, the Native troops have been exceptionally healthy during the year.

179. The following table shows the sickness and mortality of the Native Army arranged according to locality, and contrasted with the mean results of the previous seven years :—

Sickness and mortality compared with the mean of former years.

Table showing the Strength, Sickness, and Mortality among Native Troops during 1873, arranged according to localities, contrasted with mean of previous seven years.

Locality.	Stations.	Ratio per Mille for 1873.		Mean of previous 7 years ending 1872.	
		Admitted.	Died.	Admitted.	Died.
Eastern Coast	Madras	836.93	6.82	664.1	10.5
	Vizagapatam	834.40	8.03	674.8	13.5
	Saint Thomas' Mount	244.44	14.81	698.8	11.05
	Palaveram (Depôt)	983.68	23.30	1707.04	51.6
	Mean ...	724.86	13.24	936.13	21.66
Western Coast	Mangalore	539.28	9.24	492.9	13.02
	Quilon	229.37	8.25	521.2	8.3
	Trevandrum	529.41	...	369.0	5.59
	Cannanore	240.62	3.90	386.9	7.9
	Mean ...	384.67	7.13	442.5	8.7
Plains near the sea	Vizianagrum	1705.69	9.49	365.7	10.1
	Trichinopoly	1089.75	5.30	481.6	10.9
	Berhampore	874.31	5.46	559.5	13.9
	Vellore	552.63	7.73	705.6	21.7
	Palamcottah	1373.0	5.32	385.4	8.5
	Trichoor	372.78	...	412.5	6.5
	Cuttack	411.58	4.56	439.7	11.3
	Mean ...	768.85	6.31	478.5	11.8
Table-lands distant from the sea	Bellary	477.39	5.80	526.9	9.1
	Hooshungabad	804.81	10.69	778.7	11.2
	Raepore	621.06	4.71	1130.3	17.5
	Seroncha	1597.22	13.88	1380.0	11.1
	Bangalore	833.65	11.53	801.8	11.6
	Seetabuldee	2997.65	7.03	1142.6	7.8
	Secunderabad	1086.75	8.02	854.5	11.0
	French Rocks	898.10	12.08	†857.1	†13.3
	Kamptee	1158.76	13.29	924.9	9.6
	Mysore	1253.96	...	*791.9	*7.9
	Chanda	1894.73	...	1995.8	16.05
	Sambulpore	1027.69	...	2012.8	24.04
	Mean ...	1212.64	9.69	1107.9	12.4
Hill Station	Mercara	1167.57	10.92	1055.2	12.9
	Mean ...	1167.57	10.92	1055.2	12.9
Foreign Stations	Rangoon	378.53	11.53	623.6	9.6
	Port Blair	1011.23	11.23	1335.3	24.4
	Moulmein	1547.02	1.91	953.9	16.9
	Shoaygheen	1381.35	8.47	1904.7	12.1
	Tonghoo	1245.09	9.80	1031.1	16.6
	Thayetmyo	471.08	13.59	540.2	8.1
	Nicobars	7243.24	...	*6017.2	*42.1
	Akyab	464.56	7.87	...	...
	Mean ...	1717.76	9.20	1784.98	19.4
	Mean ...	1717.76	9.20	1784.98	19.4

* Mean of four years.

† Mean of six years.

NATIVE TROOPS IN MOVEMENT.

180. During the year 4,140 men and 9,576 camp-followers were in movement from station to station, for periods of time varying from 17 to 72 days. The sickness and mortality on the line of march are not included in the stational statistics of the native troops.

181. There were 260 hospital admissions, and 6 deaths amongst the Native troops in marching. The head-quarters and right wing of the 31st Native Infantry, in moving from Berhampore in the Ganjam District, to Raepore in the Central Provinces, in January and February 1873, were attacked by epidemic cholera on the 7th February while moving along the valley of the Mahanuddy river, in the neighbourhood of Sumbulpore. As this area of country is not in the Madras Presidency, I have no record of the prevalence of cholera amongst the civil population of the district but it is stated that cholera prevailed at the time amongst pilgrims returning from Pooree. There were 13 cases and 5 deaths amongst the fighting men of the regiment, and 68 cases and 26 deaths amongst the families and camp-followers. The outbreak was of short duration, and ceased before the arrival of the corps at Raepore. With this exception all the movements of Native troops were free of cholera.

182. Some very long marches were made, as in the case of the 2nd Regiment Light Cavalry from Bellary to Kamptee occupying 72 days, the 24th Regiment Native Infantry from Secunderabad to Palamcottah 54 days, without any casualties whatever, thus showing that the country traversed was generally healthy and free of epidemics.

183. The following table shows the particulars of the marches made by the various bodies of Native troops :—

Return showing Sickness and Mortality among Native Troops marching during 1873.

Regiments.	From.	To.	Number of Days in movement.	Strength.		Sickness and Mortality.				Cholera.			
				Com-missioned and Non-com-missioned Officers and Men.	Followers.	Com-missioned and Non-com-missioned Officers and Men.		Followers.	Com-missioned and Non-com-missioned Officers and Men.	Followers.	Com-missioned and Non-com-missioned Officers and Men.	Followers.	Com-missioned and Non-com-missioned Officers and Men.
						A.	D.		A.	D.	A.	D.	A.
W. 6th Regiment N. I.	Nagode	Secunderabad	19	307	813	5	...	47	...	...	...	...	...
10th Regiment N. I.	Tonghoo	Tonghoo	19	109	9	3	...	11	...	...	...	...	...
24th Regiment N. I.	Trichinopoly	Quilon	42	499	1,446	7	...	5	2	...	...	...	...
W. 2nd Regiment N. I.	Vizagapatam	Berhampore	17	370	899	12	...	...	...	...	...	...	...
Head-Quarters L. W. 22nd Regiment N. I.	Bellary	Kamptee	72	216	355	19	...	...	...	...	...	...	...
W. 22nd Regiment N. I.	Palamcottah	Hooshungabad	31	379	912	11	...	...	...	...	...	...	...
Do. 24th do.	Do.	Kamptee	44	312	581	53	...	...	...	...	...	...	...
W. Head-Quarters 24th Regt. N. I.	Secunderabad	Palamcottah	40	327	773	13	...	...	...	...	...	...	...
Do.	Do.	Do.	54	385	1,116	22	...	...	...	...	...	...	...
W. 31st Regiment L. I.	Sumbulpore	Raepore	17	315	591	13	...	...	...	...	...	...	...
Head-Quarters R. W. 31st Regiment L. I.	Berhampore	Do.	48	374	939	79	5.5	68	26	13	5	68	26
W. 11th Regiment N. I.	Raepore	Nagode	29	254	760	20	...	62	2	...	...	...	...
11th Regiment L. Cavalry	Bellary	Bangalore	19	223	392	3	...	...	...	...	...	...	...
et. 23rd Regiment L. G.	Quilon	Do.	...	...	...	...	...	...	...	...	...	...	...
W. 40th Regiment N. I.	Sangor	Secunderabad	...	...	...	...	...	...	...	...	...	...	...
Head-Quarters L. W. 5th Regt.	Secunderabad	Sangor	...	...	...	...	...	...	...	...	...	...	...
Strength, admissions, and deaths not given.													
Total ...				4,140	9,576	260	6	191	30	13	5	68	26

a. Enteritis ... 1

b. Cholera ... 5

Madras.

184. The particulars regarding the sickness and mortality of each corps are shown below :—

Corps.	Ratio per 1,000 of Strength.				
	17th Regiment Native Infantry.	7th Regiment Native Infantry.	37th Regiment Native Infantry.	13th Regiment Native Infantry.	Body Guard.
No. of weeks resident.	52	52	52	52	52
Strength ...	2,589	367	2,431	2,530	429
Total admissions ...	503	32	542	526	101
Daily sick ...	53.39	10.85	69.08	80.69	15.83
Died in hospital ...	1	1	4	8	...
Died out of hospital...	2	...	1	...	2
Fevers ...	...	...	...	...	...
Dengue ...	...	...	...	...	...
Cholera ...	...	...	...	...	...
Dysentery ...	...	...	...	...	...
Diarrhoea ...	...	...	...	...	...
Hepatitis ...	...	...	...	...	...
Venereal diseases ...	...	...	...	...	...

185. The average strength was 2,036; the hospital admissions 1,704; the Strength, sickness, average daily sick 57.5; and deaths 14. Five deaths occurred and mortality. out of hospital.

Comparison with former years.			
Admissions.	Daily Sick.	Died.	Mean of 7 years ending 1872.
1873 ...	664.1	25.4	10.5
1872 ...	636.93	28.24	6.82

186. The ratios of sickness and mortality are compared in the margin with the results of the previous seven years. The admissions were in excess of the average, but the mortality has been very low.

187. The causes of death were fevers three, phthisis two, rheumatism one, anæmia and dropsy two, hemiplegia one, apoplexy one, heart disease one, dysentery two, and stricture of the bowel one.

Saint Thomas' Mount.

188. The detachment at this station was furnished by the 23rd Regiment Native Infantry. The strength of the troops was 135; the Strength, sickness, and mortality. hospital admissions 33; daily sick 0.7; and deaths 2.

189. The causes of death in the two fatal cases are recorded as phthisis one and debility one.

Comparison with former years.			
Admissions.	Daily Sick.	Died.	Mean of 7 years ending 1872.
1873 ...	693.8	19.5	11.05
1872 ...	244.4	5.2	14.8

190. The results of the year are contrasted with the mean results of the previous seven years in the margin.

Palaveram.

191. The following table shows the number of troops, and period for which they were under observation :—

	Corps.						Ratio per 1,000 of Strength.					
	Native Infantry Depot.		13th Regiment N. I.		39th Regiment N. I.		Native Infantry Depot.		13th Regiment N. I.		39th Regiment N. I.	
No. of weeks resident.	52		9		41							
Strength ...	96		539		304							
Total admissions ...	207		93		132		2156.25		172.54		434.21	
Daily sick ...	15.73		20.73		6.39		163.85		38.46		21.01	
Died in hospital ...	7		...		...		72.91		...		...	
Do. out of do. ...	...		2		1		...		3.71		3.28	
Fevers ...	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Dengue ...	35	...	21	...	15	...	364.58	...	38.96	...	49.94	...
Cholera ...	3	...	10	...	...	...	52.08	...	18.55	...	...	...
Dysentery ...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	8	1	2	...	4	...	83.33	10.41	3.71	...	13.15	...
Hepatitis ...	19	1	2	...	2	...	197.91	10.41	3.71	...	6.57	...
Venereal diseases ...	6	...	8	...	7	...	62.5	...	14.84	...	23.02	...

Strength, sickness, and mortality.

192. The strength was 429; the total admissions 422; average daily sick 24.3; and deaths 10. Three deaths occurred out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1707.01	156.6	51.6
1873	953.68	56.78	23.3

stations across the sea.

Causes of death.

194. The causes of death are given as phthisis two, rheumatism one, bowel-complaints three, Bright's disease one, and general debility three.

Sanitary works.

195. The station is maintained in good order. No special works during the year.

Vellore.

Latitude 12° 55' North. Longitude 79° 12' East.

Height above sea 675 feet.

Mean temperature ?

Average rainfall 44 inches.

Rainfall in 1873 34.60 inches.

196. The 28th Regiment Native Infantry occupied the station for the whole year.

The strength of the troops was 646; the total admissions 357; the daily strength, sickness, sick 12.31; and deaths 5, one of which occurred out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	705.6	33.7	21.7
1873	552.63	19.05	7.7

Causes of death.

198. The deaths resulted from fever one, phthisis two, caries one, and unknown one.

199. The huts of the regiment have, in a great measure, been rebuilt during the year. The conservancy of the station is under municipal control. The following table contrasts the sickness of the troops and prisoners in jail :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
<i>Native Troops.</i>					
Average Strength, 646.					
Fevers	185.76	1.54	...	1.54	...
Dengue	...	...	...	...	...
Dysentery	13.93	...	...	...	...
Diarrhoea	21.67	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	17.03	...	...	...	...
All diseases	552.63	6.19	1.54	7.73	83.52
<i>Prisoners.</i>					
Average Strength, 951.					
Fevers	197.68	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	28.39	2.10	...	2.10	...
Diarrhoea	41.00	...	...	...	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	5.25	...	...	...	...
All diseases	689.80	9.46	...	9.46	...

Vizagapatam.

200. The 7th Regiment N. I. was at Waltair for a portion of the year. The mean annual strength was 622; the hospital admissions 519; the daily sick 34.2; and deaths 5.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	674.8	35.4	13.5
1873	834.40	55.06	8.03

Causes of death.

202. The deaths were due to phthisis one, anæmia one, leprosy one, beri-beri one, and tetanus one.

Sanitary condition.

203. The station is kept clean and in fair sanitary condition.

Sanitary works.

204. Several new drains were constructed and wells dug during the year.

Health of troops and prisoners compared.

205. The following table contrasts the mortality of the troops and prisoners during the year :—

					Sickness.	Per Mille Ratio of Mortality			Invaliding.
						In Hospi- tal.	Out of Hospital.	Total.	
<i>European Troops.</i>									
Average Strength, 66.									
Fevers	...	...	...	...	15.15	...	..	...	...
Dengue	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...
Diarrhoea	...	...	...	...	45.45	...	...	...	...
Hepatitis	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Veneral diseases	...	...	...	...	75.75	...	...	...	...
All diseases	...	...	...	...	590.91	30.30	...	30.30	...
<i>Native Troops.</i>									
Average Strength, 622.									
Fevers	...	...	...	...	136.65	...	...	...	...
Dengue	...	...	...	...	12.86	...	...	...	...
Dysentery	...	...	...	...	32.15	...	...	...	...
Diarrhoea	...	...	...	...	8.03	...	...	...	...
Hepatitis	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Veneral diseases	...	...	...	...	14.47	...	...	...	...
All diseases	...	...	...	...	834.40	8.03	...	8.03	...
<i>Prisoners.</i>									
Average Strength, 267.									
Fevers	...	...	...	...	48.68	...	...	...	...
Dengue	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	22.47	3.74	...	3.74	...
Diarrhoea	...	...	...	...	78.65	26.21	...	26.21	...
Hepatitis	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Veneral diseases	...	...	...	...	7.49	3.74	...	3.74	...
All diseases	...	...	...	...	262.17	59.92	...	59.92	...

Vizianagram.

Latitude 18° 2' North. Longitude 18° 32' East.

Height above sea ?

Mean temperature ?

Average rainfall 42.9 inches.

Rainfall in 1873 ?

206. The 12th Regiment N. I. remained here throughout the year.

Strength, sickness, and mortality.

The strength of the troops was 632; the hospital admissions numbered 1,078; the daily sick 40.9; and deaths 6.

One death occurred out of hospital.

Comparison with former years.

Mean of 7 years ending	Admissions.		Daily Sick.		Died.
	1872..	1873 ..	1872..	1873 ..	
...	365.7	1705.69	18.9	64.77	10.1
...	...	...	...	...	...

207. The ratio of sickness was much in excess of the average of this station, as will be apparent from the marginal table. This was mainly the result of an epidemic of dengue (369 cases) ague, and skin diseases.

Causes of death.

208. The causes of death were ague three, heart disease one, hepatitis one, and debility one.

Berhampore.

Latitude 19° 20' North. Longitude 84° 5' East.

Height above sea 112 feet.

Average rainfall 48.86 inches.

Rainfall in 1873 28.35 do.

209. The Right Wing of the 2nd Regiment N. I. occupied the station for 51 weeks of the year.

Strength, sickness, and mortality.

210. The strength of the troops was 366; the hospital admissions 320; the average daily sick 8.5; and deaths 2.

Comparison with former years.

Mean of 7 years ending	Admissions.		Daily Sick.		Died.
	1872..	1873 ..	1872..	1873 ..	
...	559.5	874.31	26.9	23.2	13.9
...	...	...	...	...	...

211. The ratios of sickness and mortality are compared in the margin with the results of the previous seven years.

Causes of death.

212. The causes of death in the two fatal cases were phthisis and dysentery.

Sanitary works.

213. The town of Berhampore is under municipal control, and is being drained.

Health of troops and prisoners compared.

214. The following table contrasts the health of Native troops and of the prisoners in jail. The latter had no dengue, but suffered more from diarrhoea than the troops:—

	Sickness.	Per Mille Ratio of Mortality			Invaliding
		In Hospi- tal.	Out of Hospital.	Total.	
<i>Native Troops.</i>					
Average Strength, 366.					
Fevers	278.69	...	...	...	...
Dengue	60.10	...	...	...	...
Dysentery	8.19	2.73	...	2.73	...
Diarrhoea	38.25	...	...	...	...
Hepatitis	2.73	...	...	...	...
Cholera	...	...	...	...	...
Veneral diseases	19.12	...	...	...	...
All diseases	874.31	5.46	...	5.46	...
<i>Prisoners.</i>					
Average Strength, 132.					
Fevers	295.45	...	...	...	...
Dengue	...	...	...	...	...
Dysentery	37.87	...	...	...	...
Diarrhoea	219.69	45.45	...	45.45	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Veneral diseases	22.72	7.57	...	7.57	...
All diseases	825.75	75.75	...	75.75	...

Cuttack.

215. This station was occupied by the 41st Regiment Native Infantry for the whole of 1873.

216. The strength of the troops was 656; the total admissions 270; the daily sick 18.17; and deaths 3. Two deaths occurred out of hospital.

Comparison with former years.			
Admissions.	Daily Sick.	Died.	
Mean of 7 years ending 1872. ... 439.7	27.7	11.3	
1873 ... 411.58	27.69	4.56	

Causes of death.

Sanitary works.

217. The ratios of sickness and mortality are compared in the margin with the results of the previous seven years.

218. The causes of death were meningitis one, and unknown (died out of hospital) two.

219. None.

Sumbulpore.

Latitude? Longitude?

Height above sea?

Mean temperature?

Average rainfall 54.37 inches.

Rainfall in 1873 55.7 do.

220. This station was occupied by the Left Wing 31st Regiment Native Infantry for five weeks, and Left Wing of the 2nd Regiment Native Infantry for 47 weeks of the year.

The average strength of the troops was 325; the hospital admissions were 134; the daily sick 11.9; and deaths none.

Comparison with former years.			
Admissions.	Daily Sick.	Died.	
Mean of 7 years ending 1872. ... 2012.8	42.4	24.04	
1873 ... 1027.6	36.8	...	

221. There has been a great diminution of sickness in the force at this station, as will be seen in the contrasted results entered in the margin.

Malarious fevers were formerly very prevalent at this station, but have been diminishing in frequency for the last two or three years.

222. A latrine on the dry earth system for the new hospital was finished during the year.

Bangalore.

Composition of force.

223. The Native troops at Bangalore are shown in the following table:—

	Corps.					Ratio per 1,000 of Strength.									
	Garrison.	39th Regiment N. I.	Head-Quarters and Sappers and Miners.	36th Regiment N. I.	Head-Quarters 23rd Regiment N. I.	Garrison.	30th Regiment N. I.	Head-Quarters and Sappers and Miners.	36th Regiment N. I.	Head-Quarters 23rd Regiment N. I.	Garrison.	30th Regiment N. I.	Head-Quarters and Sappers and Miners.	36th Regiment N. I.	Head-Quarters 23rd Regiment N. I.
No. of weeks resident ...	52	11	52	52	52										
Strength ...	20	409	687	638	648	400	212.71	975.25	777.42	729.93					
Total admissions ...	8	87	670	496	473	400	212.71	975.25	777.42	729.93					
Daily sick ...	0.39	11.85	16.47	21.59	14.51	19.5	28.97	23.97	33.84	22.39					
Died in hospital ...	1	...	3	6	9	50.0	...	4.36	9.40	13.88					
Died out of do. ...	1	...	3	...	1	50.0	...	4.66	...	1.54					
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.
Fevers ...	...	15	...	79	...	126	4	117	...	36.67	...	114.99	...	197.49	6.26
Dengue ...	...	2	...	331	...	1	5	...	4.68	...	481.80	1.45	...	7.83	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	1	...	7	...	...	...	16	...	150.50	...	2.44	...	10.97	...
Diarrhoea ...	...	...	...	...	...	...	...	...	...	...	...	...	...	28.21	...
Hepatitis ...	...	...	...	3	...	...	...	...	...	...	...	...	...	3.13	...
Veneral diseases ...	...	3	...	12	...	14	...	7	...	...	...	...	...	21.94	...

Strength, sickness, and mortality.

224. The strength was 2,080; the hospital admissions 1,734; the daily sick 55.4; and deaths 24. Five deaths occurred out of hospital.

Comparison with former years.			
Admissions.	Daily Sick.	Died.	
Mean of 7 years ending 1872. ... 801.3	29.2	11.6	
1873 ... 833.6	26.6	11.5	

225. The proportions of sickness and mortality have been very nearly the same as the mean of the previous seven years, as shown in the margin.

A large number of admissions from dengue fever occurred in the head-quarters of the Sappers and Miners, but hardly any in the other corps.

226. The causes of death were fevers seven, phthisis two, apoplexy one, heart disease one, bronchitis one, pneumonia and asthma five, dysentery two, burn one, debility one, suicide two, and neuralgia one.

227. The construction of new lines for the Native Infantry Regiments has been progressing throughout the year. The new houses will be a great improvement on the old; and the drainage of the lines has received special attention.

French Rocks.

Latitude 12° 39' North. Longitude 76° 50' East.

Height above sea 3,300 feet.

Mean temperature?

Average rainfall?

Rainfall in 1873?

Strength, sickness, and mortality.

228. This station was occupied by the head-quarters of the 30th Regiment Native Infantry throughout the year.

229. The average strength of the troops was 579; the total admissions were 520; the daily sick were 10.3; and deaths 7.

The admissions were mainly due to malarious fevers and dengue.

Comparison with former years.			
Admissions.	Daily Sick.	Died.	
Mean of 6 years ending 1872. ... 857.1	32.7	13.3	
1873 ... 898.1	17.8	12.03	

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

Causes of death.

231. The causes of death were ague one, enteric fever one, phthisis one, beri-beri one, epilepsy one, dysentery one, and diarrhoea one.

Sanitary works.

232. None.

Mysore.

Latitude 12° 8' North. Longitude 76° 42' East.

Height above sea 2,450 feet.

Mean temperature 76°.

Average rainfall 30.5 inches.

Rainfall in 1873 21.63 do.

Strength, sickness, and mortality.

233. A detachment from the 30th Regiment Native Infantry garrisoned the station throughout the year.

234. The strength was 63; the hospital admissions 79; and average daily sick 1.3; no death occurred.

The detachment suffered principally from dengue, which was very prevalent in the native town.

235. Some improvement has been made in the sanitary condition of the place. The main drain has partly been rebuilt, and several side drains constructed; many roads were repaired and trees planted on the sides, and an accurate survey of the town was made during the year.

Mercara.

Latitude 12° 25' North. Longitude 75° 50' East.

Height above sea 4,500 feet.

Mean temperature 67.4°.

Average rainfall 120 inches.

Rainfall in 1873 136.83 inches.

236. The station was occupied by the 8th Regiment Native Infantry throughout the year. The strength of the corps was 549; the hospital admissions 641; the daily sick 20.9; and deaths 6. Two men died out of hospital.

Comparison with former years.			
Mean of 7 years ending 1872...	Admissions.	Daily Sick.	Died.
1873 ...	1055.2	38.9	12.9
1873 ...	1167.5	38.2	10.9

237. The admissions were slightly in excess of the average, as will be seen in the margin; but there was no prevalence of epidemic disease.

238. The causes of death were paralysis one, aneurism of aorta one, pneumonia one, dysentery one, intestinal obstruction one, and unknown one.

Bellary.

239. The composition of the Native force at this station is shown in the following table :—

	Corps.					Ratio per 1,000 of Strength.												
	Garrison.	16th Regiment N. I.	4th Regiment N. I.	4th Regiment L. C.	Hd.-Qrs., Left Wing, 21st Re- giment N. I.	Garrison.	16th Regiment N. I.	4th Regiment N. I.	4th Regiment L. C.	Hd.-Qrs., Left Wing, 21st Re- giment N. I.	Garrison.	16th Regiment N. I.	4th Regiment N. I.	4th Regiment L. C.	Hd.-Qrs., Left Wing, 21st Re- giment N. I.			
No. of weeks resi- dent ...	52	48	52	49	4													
Strength	13	627	650	289	445													
Total admissions	7	262	311	132	27	538.46	417.86	478.46	456.74	60.67								
Daily sick ...	0.57	12.35	14.12	4.48	15.14	43.84	19.69	21.72	15.50	34.02								
Died in hospital.	...	1	4	...	...	...	1.59	6.15	...	...								
Died out of do.	1	2	1	...	...	76.92	3.19	1.53	...	...								
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.		
Fevers ...	...	60	...	69	1	45	...	7	...	...	95.69	...	106.15	1.53	155.70	...	15.73	...
Dengue ...	...	18	...	...	...	3	...	...	...	...	28.70	...	...	...	10.38	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	8	...	12	...	1	...	2	...	...	12.75	...	18.46	...	3.46	...	4.49	...
Diarrhoea ...	...	5	...	8	...	6	...	3	...	...	7.97	...	12.30	...	10.76	...	6.74	...
Hepatitis ...	...	1	...	1	1	...	...	...	...	...	1.59	...	1.53	1.53	...	...	...	...
Veneral diseases.	...	9	...	4	...	1	...	3	...	...	14.35	...	6.15	...	3.46	...	6.74	...

Strength, sickness, and mortality.

240. The strength of the troops averaged 1,548 men; the hospital admissions were 739; the daily sick 31.2; and deaths 9. Four of the deaths were out-of-hospital casualties.

Comparison with former years.			
Mean of 7 years ending 1872...	Admissions.	Daily Sick.	Died.
1873 ...	426.9	20.4	9.1
1873 ...	477.3	20.2	5.8

241. The ratios of sickness and mortality when contrasted with the mean results of the previous seven years are favorable, as shown in the margin.

Causes of death.

242. The causes of death in the fatal cases were fever one, phthisis four, beri-beri one, heart disease one, hepatitis one, and drowning one.

Trichinopoly.

Composition of force.

243. The composition of the Native force is shown below :—

	Corps.				Ratio per 1,000 of Strength.							
	Garrison.	38th Regiment N.I.	19th Regiment N.I.	Hd.-Qrs. and Wing 32nd Regiment N.I.	Garrison.	38th Regiment N.I.	19th Regiment N.I.	Hd.-Qrs. and Wing 32nd Regiment N.I.	A.	D.	A.	D.
No. of weeks resident ...	52	52	52	47								
Strength ...	47	649	664	602	63.32	651.77	1,022.59	1,573.08				
Total admissions ...	3	423	679	947	5.95	19.19	27.42	32.10				
Daily sick ...	0.28	12.46	18.21	19.33	...	6.16	1.50	3.32				
Died in hospital ...	...	4	1	2	...	4.62	...	...				
Died out of do. ...	...	3	...	...	...	...	...	...				
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fever ...	...	141	187	122	1	217.25	281.62	202.65	1.66			
Dengue ...	...	...	56	579	1	...	84.33	961.79	1.66			
Cholera ...	...	...	...	...	...	...	...	...	...			
Dysentery ...	...	16	19	24	...	23.65	28.61	39.86	...			
Diarrhoea ...	1	22	10	18	21.27	35.43	15.06	29.90	...			
Hepatitis ...	...	2	...	...	...	3.08	...	...	...			
Veneral diseases ...	...	10	17	5	...	15.40	25.60	8.30	...			

244. The mean strength of the troops was 1,883; the hospital admissions were 2,052; the average daily sick 48.4; and deaths 10. Three of the casualties occurred out of hospital.

245. The ratios of sickness and mortality are contrasted in the margin with the results of previous years. The mortality in 1873 has been very low, but the admissions have been more numerous than usual owing to dengue attacking a newly-arrived corps (23rd Native Infantry) and sending 579 men into hospital for that cause alone.

246. The causes of death as reported were ague one, dengue fever one, paralysis one, heart disease two, diarrhoea three, and debility two.

Quilon.

Latitude 80° 53' North. Longitude 76° 39' East.
Height above sea a few feet.
Mean temperature 81°.
Average rainfall 80.1 inches.
Rainfall in 1873 104.65 do.

Strength, sickness, and mortality. 247. The 23rd Regiment L. I. was relieved in the beginning of the year by the 26th Regiment N. I.

The mean strength of the troops was 606; the total admissions were 139; the average daily sick 5.69; and deaths 5.

Comparison with former years. 248. The ratios of sickness and mortality are contrasted in the margin with the results of the previous seven years, and it will be observed that the past year has been on the whole a favorable one for health.

Comparison with former years.	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872 ...	521.2	23.3	8.3
1873 ...	229.3	9.3	8.2

Causes of death. 249. The causes of death were phthisis one, pericarditis one, hydrothorax one, fistula in ano one, and abscess one.

Sanitary works. 250. None.

Trichoor.

Latitude 10° 33' North. Longitude 76° 16' East.
Height above sea ?
Mean temperature ?
Average rainfall ?
Rainfall in 1873 ?

Strength, sickness, and mortality. 251. This station was occupied by a detachment of the 26th Regiment N. I.

The average strength of the troops was 169; the total admissions were 63; and daily sick 2.8. No deaths occurred.

Sanitary works. 252. None of importance.

Trevandrum.

Latitude 8° 30' North. Longitude 71° East.
Height above sea ?
Mean temperature ?
Average rainfall ?
Rainfall in 1873 ?

Strength, sickness, and mortality. 253. Detachments from the 23rd, 24th, and 26th Regiments N. I. garrisoned the station during the year.

The mean strength of the detachment was 85; the hospital admissions were 45; average daily sick 1.1. No deaths occurred.

Palamcottah.

Latitude 90° North. Longitude 78° East.
Height above sea 120 feet.
Mean temperature ?
Average rainfall 23 inches.
Rainfall in 1873 ?

Strength, sickness, and mortality. 254. This station was occupied for the first six weeks of the year by a portion of the 22nd Regiment N. I., and for 47 weeks by the 24th Regiment N. I.

The mean strength of the troops was 563; the hospital admissions were 773; the daily sick 17.5; and deaths 3.

Comparison with former years. 255. The ratios of sickness and mortality are contrasted in the margin with the results of the previous seven years.

Comparison with former years.	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872 ...	385.4	15.2	8.5
1873 ...	1373.0	31.2	5.3

The admissions have been more numerous than usual, owing to an outbreak of dengue fever, which caused 554 of the total admissions to hospital.

Causes of death. 256. The causes of death were phthisis one, obstruction of the bowels one, and debility one.

The following table shows the comparative sickness and mortality of the troops and prisoners :—

	Sickness.	Per Mille Ratio of Mortality			Invaliding.
		In Hospital.	Out of Hospital.	Total.	
Native Troops.					
Average Strength, 563.					
Fevers	76.37	...	...	...	...
Dengue	334.01	...	...	...	...
Dysentery	28.41	...	...	...	...
Diarrhoea	8.88	...	...	...	...
Hepatitis	3.55	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	12.43	...	...	...	...
All diseases	1,373.00	5.32	...	5.32	...
Prisoners.					
Average Strength, 249.					
Fevers	24.09	4.01	...	4.01	...
Dengue	...	...	...	...	...
Dysentery	40.16	8.03	...	8.03	...
Diarrhoea	8.03	4.01	...	4.01	...
Hepatitis	...	...	...	...	...
Cholera	...	...	...	...	...
Venereal diseases	24.09	...	...	...	...
All diseases	265.06	24.09	...	24.09	...

Cannanore.

Composition of force.

257. The troops occupying this station are shown below :—

	Corps.			Ratio per 1,000 of Strength.						
	Garrison.	25th Regiment N. I.	9th Regiment N. I.	Garrison.	25th Regiment N. I.	9th Regiment N. I.				
No. of weeks resident ...	52	52	52							
Strength ...	1	639	640							
Total admissions ...	...	198	110	...	309.85	171.87				
Daily sick ...	...	6.44	5.16	...	10.07	8.06				
Died in hospital ...	...	...	1	...	...	1.56				
Died out of do. ...	...	...	4	...	...	6.25				
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	...	...	27	...	12	...	...	42.25	...	18.75
Dengue ...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	6	...	8	...	...	9.38	...	12.50
Diarrhoea ...	...	...	...	...	...	...	...	...	...	...
Hepatitis ...	...	...	...	...	...	...	...	...	...	...
Venereal diseases ...	...	...	2	...	8	...	...	3.12	...	12.50

258. The average strength of the force was 1,280; the hospital admissions were 308; the average daily sick 11.60; and deaths 5. Four deaths occurred out of hospital.

259. The proportions of sickness and mortality are contrasted in the margin with the results of previous years, and it will be observed that the average low rates of this station have been in excess of the results for 1873.

Comparison with former years.	Admissions. Daily Sick. Died.		
	Mean of 7 years ending 1872.	1873	1872
Mean of 7 years ending 1872.	386.9	16.3	7.9
1873	240.6	9.06	3.9

Causes of death.

260. The causes of death were phthisis two, debility one, dyspepsia one, and unknown one.

Mangalore.

Latitude 12° 50' North. Longitude 70° 4' East.
Height above sea 40 feet.
Mean temperature ?
Average rainfall 150 inches.
Rainfall in 1873 116 do.

Strength, sickness, and mortality.

261. The 34th Regiment Native Infantry occupied the station throughout the year.

The average strength of the corps was 649; the hospital admissions were 350; the average daily sick 11.4; and deaths 6. Two of the latter occurred out of hospital.

Comparison with former years.	Admissions. Daily Sick. Died.		
	Mean of 7 years ending 1872.	1873	1872
Mean of 7 years ending 1872.	492.9	19.2	13.02
1873	539.2	16.1	9.2

Causes of death.

262. The mortality has been below the average, and the admissions slightly in excess, as will appear from the abstract in the margin.

263. The causes of death were phthisis one, rupture of the heart one, dysentery two, gastritis one, and Bright's disease one.

Sanitary works.

264. None.

265. The following table shows the sickness and mortality among the Native troops and prisoners :—

					Sickness.	Per Mille Ratio of Mortality.			Invaliding.
						In Hospital.	Out of Hospital.	Total.	
Native Troops.									
Average Strength, 649.									
Fevers	...	...	...	...	137.12	...	...	...	...
Dengue	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	35.44	1.54	1.54	3.08	...
Diarrhoea	...	...	...	...	26.19	...	...	...	...
Hepatitis	...	...	...	...	8.08	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	7.70	...	...	...	...
All diseases	...	...	...	...	539.23	6.16	3.08	9.24	27.73
Prisoners.									
Average Strength, 119.									
Fevers	...	...	...	...	403.36	...	...	...	...
Dengue	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	100.84	8.40	...	8.40	...
Diarrhoea	...	...	...	...	100.84	...	...	...	...
Hepatitis	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...
Venereal diseases	...	...	...	...	84.03	...	...	...	...
All diseases	...	...	...	...	1,596.63	16.80	...	16.80	...

Secunderabad.

Composition of force.

266. The number of corps, and sickness and mortality in each, are shown in the following table :—

Sectabuldee.

Strength, sickness, and mortality.

274. The head-quarters of the 20th Regiment Native Infantry occupied the station for 49 weeks of the year.

The strength of the troops was 426; the hospital admissions reached the high number of 1,277; the daily sick averaged 56.5; and 3 men died. Two of the deaths occurred out of hospital.

The excessive sickness during the year at this station was due to dengue fever.

There were 588 admissions from this cause, so that every man of the corps must have been in hospital, and in some cases more than once. Ague was also very prevalent.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1112.6	53.8	87
1873 ...	2987.6	1827	703

Causes of death.

275. The sickness and mortality are contrasted in the margin with the results of previous years:

276. The causes of death were small-pox one, phthisis one, and unknown one.

Hooshungabad.

Latitude 22° 43' North. Longitude 77° 45' East.

Height above sea?

Mean temperature?

Average rainfall 60.5 inches.

Rainfall in 1873 41.5 do.

Composition of force.

277. The composition of the force is shown in the following table:—

	Corps.		Ratio per 1,000 of Strength.			
	Head-Quarters and Wing 32nd Regiment N. I.	Head-Quarters and Wing 22nd Regiment N. I.	Head-Quarters and Wing 32nd Regiment N. I.	Head-Quarters and Wing 22nd Regiment N. I.		
No. of weeks resident ...	3	49				
Strength ...	368	374				
Total admissions ...	10	291	27.17	778.07		
Daily sick ...	7.99	8.88	21.71	23.74		
Died in hospital ...	...	3	...	8.02		
Died out of do. ...	...	1	...	2.67		
	A.	D.	A.	D.	A.	D.
Fevers ...	6	...	192	1	16.30	513.36
Dengue ...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...
Dysentery ...	...	...	2	...	...	5.34
Diarrhoea ...	...	...	...	...	...	...
Hepatitis ...	...	...	...	...	...	...
Veneral diseases ...	...	1	...	...	...	2.67

278. The strength of the troops was 374; the hospital admissions were 301; the daily sick 8.8; and deaths 4. One of the latter occurred out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	778.7	26.5	11.2
1873 ...	804.8	23.6	10.6

Causes of death.

279. The proportions of sickness and mortality do not differ materially from the mean of the previous seven years, as will be seen in the marginal abstract.

280. The causes of death were fever one, heart disease one, fracture of skull one, and debility one.

281. None.

Sanitary works.

Raepore.

Latitude 21° 15' North. Longitude 81° 41' East.

Height above sea?

Mean temperature?

Average rainfall 45 inches.

Rainfall in 1873 34.48 do.

Composition of force.

282. The station was occupied by the 11th and 31st Regiments for the periods shown below:—

	Corps.		Ratio per 1,000 of Strength.			
	11th Regiment N. I.	Head-Quarters, 31st Regiment N. I.	11th Regiment N. I.	Head-Quarters, 31st Regiment N. I.		
No. of weeks resident ...	10	44				
Total admissions ...	290	686				
Strength ...	16	379	55.17	552.47		
Daily sick ...	13.82	12.67	47.65	18.46		
Died in hospital ...	...	3	...	4.37		
Died out of do. ...	...	...	...	...		
	A.	D.	A.	D.	A.	D.
Fevers ...	7	...	177	...	24.13	258.01
Dengue ...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...
Dysentery ...	...	...	21	1	...	30.61
Diarrhoea ...	1	...	5	...	3.44	7.28
Hepatitis ...	...	...	...	...	...	...
Veneral diseases ...	...	7	...	...	10.20	...

Strength, sickness, and mortality.

283. The strength of the troops was 636; the total admissions were 395; the daily sick 13.3; and deaths 3.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872.	1130.3	39.02	17.5
1873 ...	621.06	21.03	4.7

Causes of death.

284. The sickness and mortality were much below the average as will be seen from the marginal table.

285. The causes of death were dysentery one, debility one, and burn one.

286. None.

Sanitary works.

Chanda.

Latitude 19° 56' North. Longitude 79° 20' East.

Height above sea?

Mean temperature?

Average rainfall 44 inches.

Rainfall in 1873 38.33 do.

Strength, sickness, and mortality.

287. Detachments of the 8th and 30th Regiments N. I. garrisoned the station during the year.

The strength of the troops was 76; the hospital admissions 144; and the daily sick 3.2. There was no death.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	1995.8	57.7	16.05
1873 ... 1894.7	42.5	...	...

288. The admissions were mainly due to malarious fevers, and the sickness was rather below the average of the previous seven years.

Sanitary works.

289. None.

Seroncha.

Latitude 18° 51' North. Longitude 80° 2' East.

Height above sea?

Mean temperature?

Average rainfall 41 inches.

Rainfall in 1873 33.36 do.

Strength, sickness, and mortality.

290. A detachment of the 20th Regiment N. I. occupied the station for the whole of the year.

The mean strength of the troops was 144; there were 230 admissions into hospital; daily sick 5.19; and 2 deaths.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	1380.0	36.8	11.1
1873 ... 1897.2	36.04	13.3	...

291. The proportions of sickness and mortality were rather higher than the mean of seven years previous, as will be seen in the marginal table.

Causes of death.

292. The causes of death were dysentery one and anæmia one.

Sanitary works.

293. None.

Rangoon.

Composition of force.

294. The composition of the Native force at this station is shown below:—

	Corps.			Ratio per 1,000 of Strength.					
	Garrison.	14th Regiment N. I.	B Company, Sappers and Miners.	Garrison.	14th Regiment N. I.	B Company, Sappers and Miners.			
No. of weeks resident.	52	52	52						
Strength ...	958	658	117						
Total admissions ...	180	409	67	187.89	621.53	572.64			
Daily sick ...	11.75	21.81	36.97	12.26	33.14	56.18			
Died in hospital ...	8	10	...	8.35	15.19	...			
Died out of do. ...	...	2	...	...	3.039	...			
	A.	D.	A.	D.	A.	D.	A.	D.	A.
Fevers ...	31	1	57	1	15	...	32.35	1.04	86.62
Dengue ...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...
Dysentery ...	12	...	26	...	6	...	12.52	...	39.51
Diarrhoea ...	5	1	47	2	2	...	5.21	1.04	71.42
Hepatitis ...	...	...	...	...	...	...	...	...	...
Veneral diseases ...	6	...	18	...	4	...	6.26	...	27.35

295. The mean strength of the troops included in this return was 1,733; the hospital admissions 656; the daily sick 36.9; and deaths 20. Two deaths occurred out of hospital.

Strength, sickness, and mortality.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	623.6	33.2	9.6
1873 ... 1897.2	373.5	21.3	11.5

296. The proportions of sickness and mortality are contrasted in the margin with the results of previous years. The hospital admissions were fewer than usual, though the mortality was slightly in excess.

297. The causes of death were fevers two, rheumatism one, anæmia one, dropsy four, heart disease one, bronchitis two, diarrhoea three, colic one, debility four, and drowning one.

Causes of death.

Thayetmye.

298. The 1st Regiment N. I. occupied the station throughout the year. The strength of the troops was 588; the hospital admissions 277; the daily sick 11.7; and deaths 8. One death occurred out of hospital.

Strength, sickness, and mortality.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	540.2	21.6	8.1
1873 ... 1897.2	471.03	19.89	13.5

299. The proportions of sickness and mortality are contrasted with the results of the previous seven years, and it will be seen that, while the sickness has been somewhat below the average, the mortality has been higher. Epidemic cholera prevailed in the station, but only two men died of it.

Causes of death.

300. The causes of death were cholera two, heart disease two, hepatic diseases two, and debility two.

Tonghoo.

Strength, sickness, and mortality.

301. The 10th Regiment N. I. occupied the station throughout the year.

302. The strength of the troops was 510; the hospital admissions 635; the average daily sick 22.5; and deaths 5. One death took place out of hospital.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	1031.1	44.8	16.6
1873	1245.09	44.1	9.8

303. The proportions of sickness and mortality are contrasted in the margin with the results of previous years. The admissions in 1873 were in excess, and the mortality below the average.

Causes of death.

304. The causes of death were anæmia one, epilepsy one, aneurism of aorta one, and diarrhœa two.

Moulmein.

Latitude 16° 30' North. Longitude 97° 30' East.

Height above sea?

Mean temperature 79°

Average rainfall 215 inches.

Rainfall in 1873 212.85 do.

Composition of force.

305. The composition of the force is shown below:—

	Corps.				Ratio per 1,000 of Strength.			
	27th Regiment N. I.		Rt. Wing 39th Regiment N. I.		27th Regiment N. I.		Rt. Wing 39th Regiment N. I.	
No. of weeks resident...	52		52					
Strength ...	252		269					
Total admissions ...	494		312		1960.31		1159.85	
Daily sick ...	14.47		11.65		57.42		43.80	
Died in hospital ...	1		...		3.96		...	
Died out of do. ...	...		...		...		...	
	A.	D.	A.	D.	A.	D.	A.	D.
Fevers ...	181	...	77	...	718.52	...	286.24	...
Dengue... ..	...	...	...	...	...	...	...	...
Cholera ..	...	...	...	...	...	...	...	...
Dysentery ...	47	...	43	...	186.50	...	159.85	...
Diarrhœa ...	25	...	6	...	99.20	...	22.30	...
Hepatitis ...	...	...	...	...	...	...	...	...
Venereal diseases ...	9	...	9	...	35.71	...	33.45	...

Strength, sickness, and mortality.

306. The mean strength of the troops was 521; the hospital admissions were 806; the daily sick 267; and deaths one.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	953.9	44.4	16.9
1873	1547.02	50.13	1.9

307. The proportion of sickness was much higher than the average, and is perhaps accounted for by the regiments furnishing detachments to unhealthy stations like the Nicobar Islands and Andamans. The mortality was very low.

Cause of death.

308. The cause of death in the one fatal case was hemiplegia.

Sanitary works.

309. Nothing important.

Shoaygheen.

Latitude 18° North. Longitude 96° 45' East.

Height above sea?

Mean temperature?

Average rainfall?

Rainfall in 1873?

Strength, sickness, and mortality.

310. A detachment of the 10th Regiment N. I. garrisoned the station throughout the year.

The mean strength of the force was 118 men; the hospital admissions 163; the daily sick 4.8; and death one.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	1904.7	76.04	12.1
1873	1381.3	41.3	8.4

311. The sickness and mortality were below the average at the station.

Cause of death.

312. The fatal case was one of paralysis.

Akyab.

313. A detachment of the 24th Regiment N. I. occupied this station for only six weeks of the year. The strength was 127; admissions 59; daily sick 17.2, and one man of the detachment died of dropsy.

Port Blair.

The 27th Regiment N. I. furnished detachments for the convict stations of the Andamans.

Strength, sickness, and mortality.

314. The strength of the troops was 267; the hospital admissions were 270; the daily sick 8; and deaths 3.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 7 years ending 1872...	1335.3	55.1	24.4
1873	1011.2	30.2	11.2

315. The sickness and mortality were below the average.

The causes of death were fever (1), bronchitis (1), and jaundice (1).

Nicobars.

Strength, sickness, and mortality.

316. The detachment was furnished by the 27th Regiment N. I.

The strength was 37; the hospital admissions 268; the average daily sick 5. There was no death.

The numerous admissions were almost entirely due to malarious fevers.

Comparison with former years.			
Mean of 4 years ending 1872.	Admissions.	Daily Sick.	Died.
	6017.3	260.5	42.1
1873	7243.24	137.2	...

317. The ratios of sickness and mortality of the year are compared in the margin with the results of former years. There was no decrease in the sickness at this very malarious station.

PART II.

CIVIL.

SECTION I.

SANITARY CONDITION OF JAILS.

318. The strength of prisoners on the 1st January 1873 was 9,281, and during the year 19,589 prisoners were admitted into jails of this Presidency either for offences committed within the Presidency limits, or by transfer from other jails.

During the year 15,859 prisoners were liberated, 2,954 were transferred to jails elsewhere, 10 were transported beyond sea, 3 prisoners made their escape, 264 died, and 74 were executed by judicial sentence.

The total decrease, therefore, amounted to 19,164, and on the 31st December there remained in the jails of this Presidency 9,706 persons, or 425 more than were imprisoned at the commencement of the year. The increase in the daily strength of the jail population at the end of the year was considerable, due probably to increasing scarcity of grain in some of the districts where the monsoon rains had failed.

319. The medical returns show the mean strength of the jail population for the entire year to have been 9,250, and that the strength had varied from 9,006 in April to 9,655 in December. The total hospital admissions during the year were 5,549; the average number of prisoners on the daily sick list was 241.3; and the deaths in hospital 262. Two deaths occurred out of hospital.

Of the mean strength of 9,250 prisoners, 8,875 were males and 375 females. Two hundred and fifty-two males and 12 females died during the year.

The death-rate of the male prisoners was 28.39 per mille, and of the females 32.0.

The proportions of sickness and mortality during the year were as follows:—

Admissions	...	...	...	...	599.8 per mille.
Daily sick	...	...	...	...	26.08
Deaths	...	...	...	...	28.32

It is possible that the actual sickness during the year has been higher than is here represented; for I have ascertained that a practice of keeping prisoners on a "detained" list, without entering their names in the hospital registers, exists in some jails. In future I trust more uniformity may be secured in this respect, as I have requested the Inspector-General of Jails to issue instructions for bringing all prisoners on the hospital admission books who may be detained for more than 24 hours in hospital.

320. There has been very little prevalence of epidemic disease in the jails during 1873. A few cases of small-pox occurred, but all the jails were free of epidemic cholera. Four cases of choleraic diarrhoea were recorded in the Coimbatore Central Jail; but, as there was no cholera in the district, it is very questionable whether these diarrhoea cases were of a choleraic nature. In some of the Southern Jails there was a manifest increase of diarrhoea and dysentery in the autumn months of the year, and mainly from diseases of this class the mortality of the jails was higher in 1873 than it has been since the year 1869.

Comparison with previous years.

321. The following table shows the ratio of hospital admissions and deaths for a series of years:—

Years.	Ratio of Admissions.	Deaths.	Years.	Ratio of Admissions.	Deaths.
1861-62	1502.6	93.0	1867	1012.4	53.9
1862-63	1319.0	89.4	1868	869.1	33.8
1863-64	1373.6	107.6	1869	804.7	41.8
1864-65	1491.1	101.5	1870	735.2	26.5
1865	1290.6	126.3	1871	779.9	17.9
1866	1249.7	124.5	1872	681.14	22.26
			1873	599.89	28.32

322. In former reports I have dwelt on the question of age and its influence on the mortality of prisoners, irrespective of all preventible causes of death, and it is necessary that this subject should be borne in view in connexion with the increased death-rate of the past year.

As a matter of fact, the proportion of elderly prisoners in our jails is increasing, and the reason of the increase is that none but life-prisoners, and of these only the able-bodied under 45 years of age, are permitted to be transported to the penal settlement of the Andamans, so that the infirm life-prisoners, and those from 10 years and upwards sentences, accumulate in the various central jails; and amongst persons of this class the mortality must of necessity be high. In the Trichinopoly Central Jail, for instance, where the mortality has been high amongst the aged prisoners during the past year, the progressive increase of aged prisoners is shown in the following table:—

Trichinopoly Central Jail.

Years.	Under 15 years.	15 to 40 years.	40 to 60 years.	Above 60 years.	Total.	Percentage of those between 40 and 60.	Percentage above 60.
1870	1	531	214	11	757	28.26	1.45
1871	2	574	199	7	782	25.44	0.89
1872	10	591	286	35	922	31.01	3.79
1873	4	462	480	75	1,031	46.55	7.27

323. In my report for 1871 (page 103) I gave a table showing the mean ratio of jail mortality according to age for the five years ending 1871, and on comparing the figures with the results for 1873 it will be observed that the law of increase of mortality for increasing age holds good, and affords one explanation of the higher death-rate in 1873, viz., that there are more elderly prisoners exposed to risk.

The excess of mortality in the past year has been almost entirely due to an increase in the number of deaths of prisoners of 50 years of age and upwards.

Mortality according to Age.

	Under 15 years.	15 to 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	Above 60 years.
Mean of 5 years ending 1871.	2.7	10.4	17.7	26.7	30.6	36.2	46.2	45.2	79.2	81.3	189.5
Do. do. 1873.	13.51	6.76	13.65	20.13	24.91	26.41	32.76	33.86	63.65	91.66	250.6

Mortality from principal diseases compared with former years.

324. In the following abstract is shown the proportions of mortality from various diseases, contrasted with the results of previous years:—

	Death-rate per Mille.				
	Cholera.	Dysentery.	Diarrhoea.	Dropsies.	Anæmia.
1861-62	26.3	8.5	14.6		
1862-63	23.0	7.2	14.5		
1863-64	15.6	16.5	17.5		
1864-65	21.3	18.2	30.9		
1865	30.0	12.8	22.7		
1866	25.5	14.3	34.6		
1867	0.8	8.8	10.5	5.3	12.06
1868	0.2	5.5	7.3	1.9	5.7
1869	4.3	6.6	7.3	3.3	2.4
1870	1.5	3.6	4.6	1.6	1.5
1871	0.7	2.9	2.3	0.8	0.3
1872	1.39	3.97	4.51	0.96	1.29
1873	0.10	3.94	6.05	2.39	0.43

325. It will be observed that the mortality from dysentery, diarrhoea, and dropsies has been much higher during 1873 than in any of the three preceding years. This may, to some extent, be explained perhaps by the indifferent state of health of prisoners in some of the districts prior to admission. In the Coimbatore and Tanjore districts the prisoners were, during a part of the year, unhealthy on admission, and showed signs of scorbutic disease.

In the Coimbatore and Trichinopoly Central Jails also there was an undue amount of sickness during a portion of the year, indicating that the nutrition of the prisoners was imperfect. In the former jail there had apparently been an unusual amount of punishment by restriction of diet, while, although in the latter case no excessive punishment of this nature had taken place, there appeared to be indications that the dietary scale of the jail had in some way been insufficient for the due nutrition of the prisoners. The subject of the condition of the prisoners in these two jails was specially investigated by me in the early part of the present year, and, so far as the dietary and other sanitary arrangements of the jails are concerned, I trust the results of the present year will show that there has been an improvement in the health state of the jails.

326. For the first time since the establishment of Central Jails we find that the mortality in these new buildings has been in excess of that in the old District Jails. This has resulted mainly from an unusual amount of scorbutic disease in the Trichinopoly

and Coimbatore Central Jails, which has carried off the old and infirm. I have already pointed out that, as elderly men accumulate in the Central Jails, we must expect that the death-rates in these institutions will increase.

The proportions of sickness and mortality in the two classes of jails are given below :—

	Strength.	Ratios of Sickness and Mortality.		
		Admissions.	Daily Sick.	Deaths.
Central Jails	4,845	461.50	22.25	30.75
District Jails	4,405	752.09	30.42	25.65

Coimbatore.

(Central Jail.)

327. The average strength of the prisoners in this jail was 980 ; the hospital admissions 283 ; and deaths 42.

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1872 ..	516.44	19.33	23.98
1873 ..	283.77	19.5	42.85

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

329. The sickness and mortality in this jail have been mainly due to diseases of a scorbutic character, and especially to ulceration of the mucous membrane of the large intestines, and sloughing ulcers of the extremities.

On my inspection in November, upwards of 200 of the prisoners were found to be affected with spongy or ulcerated gums, and the health state of the jail was low. The food rations were of good quality, and stated to be issued in the quantities required by regulation, but whatever the causes might have been, it was clear that scurvy prevailed to a great extent, and that changes in the dietary were called for. An increased allowance of vegetables, lime juice, &c., was recommended, and the practice of using a restricted diet as a punishment was recommended to be used with less frequency. These measures appear to have been successful in improving the health of the prisoners.

The deaths during the past year were almost entirely due to diseases of innutrition.

The mortality in the District Jail was even heavier than in the Central Jail, and from the fact that nearly all the prisoners were admitted in indifferent health, and that the Coimbatore District prisoners in the Central Jail suffered more than those transferred from other districts, it would seem clear that the criminal population of this part of the country had already begun to feel the effects of the scarcity of food.

330. Of the 42 deaths, 38 were the result of dysentery, diarrhoea, dropsy, and anæmia, the diseases in fact which invariably result from semi-starvation, or insufficiency of nutritive material for the support of the human frame. While the sickness was prevalent in the jail, it was observed that abrasions of the skin (from fetters) often ran into troublesome ulcers, which in some cases became gangrenous and caused death.

331. The general sanitary condition of the jails was excellent, although they were full. There was no over-crowding and no insanitary condition that I could discover, beyond the fact that the diet had been reduced, in some cases, as a punishment, and that the general condition of the prisoners on admission was enfeebled by scanty and irregular living prior to imprisonment. While the mortality in the Central Jail of this station was in the ratio of 42.8 per mille, in the District Jail it rose to 131.5 per mille from precisely the same causes.

Vellore.

(Central Jail.)

332. The average strength of the prisoners in this jail was 951; the hospital admissions numbered 656; and the deaths 9.

333. The ratios of sickness and mortality are contrasted in the margin with the results of the previous six years. It will be seen that this jail has been healthy throughout the year, and that the ratios of sickness and mortality have been below the average.

334. There has been no general prevalence of scurvy, or of the diseases so closely allied to it. The jail on inspection was found to be in good sanitary condition and the prisoners generally healthy.

The prisoners from this jail are drawn chiefly from the districts of North Arcot, Cuddapah, Bellary, and Nellore, and the local jails of those districts have also been free of scorbutic complaints. The dietary scale of this jail is the same as in Coimbatore.

335. The deaths were due to phthisis one, debility one, dysentery two, bronchitis one, dropsy three, and suicide by hanging one.

Trichinopoly.

(Central Jail.)

336. The strength of the prisoners in this jail was 933; the hospital admissions were 316; and the deaths 56.

337. The ratios of admissions and deaths are contrasted in the margin with the results of the previous six years.

There has been a great increase of mortality during 1873, and from almost identically the same causes which produced the high mortality in the Coimbatore Jail. But in this jail slough-

Comparison with former years.

	Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1872 ..	286.65	16.34	23.21
1873 ..	338.62	22.58	60.02

g ulcers of the extremities were not common. The Trichinopoly Jail contained large proportion of old and feeble prisoners, amongst whom the mortality was very high.

338. There does not appear to have been any unusual use of restricted dietary as a jail punishment, but at my inspection of the prisoners they appeared to be anemic and badly nourished, and mostly in feeble health. Evidences of scurvy moreover were not uncommon. The local jails, from whence the Trichinopoly Central Jail is mostly supplied, showed that the district prisoners were generally unhealthy. The jail itself is well kept, perfectly clean, and not over-crowded, and I was assured that the food supplies had not been tampered with, but it is scarcely possible to understand how the general low health of the inmates could have been brought about if the dietary had been in all respects as laid down by regulation. There has been a tendency for some years past in this jail to diseases of innutrition, due probably in some degree to the class of convicts furnished by the southern districts, but in the past year the mortality from these causes has been excessive.

339. Of the 56 deaths 49 resulted from bowel-complaints, debility, and anaemia, &c. There was no epidemic disease prevalent, and only two of the deaths are attributed to fever.

Rajahmundry.

(Central Jail).

Strength, sickness, and mortality.

340. The strength of the prisoners in this jail was 831; the hospital admissions 667; and deaths 16.

Comparison with former years.

Admissions.	Daily Sick.	Died.
Mean of 6 years ending 1872...	773.51	23.74
1873 ...	802.64	35.71

341. The ratios of sickness and mortality have been a little above the average, as will be seen in the margin. There has been no epidemic disease in the jail, but dropsies have been more frequent and fatal than usual, pointing probably to a debilitated condition of the criminal classes prior to imprisonment.

Causes of death.

342. The causes of death were phthisis one, apoplexy one, diarrhoea two, dysentery two, bronchitis one, dropsies seven, peritonitis one, and paraplegia one.

Cannanore.

(Central Jail.)

Strength, sickness, and mortality.

343. The strength of the prisoners was 582; the hospital admissions 131; and the deaths 11.

There was no epidemic disease, and no prevalence of diseases of innutrition.

344. It is worthy of note that a dietary scale, composed of dry cereals in substitution for rice, has been used in this jail with very satisfactory results for the last two years. It was supposed that rice being the ordinary food of the Western Coast people, the dry grains (*raggi* and *cholum*) would be injurious, but experience has shown that

health may be maintained on the ordinary dry cereals, even amongst persons accustomed to rice as their principal article of food. Since the establishment of the new dietary, scorbutic diseases have much diminished.

Comparison with former years.			
Admissions.	Daily Sick.	Died.	
Mean of 6 years ending 1872...	1084.23	44.30	52.43
1873 ...	225.08	21.42	18.90

345. The ratios of sickness and mortality in this jail are contrasted marginally with the results of previous years. It will be observed that the health state of the jail has been favorable.

Causes of death.

346. The causes of death were phthisis one, pneumonia one, diarrhoea one, dysentery one, debility five, heart disease one, and ascites one.

Salem.

Central Jail.

Strength, sickness, and mortality.

347. The average strength of prisoners in this jail was 568; the hospital admissions numbered 183; and the deaths 15.

348. The ratio of mortality was rather higher than the mean of the previous years as shown in the margin, but there has been no epidemic, or serious outbreak of disease, such as occurred in Coimbatore and Trichinopoly. On my inspection of the jail in January of the present year there was very little sickness, and but few indications of scurvy.

Causes of death.

349. The causes of death were fevers two, phthisis two, apoplexy one, diarrhoea one, debility two, dysentery two, bronchitis two, epilepsy one, albuminaria one, and caries one.

District Jails.

350. It seems scarcely necessary to review the vital statistics of each District Jail separately. In Berhampore, Vizagapatam, Tanjore, Tranquebar, and Coimbatore the mortality has been high from diseases of debility and innutrition, and with increasing scarcity and high prices of food it is only too probable that the experience of the present year may show still more unfavorable results than those chronicled for 1873. But in the greater number of the District Jails there has been but little sickness or mortality, and the whole of them have happily been free of epidemic pestilence. The diseases have been mainly those of debility and impaired constitution, such as the criminal population are especially liable to.

The following table shows the strength, admissions, daily sick, and deaths in each jail, with the ratios per thousand;—

District Jails.

District Jails.	Strength	Admissions.	Daily Sick.	Deaths.	Ratio per 1,000 of Strength.		
					Admissions.	Daily Sick.	Deaths.
Madras Penitentiary	557	414	21.07	3	743.25	37.82	5.38
Bellary	363	136	5.57	5	374.65	15.34	13.77
Cuddalore	310	234	8.85	5	754.83	28.54	16.12
Vizagapatam	267	70	5.68	16	262.17	21.27	59.92
Cuddapah	260	265	7.68	6	1019.23	29.53	23.07
Madura	258	85	3.14	5	329.45	12.17	19.37
Palamcottah	249	66	3.00	6	265.06	12.08	24.09
Chittoor	200	267	10.50	1	1335.0	52.5	5.0
Nellore	166	108	4.94	2	650.60	29.75	12.04
Coimbatore	152	151	9.65	20	993.42	63.48	131.57
Ootacamund (Native)	144	52	1.76	1	361.11	12.22	6.94
Tanjore	133	61	4.59	8	458.64	34.51	60.15
Berhampore	132	109	4.74	10	825.75	35.30	75.75
Calicut	129	113	3.04	2	875.96	23.56	15.50
Chingleput	129	117	3.00	...	906.97	23.25	...
Tranquebar	124	132	4.83	8	1054.51	38.95	64.51
Mangalore	119	190	5.13	2	1596.63	43.10	16.80
Kurnool	105	174	4.72	5	1657.14	44.95	47.61
Guntur	99	85	2.93	3	858.58	29.59	30.30
Rajahmundry	96	79	4.64	1	822.91	48.33	10.41
Russelcondah	91	80	2.03	...	879.12	22.30	...
Trichinopoly	80	53	3.23	3	662.5	40.37	37.5
Gudiy	62	60	1.33	...	967.74	21.45	...
Tellicherry	55	37	1.22	1	672.72	22.18	18.18
Masulipatam	37	74	2.58	...	2000.0	69.72	...
Pambem	34	63	3.55	...	1852.94	104.41	...
Her Majesty's Jail, Madras	33	37	0.58	...	1121.21	17.57	...

SECTION II.

VITAL STATISTICS OF THE MADRAS PRESIDENCY.

GENERAL.

Completion of the
census of the Presi-
dency.

351. Since the issue of the last Annual Report the tabulation of the census of 1871 has been completed, and the results are now available for the purposes of this report.

Gross population of
the Madras Presidency.

352. The total population of the Presidency has been ascertained to be 31,281,177, and of these 15,722,306 were males, and 15,558,871 females, the proportion of the sexes being 99 females to every 100 males. There are some grounds for supposing that the female population in certain districts was but indifferently returned. In seven of the Southern districts the female population was returned in excess, but in the remaining 14 districts as less than the male.

Increase of popula-
tion.

353. After deducting the population of the areas of which no census was previously taken, it was found that the numbers in 1871 were 16.1 per cent. in excess of the quinquennial census returns of 1866. As it is not very probable that a population would increase to the extent of 16 per cent. in a period of five years, the inference holds good that the former censuses did not exhibit the actual facts as to the numbers of the people.

Classification of popu-
lation.

354. The total population was found to be made up of the following classes of people:—

Hindus, including aboriginal tribes	28,863,978
Mahomedans	1,857,857
Native Christians	490,299
East Indians	26,374
Europeans	14,505
Jains	21,254
Others (unspecified)	6,910
Total	31,281,177

355. There is a great difference in the density of population. As a rule the districts on the sea-board and the deltas of great rivers, in which irrigation has been employed for the production of food-supplies, show the greatest number of people in a given area, while in the inland and mountainous districts the population is but thinly distributed. In the Tanjore District there are 540 persons, and in the Combaconum taluq of that district 1,009 persons to a square mile.

On the other hand the Jeypore Hills in the Vizagapatam district have only 24 persons to a square mile, and the Neilgherry Mountains but 66. The average population per square mile for the whole of the Presidency was 226.2. The population of Southern India is not to any great extent a migratory one. There

Emigration.

is a steady emigration of a temporary character from the southern districts to the Island of Ceylon, and to a lesser extent to Burmah; but this is much of the same character as the influx of Irish laborers into England during harvest time. There is a demand for labor on the coffee estates of Ceylon, and the demand is met by the migration of coolies from Southern India, most of whom, however, return to their villages when they have served for a few months in Ceylon. The emigration to Mauritius and the West Indian Islands is comparatively insignificant as regards the drain on the population.

Houses.

356. The Madras population is accommodated in 6,229,954 houses, and on the average there are about five persons to each house. About four-fifths of the houses are mud walled and thatched. Tiled and terraced houses are most common in towns, and thatched houses in the country.

Sexes.

357. As regards the proportions of the sexes these were found to vary in the different castes. The females were most numerous amongst Mahomedans, East Indians, Mixed castes (Satani), and Brahmans, and fewest among Rajputs, Barbers, Washermen, and Pariahs. The European female population, owing to the circumstances under which we hold the country, was small, or only in the proportion of 46.2 to 100 males.

As has been stated before, the female population appears to have been more carefully counted in some districts than in others.

358. The classification of the people according to age was attempted, and with very fair results as regards the decennial grouping. The following table contrasts the results with those of the British Census of 1861:—

Table comparing the Proportions of Populations at each Age in Madras and England and Wales.

Ages.	10		20		30		40		50		60		Above 60		Unknown.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
British Census, 1861.	25.6	24.4	20.6	19.6	16.3	17.5	12.8	13.2	10.2	10.3	7.06	7.03	7.04	7.7	...	...
Madras, 1871...	32.5	32.4	19.2	19.5	17.6	18.9	12.5	11.7	8.2	7.9	5.06	5.1	3.07	3.3	1.6	1.2

This table shows that our Indian population is numerically strong in children and young people; that as regards adult ages, the proportions are much the same as in England, but that in ages above 40 there are relatively fewer who survive in India than in England and Wales.

359. The labors of the Census Office were much increased by the classification of the people according to caste and religion.

Caste classification.

360. The caste divisions and sub-divisions of the Hindus were found to be

Hindus.

1. Brahmins (Priests).
2. Kshatriyas (Warriors).
3. Chetias (Traders).
4. Vellalas (Cultivators).
5. Idiyars (Shepherds).
6. Kammatan (Artizans).
7. Karmacan (Writers).
8. Kalkalar (Weavers).
9. Vannians (Laboring Castes).
10. Kasaven (Potters).
11. Sutan (Mixed Castes).
12. Sambadaven (Fishers and Hunters).
13. Shanars (Palm Cultivators).
14. Ambattan (Barbers).
15. Vannan (Washermen).
16. Others.
17. Pariahs (Out-Castes).

exceedingly numerous and perplexing, and one of the first things to be done was to arrange them in some defined order. A Committee in Madras, which considered the subject fully in 1869, thought that all the various castes of Hindus might be grouped under 17 headings (as per margin).

The several classes of Mahomedans were also grouped in eight divisions.

As regards caste divisions it was ascertained that the population of Southern India was essentially non-Aryan, and that the number of persons claiming (often without the slightest grounds) to be of Aryan descent was only about one-sixteenth of the whole, and these were unequally distributed.

The Mahomedan population also was ascertained to be largely aboriginal, and to be increasing somewhat by the conversion of low caste Hindus, more especially in the Western Coast districts, where the old servile races are treated with contumely by the Hindus.

361. In religion the Hindus were classified as SIVA-worshippers, VISHNU-worshippers, and LINGAM-worshippers. It was ascertained that the VISHNU cult prevailed most commonly in the Northern districts and amongst the Telugu nations, while in the Tamil districts of the extreme South and Western India, SIVA was the popular god. The Lingam-worship did not prevail except in a few localities. The great bulk of the Hindu people are worshippers of local deities, and have no acquaintance with the niceties of the Vedanta theology.

362. The Mahomedan religionists were classified as *Soonees*, *Shias*, and *Wahabis*, but the great bulk of them belong to the former sect.

Mahomedans.

363. Christianity has made considerable progress in Southern India, and it was found that 490,299 of the native inhabitants had returned themselves as Christians. These people belong to all castes of Hindus, though the greater number appear to have been recruited from

Christian population.

castes occupying a low social position. The Roman Catholic Christians are in the proportion of about four to one of Protestants.

There was hardly an instance, however, of a Mahomedan being returned as a convert to Christianity.

364. In classifying the people according to their industrial employments: only the male population was considered. It was found that 63.1 per cent. of the males, or rather more than the whole of the people above 12 years of age, were returned as following some employment. These employments were grouped under six major, and nineteen minor heads, and of the whole population about two-thirds are connected with the cultivation of the soil, either as farmers or laborers. Professional occupations, including Government Service, Civil and Military, absorbed about 2 per cent. of the males, Trade and Commerce nearly 4 per cent., Personal Service 3 per cent., and Industrial Occupations about 8 per cent.

365. As regards education it was ascertained that 1,530,150 of the people could read and write, but that there was a wide difference in regard to the degree of education in the several revenue districts. In the town of Madras 18.3 per cent. of the people could read and write, while in the district of Ganjam only 2.5 per cent. Female education, except in the town of Madras and the district of Tinnevely (under the auspices of the great Protestant Mission Societies), had made very little progress.

366. With regard to the higher education, as tested by the University examinations, the European and East Indian populations have succeeded in the highest proportion in passing the Matriculation standard. Next to these classes the Brahmans occupy the best position educationally, and then the Native Christians. The favorable position of the Native Christian community, in regard to the higher education, is due to the labors of the great Mission Societies, which have also done much for the secular education of the non-Christian communities.

367. The census results showed a total number of 129,686 infirm persons in the Presidency. Of these nearly 14,000 were suffering from mental infirmity. More than 100,000 were blind, deaf or dumb, and nearly 14,000 were victims of that loathsome malady, leprosy. Leprosy was found to be specially prevalent in the districts along the coast line.

These are the main results of the census of 1871, but the details are incorporated in numerous tabular statements, and in a special report issued by the Madras Government in two large volumes.

REGISTRATION OF BIRTHS AND DEATHS.

368. The actual registration of the births and deaths for the whole Presidency gives the results of 17.7 and 16.9 per mille respectively on the population of 1871, but these results are manifestly very imperfect, and I am sorry to have to remark that there has been no general improvement in the record of these important vital statistics during the year 1873.

No improvement in registration.

369. The registry of births has fallen off somewhat in 1873. The numbers recorded annually since 1870 are shown below :—

1870	...	...	...	...	...	...	439,063
1871	...	...	...	...	...	...	517,109
1872	...	...	...	...	...	...	554,379
1873	...	...	...	...	...	...	538,123

The registration results have been fair in Tanjore, Salem, North Arcot, Neilgherries, and Trichinopoly, but very bad in Ganjam, Vizagapatam, Nellore, South Arcot, Madura, and Coimbatore. I have endeavoured to attract the attention of the revenue officers to the subject of these statistics, by publishing the monthly abstracts in the *Fort St. George Gazette*, with notes pointing out where the work was inefficient; but, notwithstanding all the attention given to the subject, the district registration is in many parts of the country done in a perfunctory manner, and with only the faintest attempt at accuracy.

At the present time taking one district with another, we are not registering much more than *one-half* of the actual births, and probably not more than *two-thirds* of the deaths.

370. The village accountants, who are required to collect these statistics, are the parties primarily in fault, and there is much reason to suppose that these functionaries do not take the trouble to record the changes in the village populations with accuracy. Many of the villages in this Presidency are spread over wide areas, and have numerous outlying hamlets, and I suspect that the omissions in the registers are due to the size of the villages, and to the want of a proper system of ascertaining the facts in the remote portions of such villages. In theory, the village commune, with its magistrate, accountant, and public servants, is a perfect institution for the collection of statistical data; but, in practice, it is not so perfect as might be supposed; and, if the revenue accounts are no more accurate than the statistics of births and deaths, there must be ample room for reformation in the machinery of the village system.

371. No legal responsibility has, as yet, been made to attach to village officials in connexion with the registration of births and deaths, and I am of opinion that the time has come when this portion of their public duties should be clearly defined by law. For the last eight years we have been endeavouring to secure an accurate register of the number of persons dying in each year, and of children born for the past four years, but the labor expended in the collection of these figures is, to a great extent, wasted by the inaccuracy and incompleteness of the initial registration.

372. Officers of revenue can do much in securing greater accuracy of registration, and instances have come to my knowledge where, by individual activity, marked improvement of the work has resulted; but in some districts, and especially in those where the zemindary tenure of the soil largely prevails, the revenue officials appear to be powerless in getting the village officials to attend properly to this requirement of the State. For these reasons I should be glad if the administration saw fit to pass a short Act, defining the duties of village officials in registering births and deaths.

373. The total of births registered during the year was 538,123, or in the ratio of 17·7 per thousand of population. Of these, 277,153 were males and 260,970 were females. The registration, so far as it goes, seems to be in accord with the results of other countries, and to illustrate the universal law that more males are born than females. From these figures we see that the births of 106 males are registered for every 100 females.

374. In the Ganjam District the birth registration is bad alike in the taluqs, zemindaries, and municipal towns. In the Vizagapatam District the registration is also bad, except in the municipal towns where the registered births were 26 per thousand, against 10·1 per mille in the district. In the Godavery District the registered births were only 15·1 per mille, while in the municipal towns 23·8 per mille were registered.

The registration in the zemindary estates of this district was worse than in the Government villages.

In the Kistna district only 17·2 per mille of births were registered, while the municipal towns show 22·2 per mille. Here the results are most faulty in the zemindary estates.

In Nellore registration has always been bad, and curiously enough it is worse in Government taluqs than in zemindary estates.

In the Chingleput district the birth registration averaged 21·1 per mille of population, which is a better result than in the municipal town of Conjeveram (20·4 per mille). The registration in South Arcot district was very defective, only 14·3 per mille, against 23·9 per mille in the municipalities of the district.

In Trichinopoly district the registered births were 20·0 per mille, while in the municipal towns 33·3 per mille were recorded.

In the district of Tanjore the births were 27·4 per mille, and in the municipal towns 29·6. These results are on the whole very satisfactory. Tanjore has always been one of the best districts for registration, and still maintains its position.

The registration in the district of Madura is most unsatisfactory. The births come to only 13·8 per mille in Government villages, and 9·1 per mille in zemindary estates, while the municipal towns record a birth-rate of 28·1 per mille.

In Tinnevely again there are the same unsatisfactory results. The district birth-rate as registered is only 15·1 per mille, while the municipal towns have registered 38·3 per mille.

In the district of Kurnool the registered births were 17·6 per mille, while in the municipal town the recorded rate is 26·7 per mille.

In Cuddapah the district rate is 15·3 per mille, the municipal town rate 34·2 per mille, or more than double.

In Bellary the contrast is not quite so great, but here the district-rate in Government villages is 19·3 per mille, and the municipal town rate 28·6 per mille.

In North Arcot district the rural registration is somewhat better than the municipal. In the former the registered births were 22·5 per mille, while in municipal towns only 21·5. The zemindaries of this district have registered exactly the same proportion of births as the municipal towns, viz., 21·5 per mille. The birth registration in the Municipality of Vellore has frequently been complained of.

In Salem district and town there has been considerable improvement in registration, resulting in great part from the strong personal interest taken in the subject by the Acting Collector, Mr. Price. The district registration averaged 23.1 per mille, while the town-ratio came up to 30.5 per mille.

The Coimbatore district always figures unfavorably in regard to the registration of births and deaths, and I am at a loss to account for the circumstance, considering that there are but few zemindary estates of insignificant area in the district. The registration is also most defective in the municipal towns of the district, notwithstanding repeated representations from my office on the subject. The rates for 1873, of births, were 12.6 per mille for the district, and 17.6 per mille for the Municipalities. These figures do not include much more than one-third of the actual births.

In the Neilgherry district the ratio is high for the municipal towns, and defective for the rural tracts. The former is 40.0 per mille, and the latter only 14.2 per mille.

In South Canara the taluq registration was equivalent to 19.8 per mille, and the municipal town to 21.8 per mille.

In Malabar the contrast was greater. The village registration was only 19.0 per mille, while the municipal towns registered 32.4 per mille of births.

I have compared the municipal birth registration with that of the districts in which the towns lie, with the view of demonstrating the imperfection of the rural registration.

375. A year or two since the municipal figures were just as defective as the taluq returns; but during the last year, in answer to repeated appeals for assistance in producing better results, the Municipalities have made great efforts to secure a more accurate record of their vital statistics.

In a large number of these towns, I believe, the results are now fairly recorded, but in a minority of them there is still room for improvement. Taking the average of the whole of the municipal towns, which have a population of 1,561,771 persons, we find that the registered birth-rate was 26.5 per mille, against 17.2 per mille for the rural circles and zemindaries.

But 26.5 per mille does not, in point of fact, anything like represent the normal birth-rate of an Indian population. In European countries, where the marriage of females is usually deferred for some years after the nubile age, and where many women never marry at all, the birth-rate ranges from 30 to 35 per thousand of population, but this ratio must necessarily be higher in a country where all women are married at the child-bearing ages. In some of our municipal towns we find the registered birth-rates ranging so high as 50 per thousand of population, and from the special circumstances of the population in India, we may be quite certain that a birth-rate of less than 30 per thousand is not common, except in seasons of great unhealthiness. A consideration of these circumstances leads us to see that the registration of births is still most imperfect in many of the municipal towns, as well as throughout the rural districts of the Presidency, and that combined and systematic efforts on the part of revenue, municipal, and village officials are requisite to ensure anything like trustworthy data.

DEATHS.

376. The total number of deaths registered during the year 1873 was 513,232, or 5,050 in excess of the registration of the previous year, and more than in any year since 1866. As 1873 was a year remarkable for almost complete immunity from epidemic cholera, the increase in the registered number of deaths may be accepted as an indication that there is a slow improvement in registration.

377. But while the registered mortality in the rural districts of the Presidency shows only a death-rate of 16.9 per thousand and in zemindary estates of 13.4 per thousand, the registration in 45 municipal towns shows an average death-rate of 27.7 per mille, and from this fact it is quite obvious that our provincial registration is still falling short of the actual truth.

It is scarcely necessary to review in detail the results of the registration in the Government villages, Zemindaries, and Municipal towns of the several districts, suffice it to state that the municipal registration in every district shows higher death-rates than the rural circles. This in some degree may be due to the influences of town life, the accumulation of human beings on limited areas being universally obnoxious to longevity; but this explanation is not sufficient to account for the great difference in the registers of Municipal towns and of the rural districts. The truth is that the working of the system of village registration is not satisfactory, and that in every year a large number of deaths escape registration.

378. Of the deaths registered 267,756 were of males and 245,476 females. The male deaths are in the ratio of 109 to 100 females, and the excess of male mortality in the registers is more than the ascertained proportions of the sexes of the living population warrant. I believe that sufficient care is not taken to register deaths of females, especially if they be young children or of out-caste tribes.

379. The main causes of death in 1873 are shown in the following table, compared with the results of the previous seven years:—

Years.	Total Deaths.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Other Causes.
1866	600,106	200,961	23,106	110,102	...	265,937
1867	372,026	33,205	27,907	112,511	...	198,403
1868	390,953	8,036	34,330	105,692	...	242,901
1869	451,981	21,034	17,448	132,346	...	281,153
1870	451,020	55,867	11,252	151,027	...	232,874
1871	444,371	17,656	20,823	192,469	38,923	174,495
1872	503,182	13,247	39,074	214,148	39,387	202,326
1873	513,232	840	51,782	222,843	36,392	201,375

From these figures we see that there has been an extraordinary diminution in the mortality from epidemic cholera, a very great increase in the number of deaths from small-pox, a further increase in the heavy mortality of past years from malarious fevers, and a somewhat low average of mortality from other causes.

380. The death registration of the various districts has been unequal, varying from 11 per thousand in Ganjam to 22 and 24 per mille in Tanjore and Salem, and even to 36 per mille in the town and

district of Madras. The average for the whole Presidency has been nearly 17 per thousand of population, a ratio which is doubtless considerably below the actual death-rate.

Of the total deaths 10,760 are returned as "born dead," and deducting these the ratio of registered mortality is only 16.5 per mille.

Deaths at different ages.

381. The deaths according to age were as follows:—

Below 1 year	...	...	...	...	82,259
From 1 to 6	...	...	...	...	82,985
From 6 to 12	...	...	...	...	28,532
From 12 to 20	...	...	...	...	28,347
From 20 to 30	...	...	...	...	46,800
From 30 to 40	...	...	...	...	44,183
From 40 to 50	...	...	...	...	43,498
From 50 to 60	...	...	...	...	50,481
Above 60	...	...	...	...	95,387

The following table shows the numbers of the population at different ages, with the registered mortality, and the proportion of the latter to the former, in all classes of the population:—

Ages.	Population.	Deaths.	Proportion per Mille.
Under 6 years	6,580,599	165,244	25.1
6 to 12	4,812,372	28,532	5.9
12 to 20	4,851,742	28,347	5.8
20 to 30	5,702,078	46,800	8.2
30 to 40	3,778,993	44,183	11.6
40 to 50	2,527,338	43,498	17.2
50 to 60	1,593,982	50,481	31.6
Above 60	983,749	95,387	96.9
Unknown Ages*	449,824	...	...

382. This table shows a low rate of mortality for infant life, much lower in fact than the results of European countries afford; but this low ratio of infantile mortality. I suspect is mainly due to imperfect registration of the deaths of young children. The deaths in persons over 60 years of age are high, but at other ages the ratios are below what they would be if the registration were carefully attended to.

HISTORY OF THE CHIEF DISEASES CAUSING MORTALITY.

(a.)—CHOLERA.

383. In the Annual Sanitary Report for 1872 I demonstrated that a new epidemic visitation of cholera had begun in that year in our northern coast districts, and that a simultaneous southward movement of the pestilence had commenced in the Central Provinces and Deccan. All past experience of the movement of cholera warranted the assumption that the newly invading epidemic would gradually sweep over the

General immunity from cholera in the Madras Presidency during 1873.

* These figures relate chiefly to the population of the Hill Tracts of Ganjam and Vizagapatam, of whom no registration of deaths is attempted.

whole tract of the Peninsula of India, and then pass over to the Island of Ceylon; that it would recur, here and there, in the tracts that had been invaded during the two years following the period of invasion, and that it would finally die out, just as all previous epidemics, of which the facts have been collected, had done. But in recording the facts it behoves us to notice that the experience of former epidemic visitations was not repeated on this occasion, and that, instead of advancing steadily to the southward, the epidemic stopped short in the Kurnool District, in the centre of the peninsula, and in Nellore on the Eastern Coast, while the whole of the southern districts of the Madras Presidency, the province of Mysore, the Native States of Cochin and Travancore, and the Island of Ceylon have remained entirely free from cholera in its epidemic and pestilential form. Another peculiarity may also be noted, viz., that in the districts which were newly invaded in 1872, there has been no recrudescence, or revival, of the epidemic in 1873, so that there has been a most remarkable immunity from cholera throughout the length and breadth of the territories of which I have official cognizance during the year 1873. There was evidently some re-appearance of cholera in the tract of the Mahanuddy valley, as one of our regiments in marching through this tract was attacked by cholera; but in the Madras districts there was no renewal of the epidemic.

It would be useless to enter into any speculations as to the causes of the arrest of a great epidemic wave, such as we had good reason to expect would affect the population of Southern India. The seasons, and the course of the winds and rainfall, did not materially differ from those in which cholera epidemics have pursued their normal paths, and after considering the facts in many aspects I must confess myself utterly ignorant as to the why and the wherefore of this abortive epidemic movement. It is none the less however, a matter of heartfelt congratulation that the people of Southern India should have been spared the calamity of a great cholera epidemic. The hand of death is already too busy among us, irrespective of the cholera pestilence, which has, within historical times, been a grave obstacle to the progress and civilization of the population, and the absence of this pestilence, even though it be but for a time, is too important a matter in the sanitary history of the country to be passed over in silence.

384. While the Peninsula of India has on this occasion escaped invasion, it must not be forgotten that cholera has been noticed in great force in the territories to the east of the Bay of Bengal. In Burmah, Tennasserin, Cochin-China, the Straits Settlements, and the Islands of the Indian Archipelago the destroyer has reaped a goodly harvest of victims. Some particulars relating to the epidemic in Burmah will be found in the reports of the medical officers of British Troops at Thayetmyo (Appendix II.), but regarding the progress of cholera in the general population of that province the Sanitary Commissioner of British Burmah will doubtless give full particulars.

385. In the latter part of the year 1872 the newly invading cholera had reached so far south as the Kurnool and Nellore Districts. In Kurnool the epidemic ceased in November, but it was beginning to increase in Nellore in the month of December, when 56 deaths occurred. In January of 1873 it prevailed in three taluqs (rural circles), in 49 villages of those circles, causing 356 deaths. In February only 120 deaths occurred, and by the end of March the epidemic was practically extinct in the district. The tract

Cholera in the Nellore District.

of country affected lay to the north and west of Nellore town, and no cases were seen in the town itself. Of the total of 840 cholera deaths registered throughout the Presidency, 497, or more than half, occurred in this one district of Nellore, and these in fact are very nearly all the deaths that can be attributed to "epidemic" cholera in the Madras Presidency during the year. The remainder were mostly isolated cases of "sporadic" cholera, occurring in districts where there was no tendency to the diffusion of the pest, such as is observed in the progress of cholera as an epidemic.

Districts in which
deaths from cholera
occurred.

386. Deaths from cholera were registered in the following ten districts :—

	No. of Villages attacked.	Total Deaths.
Ganjam	30	83
Kistna	10	95
Nellore	74	497
Madras Town,	2	6
South Arcot	45	50
Tanjore	21	54
Madura	23	25
North Arcot	2	2
Salem	5	6
Malabar	12	22
Total... 224		840

And in the following eleven named Revenue districts not a single death from cholera, sporadic or otherwise, was brought to notice :—

Vizagapatam.	Coimbatore.
Godavery.	Trichinopoly.
Kurnool.	Tinnevelly.
Bellary.	Neilgherries.
Cuddapah.	South Canara.
Chingleput.	

387. In the large province of Mysore, with a population of 5,000,000, there was no death registered from cholera, nor did any death occur in Cochin or Travancore. In Ceylon 14 deaths, mostly isolated cases, were registered.

388. Thus we see that the country, as a whole, has been wonderfully free of cholera, and that the only epidemic distribution of the disease was in the Nellore district, where it was evidently connected with the epidemic invasion of the preceding year.

389. Owing to the very limited prevalence of the epidemic in 1873, I do not deem it advisable to incur the expense of a map showing its geographical distribution. The map would practically be blank throughout, except in three or four rural circles of the Nellore District.

But, although there has been but little cholera in the Presidency, there are one or two facts to be noted as bearing on the practical subject of the diffusion of the disease.

390. The town of Madras, which for many years had cholera so domesticated in it, that hardly ever a week went by without deaths being recorded from this cause, has, for the last two years, been singularly free of the disease. In 1872 there were only five deaths attributed to this cause, and in 1873 there were six.

The first death in 1873 occurred in the month of February in the General Hospital. The man was a Mahomedan horse-keeper, who had been employed in the Commissariat mule stables on the beach. This case appears to have been an isolated one, and no other death occurred at this time. The next death occurred in the month of April, also in the General Hospital. The patient, a European seaman, was landed from the *S.S. Colombo*, which had just arrived from Calcutta. There was no extension of the disease on this occasion.

391. On the 30th August the British India Steam Navigation Company's steamer *Assyria* arrived in the Madras Roads with 262 emigrants, brought as deck passengers from Calcutta, and intended for transshipment to the emigrant ship *Pandora*, about to sail for Demarara.

On the passage down to Madras the emigrants suffered severely from wet and exposure, and three persons died during the voyage, one death being clearly due to cholera. By some complicated bungling on the part of the Marine and Emigration authorities a number of sick persons were allowed to be landed and carried through the town to the Native Infirmary. In this institution four persons died of cholera, who had been landed from the party of emigrants. Other deaths occurred also of this party in the ship *Pandora*, and in the quarantine ground at Ennore; but, as the persons were buried at sea, or in the quarantine camp, they did not come under the registration of the village officials.

392. A day or two subsequent to the landing of these people in Madras, there were rumours of choleraic seizures in Black Town, but the mortuary register gives no deaths. One case of cholera, an inhabitant of the town, was treated in the Native Infirmary and recovered. No direct communication could be traced in this case with the party of emigrants. The disease did not spread to the villages near the emigrants' camp at Ennore.

It is worthy of remark that this same steamer *Assyria* before arriving at Madras touched at the port of Nizampatam (Vadurevu) in the Kistna district on the 28th August while choleraic diarrhoea was prevailing amongst the emigrants, and stayed there one day, landing rice and other cargo. No passengers were landed, but coolies from the coast villages were employed in landing cargo.

393. On the 15th September cholera deaths were reported from a hamlet in this neighbourhood, and it was thought by the people themselves that the disease had been brought to them from a fishing village in the Nellore district, but subsequent inquiry on the part of the Nellore officials showed that there had been no cholera whatever in this district at the time referred to, so that the theory of importation from a neighbouring district falls to the ground. On the 20th September cholera broke out in Vadurevu, the village connected with the port of Nizampatam. It spread to the town of Bapatla a few miles inland on the 27th September,

and to several other villages in the neighbourhood, and finally died out in November.

The Collector of the district (Mr. Leman) has been so good as to furnish me with the following account of this local outbreak.

The local authorities I may state do not seem to think that communication with the *Assyria* had anything to do with the outbreak, but the fact that cholera should appear in a locality, some of the people of which had had communication with an infected ship, and no where else, along the many hundred miles of the Carnatic Coast, is not a little remarkable. No satisfactory inquiry could be instituted in regard to the history of the persons who had been on board and landed cargo, nor of the first cases of the disease, but it is clear from the history, that the cholera was of the usual epidemic type, though limited in the area of its diffusion.

* 15th September 1873.

	M.	F.	Total.
Number of persons attacked	1	3	4
Died	1	3	4

 Prevalled but a few days.

† Prevailed from 20th September to 12th October.

	M.	F.	Total.
Attacked	9	11	20
Died	5	9	14

‡ Prevailed from 24th September to 3rd October.

	M.	F.	Total.
Attacked	1	5	6
Died	1	5	6

Prevailed from 27th September to 13th November.

	M.	F.	Total.
Attacked	5	7	12
Died	4	3	7

"4. In the village of Nayanapalli, which is six miles from Chinna Ganjam and four miles from 1st October.—One female died.

Prevailed from 10th to 19th October.

	M.	F.	Total.
Attacked	5	2	7
Died	4	2	6

Prevailed from 28th September to 15th November.

	M.	F.	Total.
Attacked	36	33	74
Died	22	23	45

Prevailed from 4th to 9th October.

	M.	F.	Total.
Attacked	4	1	5
Died	2	0	2

Prevailed from 4th to 20th November.

	M.	F.	Total.
Attacked	9	4	13
Died	6	2	8

"9. From 27th November up to date no fresh cases have occurred in Repalli Taluq.

(Signed) G. LEMAN,
 Collector of Kistna District.

* This was shown to have been unfounded by inquiries of the Nellore officials.

394. In the remaining districts there was nothing remarkable in the cholera history of the year. There is, in South India, an endemic form of cholera which seems to differ from the epidemic variety only in not spreading, and it must be further remembered that the deaths now and then registered as cholera in non-epidemic seasons may really be due to other causes.

In what particular respects the endemic cholera of Tanjore, and other localities of the south, differs from the epidemic variety of the disease, is a subject for investigation and report when a sufficient number of facts have been accumulated.

395. There was no cholera in emigrant ships sailing from, or arriving at, Madras. As already stated some cases occurred in a party of emigrants transhipped from the S. S. *Assyria* to the Pandora in September, but these emigrants were subsequently landed at a quarantine camp near Ennore, and the ship meanwhile purified and disinfected prior to their re-embarkation.

(b)—SMALL-POX.

I have to record a registered mortality of 51,782 (the highest during the last eight years) from small-pox.

396. This disease has prevailed in almost every district, but less in Ganjam and South Canara than anywhere else. Of the registered deaths 26,733 were males and 25,049 females. As is usual in all small-pox epidemics, the highest rate of mortality was attained in the months of March and April. This being the third year of the present epidemic, it may be expected to decline during 1874. The disease has been particularly fatal in Chingleput, North Arcot, Salem, Coimbatore, and Malabar. The heaviest mortality of all occurred in a suburb of the Municipal town of Cochin, inhabited by Mapilahs. In the town of Madras, too, the disease has been more fatal than in any year since 1862. The number of deaths in the town from this cause was 1,062, and amongst them were three unvaccinated European children, the only small-pox deaths in this section of the community. The deaths were in the proportion of 0·8 per mille in Europeans, 1·6 per mille in East Indians, 2·1 per mille in Mahomedans, and 2·8 per mille in Hindus, and these proportions indicate pretty fairly perhaps the degree in which the several sections of the people are protected by vaccination. The heavy death-rate from small-pox was in no degree surprising, considering the quality and extent of the vaccination work in past years.

397. The operations of the vaccine department during the year have not increased as much as might have been expected from the great prevalence of small-pox.

The Superintendent-General of Vaccination has furnished me with a return showing a total of 229,315 operations during the year, of which successful results were recorded in 213,203 cases. The number of children under one year of age operated on was 31,407, and, as the infant population cannot be very much short of one million, it will be at once apparent how inadequate the vaccine operations are to protect the community from an epidemic of small-pox,

such as has lately been spreading over the land. It is clear that not more than one out of 30 children, in infant life, is benefited by vaccination. The proportion increases somewhat at later ages, but not in a degree to be of any real benefit to the community.

In addition to the vaccine operations conducted by the staff of the Superintendent-General, there were 49,554 vaccine operations performed in municipal towns by operators paid by the Municipalities.

Excluding the town of Madras, the vaccine operations in which are included in the return of the Superintendent-General, the population of the municipal towns is 1,176,463, and in these towns 49,554 persons were vaccinated during the year, 10,725 of whom were under one year of age.

Municipal vaccination is making considerable progress in many of the towns; and in Trichinopoly, Madura, Dindigul, Tuticorin, Adoni, Vellore, Coimbatore, Salem, Calicut, Palghat, and Cochin, much was done, while the fear of small-pox prevailed, to bring up arrears of work.

Practically, there are no obstacles to vaccination, except the apathy and indifference of the people and the conduct of the operators. Whatever value may be attached to the so-called "religious objections" to the operation, it is found in practice, that a money payment of one anna ($1\frac{1}{2}d.$) per child is sufficient to induce parents to bring forward their children freely to any depôts that may be established. There is, however, an objection on the part of mothers to have young infants operated on, and also to the abstraction of lymph from their children's arms, but these are small difficulties, that might, in my opinion, be easily got over, by giving slightly higher rewards for all children under one year of age, and by compensating the mothers of the children from whom lymph is taken.

In dealing with this question of the extension of vaccination, it must be remembered that the great bulk of the people are very poor, and that they can ill-afford to waste their time in dancing attendance on vaccinators; and that if on public health grounds we desire to extend vaccination, it is the best and wisest policy to treat the poor and ignorant with some consideration.

On these grounds, I have for some years past advocated a system of paying a trifling sum to the children brought up for vaccination, to compensate the parents for loss of time, and to ensure economical and efficient working of the department.

I am glad to say that many of the Local Funds Boards are taking great interest in the question of vaccination; and, as these Boards are expected to find the funds for the payment of vaccinators, they naturally desire to see that they get some return for their expenditure.

Amongst these Local Boards there is widespread dissatisfaction with the present system of vaccination. I have already expressed my views that the duties of the Superintendent of Vaccination and his Assistants should be confined to an inspection and report of work done, and that the Local Boards should be responsible for the employment, payment, and supervision of their vaccinators.

In the districts of Trichinopoly and South Arcot, the new system is to be tried, and I cannot help thinking that, if it has only a fair trial, it must succeed better than our present system.

So far as the municipal towns are concerned, I believe the time is quite ripe for the introduction of a clause in the Municipal Act, making vaccination compulsory by law. It would be a great point to demonstrate to the people at large the fact that certain populations in their midst could be protected from small-pox by a mild and simple procedure.

During the past year the municipal vaccination has on the whole been well done; but when small-pox ceases to be present as an epidemic, the vaccinators and the people alike get careless, and the work is neglected.

Return showing the Numbers vaccinated in each Municipality during the year 1873.

Districts.	Number of Vaccinators employed.	Number of Persons vaccinated.	Successful.	Unsuccessful.	Unknown.	Number of Children under one year of Age.
Berhampore	1	157	151	6	...	...
Chicacole	1	152	95	50	1	6
Vizagapatam	2	1,296	1,244	32	20	37
Bimlipatam	1	350	322	19	9	19
Vizianagram	1	572	525	35	12	99
Cocanada	1	895	698	132	65	81
Ellore	1	663	523	122	18	6
Rajahmundry	1	987	838	67	82	180
Guntoor	1	1,272	860	238	174	90
Masulipatam	1	1,327	1,258	69	...	50
Nellore	1	590	539	15	6	66
Conjeveram	1	657	568	79	10	27
Cuddalore	2	724	683	41	...	120
Trichinopoly	4	3,846	3,694	152	...	1,067
Tanjore	3	1,378	1,315	46	17	177
Combaconum	1	1,123	983	101	39	226
Mayaveram	1	591	550	38	3	209
Negapatam	2	721	643	78	...	118
Manargoodi	1	531	516	10	5	75
Madura	3	2,630	2,365	150	115	1,793
Dindigul	1	1,250	960	81	209	207
Tinnevely	1	500	391	95	14	23
Palamecottah	1	615	473	119	23	47
Tuticorin	1	1,512	1,236	85	191	133
Kurnool	1	344	293	21	30	45
Cumbum	1	107	71	24	12	16
Cuddapah	1	326	251	49	26	57
Bellary	3	1,369	1,272	92	5	1,281
Adoni	1	1,708	1,641	56	11	986
Ghooty	1	297	282	15	...	136
Anantapore	1	268	267	...	1	116
Vellore	1	1,688	1,319	76	119	250
Coimbatore	1	2,451	2,016	332	103	1,105
Salem	2	1,563	1,403	156	4	626
Mangalore	2	1,242	1,050	96	96	119
Tellicherry	1	1,104	903	61	134	6
Calicut	9	3,874	3,582	113	179	159
Palghat	4	3,467	3,328	89	50	50
Cochin	3	2,607	2,052	336	219	71
Cannanore	1	904	818	23	63	69
Ootacamund	1	742	712	23	7	159
Coonoor	1	640	584	19	31	259
Srerungum	2	287	285	2	...	39
Wallajahpett	1	227	217	9	1	16
Total ...	72	49,554	43,877	3,462	2,104	10,725

(c)—FEVERS.

398. The deaths registered from fevers were even higher than in the former year. There were 222,843 casualties so reported, and of these 117,387 were males and 105,456 were females. Fevers, one year with another, destroy twice as many people as small-pox, cholera, and all other epidemic causes put together. With regard to the growing increase in the number of fever deaths reported, it must be borne in view that our death registration has never yet been even approximatively perfect; and, secondly that the diagnosis of the causes of death rests upon the testimony of ignorant reporters, who in many cases may possibly assign the wrong causes.

399. In my Annual Report for 1872 I stated that the death registers appeared to afford evidence of the migratory character of the fever miasm, and that the migratory movement appeared to pass from north to south. I have given much attention to this subject during the last two years, and am now forced to the conclusion that the vital statistics hitherto collected are so imperfect that any deductions from them touching the migratory character of the fever miasm may possibly be erroneous. That various tracts of country are in certain seasons more prone to malaria than others, and that there is a periodicity in the recurrence of these malarious seasons is, I think, clear from the observations of numerous persons. For the present I content myself with recording the registered fever deaths in each district for a series of years.

Districts.	Population.	Fever mortality in							
		1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.
Ganjam ...	1,202,193	7,085	6,809	7,412	8,451	7,655	8,420	12,025	10,732
Vizagapatam ...	1,528,967	6,815	5,913	6,812	9,226	9,757	11,761	24,233	13,083
Godavery ...	1,532,939	9,675	13,885	8,262	17,200	12,654	11,306	14,118	16,201
Kistna ...	1,452,374	3,164	3,537	2,709	3,397	6,625	8,240	11,400	13,371
Nellore ...	1,376,811	2,837	1,834	1,972	2,818	4,138	7,760	8,601	10,279
Madras ...	397,552	2,256	2,456	2,232	2,615	2,296	2,474	2,943	2,569
Chingleput ...	948,134	2,327	1,996	2,096	2,631	3,321	3,916	5,535	5,543
South Arcot ...	1,735,817	2,790	3,501	2,335	3,352	6,354	11,315	10,543	11,394
Trichinopoly ...	1,200,408	3,174	2,456	2,521	2,689	6,289	9,942	9,150	8,983
Tanjore ...	1,073,731	4,995	4,699	5,943	7,151	7,210	7,309	6,105	5,767
Madura ...	2,266,615	4,632	3,510	4,411	4,832	4,195	7,552	8,801	9,297
Tinnevely ...	1,693,959	2,379	1,897	2,420	2,960	4,990	5,758	5,952	6,151
Kurnool ...	659,604	6,698	7,913	7,737	8,160	8,696	9,581	11,406	12,188
Cuddapah ...	1,351,194	6,594	6,168	7,196	9,272	10,244	14,093	12,676	13,823
Bellary ...	1,663,006	11,514	8,227	8,445	8,503	7,753	7,997	8,468	9,669
North Arcot ...	2,615,278	6,273	6,895	7,491	8,454	11,150	15,331	17,167	22,038
Salem ...	1,066,995	6,909	5,100	5,771	9,271	15,658	19,501	18,125	25,254
Coimbatore ...	1,762,274	3,275	2,908	3,425	3,483	7,612	11,925	10,103	10,294
Neilgherries ...	49,501	...	...	...	409	337	531	307	405
Malabar ...	2,261,250	12,562	11,133	9,590	13,926	10,223	10,957	11,967	11,392
South Canara ...	913,362	4,287	11,426	6,312	5,596	3,796	6,741	4,823	3,824
Total ...	30,287,542	110,102	112,511	105,692	132,343	151,027	192,469	214,148	222,343

These figures seem to show a diminution of fever mortality in Ganjam and Vizagapatam in 1873, with an increase in the Godavery and Kistna districts to the south. In Tanjore and Trichinopoly there appears to have been a decrease in fever mortality since 1871. In North Arcot and Salem districts fever has been particularly rife and fatal in 1873, and it is worthy of notice, in connexion with this subject, that these districts were especially exposed to heavy and irregular rainfall in 1872. In Kurnool and Cuddapah fevers have been very numerous and fatal without, so far as I can ascertain, any peculiarity of season.

Death-rate from fever
in the several districts
compared.

400. The proportion of registered fever deaths for the whole Presidency has been 7·35 per mille, but these proportions have varied a good deal in different districts as below:—

Ganjam ...	8·9 per mille.	Madura ...	4·1 per mille.
Vizagapatam ...	8·5 „	Tinnevely ...	3·6 „
Godavery ...	10·1 „	Kurnool ...	12·7 „
Kistna ...	9·2 „	Cuddapah ...	10·2 „
Nellore ...	7·4 „	Bellary ...	5·7 „
Madras ...	6·4 „	North Arcot ...	10·9 „
Chingleput ...	5·9 „	Salem ...	12·8 „
South Arcot ...	6·4 „	Coimbatore ...	5·8 „
Trichinopoly ...	7·4 „	Neilgherries ...	8·2 „
Tanjore ...	2·9 „	South Canara ...	4·1 „
		Malabar ...	5·3 „

It will be seen that the Northern and Central districts have had the highest ratio of fever mortality.

(d)—BOWEL-COMPLAINTS.

401. The deaths recorded under this head were 36,392, or 19,726 males and 16,666 females. The number is rather lower than in the two preceding years. The figures refer chiefly to diarrhoea and dysentery.

(e)—INJURIES.

402. The total of accidental deaths (14,251) is below that of the two preceding years, as shown in the following abstract:—

Years.	Suicides.	Wounding.	Accidents.	Snake-bite or killed by Wild Beasts.	Total.
1866 ...	623	Not separately recorded.	6,216	2,208	9,047
1867 ...	615		5,853	2,145	8,613
1868 ...	602		6,007	2,633	9,242
1869 ...	694		6,057	2,559	9,310
1870 ...	1,438		8,158	2,729	12,325
1871 ...	2,370		8,473	3,387	15,323
1872 ...	2,366		8,724	3,116	15,150
1873 ...	2,077		8,267	*2,989	14,251

The number of suicides is given as 2,077, of which number, 988 were returned as males and 1,089 females. The mode of self-murder is not entered in the returns.

From wounds and accidents 9,185 deaths are returned (4,893 males and 4,292 females.)

* Of these, 2,635 were by snake-bite and 351 killed by wild beasts.

From injuries by poisonous snakes 2,638 deaths are returned (1,550 males and 1,088 females).

The comparative prevalence of these noxious reptiles in rural districts is well shown in the case of the town of Madras and neighbouring district. In the town (population 397,552), only one death from snake-bite was registered, while in the Chingleput district (population 938,184) there were 120 deaths from snake-bite.

Deaths from snake-bite have been most numerous in the Tanjore district, 364, South Arcot, 222, Trichinopoly, 212, and Malabar, 181. On the Neilgherry Hills no death from this cause was registered.

The deaths from *wild beasts* are returned as 351 (males 219 and females 132). Of these, 40 are returned from Ganjam, 32 from Vizagapatam, 30 from Coimbatore, and 27 from North Arcot. No death of this kind was registered in the Tanjore, Neilgherry, and Madras districts; but in all other districts some accidents from wild beasts are noted.

SECTION III.

METEOROLOGY OF THE YEAR.

403. In connexion with public health there is no more important meteorological phenomenon than the regularity of distribution of the fall of rain. At the present time we have in Bengal the spectacle of a wide area of country, and a population of many millions of persons brought to the verge of starvation, by the failure of the usual rains at a particular season of the year, while the normal administration, and financial prosperity of Imperial India have been thrown into confusion by the efforts necessitated for the preservation of human life in Bengal.

When we observe how terrible are the consequences of a failure of the ordinary rains, it behoves all concerned to take note of the phenomena of rain distribution, and to register the facts in regard to each year in such a form that the data of the past shall be a guide to future expectations, and that famine and its attendant suffering shall never come upon us without warning and preparation.

404. In the Madras Presidency, since the year 1870, great attention has been paid to the registration of the rainfall. In the whole Presidency there are 223 registering stations, or on the average about 10 stations in each revenue district, where the rainfall is measured and recorded, and the returns of which stations are subjected to the scrutiny of the Government Astronomer prior to publication.

405. It is to be regretted, however, that there should be any unnecessary delay in the publication of the rain statistics, for it is evident that to be of any value to officers of the administration, the returns of rainfall should be published up to date, so that excess or failure in particular districts, and the probable effect on outturn of crops, might be anticipated in time to allow of arrangements being made with the view of mitigat-

ing the effects of scarcity. Recent instructions of Government have been issued for the regular and early publication of rainfall returns, which will secure this object.

406. The average monthly rainfall of each district for a long series of years is not available. The records extend over only four years, but the monthly records for this period (ending 1873) are given in the following table. They show a considerable variation in rain distribution in these four years, and the rainfall of 1873 was somewhat peculiar.

The western, midland, and northern districts of the Madras Presidency derive their principal rain from the south-west monsoon, while the southern and eastern Coast districts, known as the Carnatic, are watered chiefly by the north-east monsoon rains. The season of the south-west monsoon extends from June to October, and of the north-east monsoon from October until February or March, but it rarely happens that any heavy rainfall occurs in the Carnatic after the month of December. January, February, and March are usually clear dry months in all parts of the Presidency. In April and May showers of rain fall in many districts, and this season of the year, which marks the change of the monsoons, is not unfrequently characterised by violent cyclonic storms.

The heaviest rainfall of the Presidency is in the Western Coast districts, where the average rainfall is over 100 inches, and in some parts nearer 200 inches. The districts immediately to the east of the western mountains are generally dry and rainless during the south-west monsoon, but get their share of the north-east rains late in the year. The rainfall of the north-east monsoon is heaviest along the coast line, from the Nellore district southward, and in some seasons, as in 1873, it hardly extends at all inland to the districts of North Arcot, Cuddapah, Bellary, and Kurnool. In some years a large amount of the rain of the north-east monsoon falls out at sea, in the Bay of Bengal, and is lost to the eastern and southern districts of the peninsula.

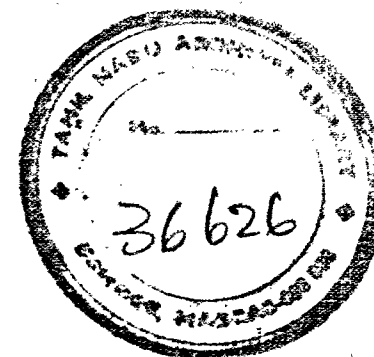


Table showing the Monthly Rainfall in the Madras Presidency for four years ending 1873.

Districts.	No. of Places of Observation	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Total.	
		Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.
Canjiam	1870	1.49	3	...	...	0.64	1	0.77	2	0.47	1	3.83	5	4.75	8	6.61	10	9.90	14	14.63	12	2.55	3	...	...	45.64	59
	1871	0.02	...	0.32	...	1.32	1	3.99	6	2.23	5	6.02	7	6.54	13	4.89	11	6.35	11	0.67	2	...	...	0.05	...	32.49	57
	1872	...	...	0.21	...	0.19	1	0.62	2	1.73	3	18.23	13	9.35	12	8.08	14	8.71	14	12.26	12	2.27	2	1.29	1	59.89	74
	1873	0.05	...	...	...	0.84	2	0.74	2	1.96	5	1.71	4	4.32	10	9.63	14	6.07	10	10.12	10	0.98	4	1.78	3	88.20	64
Vizagapatam	1870	2.84	3	...	...	...	...	0.92	1	0.88	2	5.50	7	3.42	6	5.03	8	10.67	13	21.67	12	3.29	3	...	...	53.68	55
	1871	0.14	...	...	...	...	...	2.69	3	4.58	7	5.00	5	2.85	6	4.48	8	5.22	8	1.14	2	0.11	1	0.05	1	29.18	44
	1872	...	...	...	...	0.12	...	0.39	1	0.92	3	7.88	12	8.85	14	9.11	15	8.12	12	7.40	11	2.69	3	0.62	1	46.14	72
	1873	...	...	...	...	0.08	...	0.41	1	2.93	4	2.14	3	6.15	10	9.36	11	4.13	7	8.83	13	1.71	3	4.63	2	40.37	54
Godavery	1870	1.06	2	...	...	0.22	...	0.51	1	0.32	1	5.59	7	4.94	9	2.68	5	11.84	12	16.26	13	1.88	2	...	...	44.80	52
	1871	0.53	1	...	...	1.70	1	0.63	1	3.34	5	3.72	6	7.71	13	4.14	7	5.45	10	11.58	3	3.29	3	...	...	33.10	51
	1872	...	...	...	...	...	...	0.50	1	1.22	3	6.34	9	5.09	10	8.07	11	9.65	11	11.66	12	1.53	2	...	...	45.84	61
	1873	...	...	...	...	0.44	1	0.44	1	0.94	2	2.48	3	6.65	11	5.35	9	6.01	8	13.76	15	1.58	3	0.41	1	37.63	53
Kistna	1870	2.37	3	...	...	0.06	...	0.12	...	0.73	2	3.16	6	5.50	9	4.21	8	9.38	12	8.22	11	0.64	1	...	...	34.39	51
	1871	1.98	1	...	...	1.40	1	0.44	1	2.32	5	1.85	4	6.98	12	4.62	8	6.03	10	1.85	4	2.34	3	...	...	30.05	50
	1872	...	...	...	...	...	...	0.09	...	0.68	2	3.64	7	4.54	10	4.96	10	7.41	11	10.46	10	3.47	4	...	...	36.63	57
	1873	...	...	...	...	...	...	0.54	1	0.69	1	2.27	5	1.46	7	4.54	10	3.89	8	12.16	15	1.34	3	...	...	26.81	50
Nellore	1870	3.70	3	...	...	0.04	...	0.13	...	0.19	1	1.22	4	2.60	5	3.99	5	7.41	8	12.77	8	3.99	4	...	...	36.88	38
	1871	1.51	2	...	...	0.64	1	0.29	1	1.88	3	0.76	2	4.32	8	2.37	4	3.28	4	5.23	4	17.44	11	...	...	36.28	41
	1872	...	...	...	...	...	...	0.08	...	2.56	2	0.97	3	2.57	6	5.02	7	3.04	5	10.28	8	12.00	11	...	...	41.31	47
	1873	...	...	...	...	...	...	0.10	...	0.06	1	1.09	2	1.33	4	3.55	7	1.93	4	17.80	17	5.67	6	...	...	25.37	44
Madras	1870	6.55	6	...	...	1.72	1	...	...	...	...	8.63	12	5.70	16	6.94	13	12.53	13	22.04	15	7.26	16	...	...	74.19	99
	1871	0.44	3	...	...	1.19	3	0.01	...	0.31	2	2.84	13	8.88	15	1.48	10	8.18	11	6.21	12	26.41	18	...	...	56.33	94
	1872	...	...	...	...	...	...	1.65	2	4.15	2	0.97	6	2.71	19	7.38	21	2.90	13	18.48	14	29.08	21	...	...	73.77	110
	1873	0.01	1	...	...	...	...	1.37	2	0.02	1	1.06	11	2.23	11	3.39	13	3.02	10	10.61	20	13.60	17	...	...	51.92	96
Chingleput	1870	3.02	3	...	...	0.55	1	0.15	...	0.03	...	4.45	7	4.70	9	5.33	9	6.38	9	13.02	9	6.08	10	...	...	45.59	59
	1871	1.35	3	...	...	1.03	2	...	...	0.95	2	2.04	4	4.01	7	3.58	7	7.26	7	4.77	8	21.86	14	...	...	48.59	57
	1872	...	...	...	...	...	...	0.31	1	6.73	2	1.56	4	4.56	11	7.82	12	3.80	6	10.32	10	24.95	15	...	...	66.63	70
	1873	...	...	...	...	...	...	1.40	2	0.20	1	0.87	4	1.80	7	4.10	8	3.52	6	8.21	13	6.48	11	...	...	38.99	59
South Arcot	1870	0.13	1	...	...	0.05	...	...	...	0.20	1	2.88	6	2.97	5	8.73	9	3.48	4	10.93	8	8.39	11	...	...	42.38	49
	1871	1.11	2	...	...	0.71	1	0.21	1	2.30	3	1.56	3	2.62	5	8.83	6	9.15	9	6.69	10	14.99	13	...	...	45.06	57
	1872	...	...	...	...	0.29	1	2.34	1	6.10	3	1.13	1	5.53	7	6.83	11	3.66	5	6.69	6	17.90	15	...	...	56.90	59
	1873	0.02	...	...	...	2.23	2	...	...	1.33	2	1.35	3	1.69	3	2.97	7	4.98	7	11.55	17	5.87	10	...	...	40.63	57

Trichinopoly...	1870	5	1.43	1	...	0.31	...	0.69	2	0.55	2	5.32	5	0.86	2	7.01	8	4.22	4	9.59	11	6.17	11	...	...	37.76	49
	1871	5	1.91	4	...	0.02	...	0.78	2	4.46	5	1.26	2	0.50	2	3.16	4	5.12	8	7.00	11	9.17	10	...	...	36.62	54
	1872	...	...	...	...	...	...	1.19	2	4.55	3	1.44	4	5.44	6	6.43	7	3.53	7	5.88	8	9.18	13	...	...	42.08	61
	1873	...	...	...	...	...	...	2.59	5	2.66	1	...	...	1.33	2	3.17	6	2.63	5	14.68	17	2.35	7	...	...	35.57	51
Tanjore	1870	10	2.02	2	...	...	...	0.11	...	0.34	...	4.33	7	1.79	6	6.80	11	2.97	5	7.45	8	7.24	13	...	...	44.01	57
	1871	10	3.59	6	...	...	...	1.74	2	3.48	6	0.84	3	1.94	5	2.93	5	6.13	8	7.93	11	14.32	13	...	...	46.68	67
	1872	10	0.49	2	...	...	...	2.27	1	6.73	2	1.30	3	5.33	3	4.56	9	3.39	7	6.57	11	15.30	16	...	...	52.17	69
	1873	10	...	...	...	...	...	5.30	5	2.25	2	1.03	1	1.07	3	3.43	4	2.94	6	14.48	19	6.73	11	...	...	45.70	63
Madura	1870	13	1.29	2	...	...	...	1.10	2	0.33	1	2.33	4	0.37	2	4.54	3	1.89	3	9.08	6	7.47	11	...	...	24.35	40
	1871	13	2.95	6	...	...	...	1.71	4	1.32	2	1.09	2	0.63	3	1.61	4	1.18	4	4.12	8	7.07	8	...	...	27.14	52
	1872	13	0.19	...	...	...	...	1.29	2	0.33	2	1.39	2	1.34	2	2.23	5	3.03	7	3.83	8	...	...	...	...	13.94	29
	1873	13	...	...	...	...	...	2.62	4	4.07	3	0.12	1	0.33	1	2.12	4	1.33	2	6.02	12	4.17	8	...	...	20.29	44
Tinnevely	1870	11	3.14	5	...	...	...	0.74	2	0.33	1	0.35	1	0.11	...	0.54	2	1.31	3	2.43	5	3.87	10	...	...	20.16	37
	1871	11	9.20	9	...	...	...	1.94	4	0.39	2	1.66	3	0.39	2	0.54	1	0.51	1	4.41	7	8.33	10	...	...	31.97	47
	1872	11	...	...	...	...	...	2.01	5	1.46	2	0.33	2	0.23	1	6.14	2	2.63	5	2.05	4	8.81	15	...	...	23.28	43
	1873	11	...	...	...	...	...	2.60	4	3.31	3	0.63	2	0.49	1	...	...	9.43	1	2.13	4	5.63	9	...	...	21.76	42
Kurnool	1870	9	0.53	2	...	...	...	...	...	0.31	...	3.20	6	4.36	12	7.12	11	3.81	9	5.15	8	0.54	2	...	...	28.82	52
	1871	9	0.26	1	...	...	...	0.09	...	2.93	6	1.66	5	0.34	...	2.40	4	6.92	9	1.34	3	1.92	8	...	...	23.37	40
	1872	9	...	...	...	...	...	0.39	2	1.67	3	3.88	9	0.34	...	3.97	8	7.02	11	4.21	6	1.17	3	...	...	28.42	56
	1873	9	...	...	...	...	...	0.98	...	1.31	3	2.32	4	1.35	4	5.17	10	3.54	5	7.64	10	0.61	2	...	...	23.40	38
Cuddalore	1870	17	1.29	2	...	...	...	0.16	...	1.16	2	3.15	7	2.33	...	0.99	9	4.56	7	11.54	9	1.19	3	...	...	33.55	47
	1871	18	0.77	1	...	...	...	0.25	1	3.50	5	2.02	5	3.45	6	3.37	4	6.06	7	2.73	4	4.08	7	...	...	24.49	43
	1872	18	...	...	...	...	...	0.12	...	4.03	2	2.07	5	3.84	7	5.23	9	4.04	7	7.30	9	7.39	9	...	...	36.31	53
	1873	18	...	...	...	...	...	0.66	1	0.94	2	1.35	3	0.83	2	4.34	8	3.72	5	11.31	14	0.37	2	...	...	25.86	41
Bellary	1870	17	0.04	...	...	...	...	0.11	...	1.62	3	5.11	9	3.17	7	5.09	10	2.52	6	6.54	10	0.63	2	...	...	24.00	48
	1871	17	0.34	1	...	...	...	0.41	1	4.11	7	2.55	8	1.61	5	2.78	6	5.33	8	3.97	6	1.67	4	...	...	22.78	43
	1872	17	...	...	...	...	...	1.19	2	1.67	2	0.71	6	3.57	8	3.46	9	7.90	11	6.91	7	1.23	4	...	...	25.39	52
	1873	16	...	...	...	...	...	1.19	3	1.66	4	0.47	2	0.87	2	3.46	9	3.37	6	9.84	12	0.31	1	...	...	19.63	39
North Arcot...	1870	9	0.86	2	...	...	...	0.19	1	1.47	2	3.60	8	3.27	6	5.74	7	4.55	7	11.26	11	2.14	7	...	...	34.35	55
	1871	9	1.36	1	...	...	...	0.48	1	3.54	4	1.79	8	2.33	5	2.19	5	9.59	10	5.10	8	13.83	12	...	...	43.68	52
	1872	9	...	...	...	...	...	0.07	...	9.12	3	1.03	4	3.76	7	6.79	13	2.69	7	6.91	8	13.69	11	...	...	38.00	60
	1873	9	...	...	...	...	...	0.60	...	0.77	2	1.33	3	2.40	3	5.03	9	7.05	5	9.76	14	1.90	4	...	...	46.41	52
Salem	1870	10	0.22	1	...	...	...	0.37	2	2.80	6	4.56	8	2.79	7	5.38	7	7.49	9	8.97	11	1.68	4	...	...	36.04	56
	1871	10	0.41	1	...	...	...	1.27	3	4.61	7	1.12	3	2.63	5	3.61	5	7.43	10	4.55	10	4.86	6	...	...	34.20	61
	1872	10	...	...	...	...	...	1.18	2	7.74	5	3.66	6	3.42	6	4.18	11	6.11	10	4.33	9	6.94	11	...	...	42.44	63
	1873	10	...	...	...	...	...	1.73	4	1.48	2	1.31	2	2.23	4	4.68	9	5.42	8	3.71	4	0.52	2	...	...	29.62	50
Coimbatore ...	1870	10	0.45	1	...	...	...	0.31	2	1.61	2	3.12	6	1.63	4	3.08	6	3.06	5	4.94	7	2.34	5	...	...	22.03	42
	1871	10	0.78	1	...	...	...	1.80	4	3.65	5	1.20	3	1.43	4	1.64	3	5.02	8	5.02	8	5.93	9	...	...	29.51	46
	1872	10	...	...	...	...	...	1.78	3	2.84	5	3.90	6	2.33	5	2.49	5	4.22	9	9.00	6	4.53	12	...	...	23.13	45
	1873	10	...	...	...	...	...	3.37	5	3.10	5	0.72	4	1.15	4	2.52	5	1.95	4	7.79	12	1.50	5	...	...	24.47	47

Return showing the Monthly Rainfall in the Madras Presidency for four years ending 1873.—(Continued).

Districts.	No. of Places of Observations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Total.	
		Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.	Rainfall.	Days.
South Canara.	1870	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1871	5	4.94	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1872	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1873	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malabar	1870	15	0.65	1	0.30	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1871	15	3.00	4	0.41	1	1.88	2	5.14	9	6.98	11	37.45	26	33.66	29	12.35	18	9.88	16	6.33	10	8.88	10	0.21	1	330.08
	1872	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1873	15	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Totals	1870	221	33.53	42	0.94	3	9.65	13	8.67	18	18.19	39	136.88	166	122.48	181	127.06	189	129.67	174	228.10	210	72.97	187	24.11	83	905.95
	1871	222	36.59	49	1.95	21	22.19	27	26.42	35	61.39	106	115.11	129	153.69	185	80.90	189	126.62	177	87.14	139	171.37	161	53.1	89	910.68
	1872	223	0.59	3	3.52	7	1.97	5	22.65	35	79.22	61	131.35	149	179.91	204	146.49	230	122.04	197	143.26	171	165.71	178	56.62	96	1033.88
	1873	221	0.08	1	55.60	52	2.76	5	34.86	55	49.39	69	95.38	112	104.94	147	99.25	168	80.50	185	189.30	262	60.69	106	80.77	42	803.52
Averages	1870	...	1.63	2	6.04	...	0.48	1	0.43	1	0.01	2	6.88	8	6.12	9	6.25	9	6.43	9	11.15	10	8.65	6	1.20	1	45.30
	1871	...	1.83	2	0.60	...	1.11	1	1.27	2	3.22	5	5.75	6	7.03	9	4.04	7	6.32	9	4.36	7	8.57	8	0.77	2	45.53
	1872	...	0.02	...	0.17	...	0.10	...	1.13	2	3.96	8	6.59	7	8.99	10	7.32	11	6.70	10	7.16	8	8.28	9	2.83	5	52.69
	1873	...	0.004	...	2.78	...	0.13	...	1.74	2	2.47	3	4.77	5	5.24	7	5.18	9	4.21	7	10.03	14	3.08	5	1.61	2	41.26

From these figures we see that the mean rainfall for the whole Presidency has been less in 1873 than in any of the three previous years. For 1870 and 1871 the average of all the registering stations was about 45 inches. In 1872, a year of excessive rainfall, the average was nearly 55 inches, and in 1873 only 41 inches, the average number of rainy days in 1873 being only 59 against 60, 61, and 66 in the three previous years. On the whole therefore it may be said that the rainfall of 1873 has been defective.

407. The south-west monsoon rains, though setting in at the usual time in 1873 on the Western Coast, were very much later than ordinary in the midland and northern districts, and we see that Ganjam and Vizagapatam, which had 15.2 and 7.8 inches of rainfall, respectively, in June 1872, had only 1.7 and 2.1 inches in June of 1873. The rains were very late also throughout the whole of the Deccan and Mysore. It is usual for the whole country to be green with grass and young grain by the end of June, but in this year the land was brown and bare up to the end of July, and great fears were at one time entertained that the rains would come too late to save the raggy (*eleusine*) crops of Mysore; but, although late, the rains appeared in time to secure an adequate dry grain harvest. The end of the south-west monsoon in October gave heavy rain in all parts of the country, but the north-east rains from the end of October were not so heavy as usual, and in some districts, as in Trichinopoly, failed almost entirely. In Tinnevely the rice crops would have been lost but for a timely rainfall in February of 1874 on the Western Ghats, which flooded the mountain streams, filled the tanks, and gave a sufficiency of water for the ripening of the harvest.

408. The peculiarities of the seasons of 1873 in the south of India seem to have been (1) heavy rainfall in February over most of the southern districts; (2) a late south-west monsoon, with heavier rainfall than usual in October; and (3) a scanty north-east monsoon, with deficient rainfall, in the districts removed from the Eastern Coast line. The heavy rains in February had the effect of diluting the salt water of the lagoons so much that no salt could be manufactured until a much later period in the year than usual.

409. The average rainfall for the whole area has been 14.56 inches less than in 1872 and 5.41 and 5.12 less than in 1871 and 1870, respectively, and the average of rainy days has been 58.

410. Mr. Pogson's monthly meteorological abstracts of the Provincial Observatories are appended. There seems to have been nothing remarkable in the phenomena of the year as shown in these average statements.

There was no storm or unusual atmospheric disturbance during the year.

Mean Monthly Meteorological Results at the different Meteorological Stations in the Madras Presidency for the year 1872.

Stations.	Barometer.		Dry Bulb Thermometer.				Wet Bulb Thermometer.				Sun Thermometer.		Wind.		Rain.		Clear Sky.	General Weather.			
	Reduced to 32°	Daily Range.	Mean.	Mini- mum.	Maxi- mum.	Range.	Mean.	Mini- mum.	Maxi- mum.	Range.	Humidity.	In Vacuo.	Ex- posed.	Miles.	Points.	Points.			Inches.	No.	Cents.
Bangalore.	Inches.	Inches.	°	°	°	°	°	°	°	°	Cents.	°	°	°	°	°	°	°	°	°	°
	26.996	0.123	66.4	54.4	79.6	25.4	57.4	53.1	78.3	59	129.7	92.0	49.3	9	East.	0.00	...	...	56	76	
	26.988	0.120	71.4	61.6	82.8	21.2	62.4	59.2	5.4	62	132.4	95.0	57.8	14	E. by S.	0.43	1	...	57	63	
	26.954	0.127	76.0	63.7	89.4	25.7	62.2	74.7	58.6	48	141.6	103.6	59.6	18	S. S. E.	0.00	...	...	46	77	
	26.904	0.131	77.6	67.8	92.5	23.3	66.8	69.0	63.2	58	141.3	105.7	66.0	18	S. S. W.	...	...	...	57	51	
	26.861	0.122	80.0	70.3	92.5	22.0	67.5	69.0	64.7	4.3	55	141.9	107.4	68.6	17	S. by W.	...	...	...	57	51
	26.846	0.085	74.5	60.9	86.9	19.9	67.0	68.7	64.3	4.4	69	135.2	99.0	66.0	21	S. W. by W.	1.44	6	...	57	34
	26.864	0.083	73.1	66.8	81.1	17.3	66.6	68.4	64.0	4.4	72	129.3	95.5	65.7	22	W. S. W.	0.72	8	...	51	35
	26.886	0.108	72.4	66.0	83.0	17.0	67.4	68.3	64.2	5.1	79	130.4	95.1	65.0	24	West.	8.28	16	...	41	32
	26.915	0.124	72.2	65.7	82.4	16.7	67.0	68.8	64.2	4.6	78	132.6	95.1	63.9	24	West.	5.50	12	...	42	37
	26.915	0.120	71.0	63.7	79.6	13.9	67.1	68.9	64.7	4.2	83	132.8	96.1	63.8	21	S. W. by W.	11.11	21	...	48	28
	27.010	0.110	69.7	61.8	79.5	17.7	62.8	65.4	59.9	5.5	69	132.1	93.9	58.4	14	E. N. E.	0.16	2	...	46	55
27.014	0.111	67.9	59.6	79.2	19.6	60.8	63.5	57.7	5.8	68	130.9	94.6	56.2	120	E. N. E.	0.04	2	...	48	65	
Mean...	26.929	0.114	72.6	64.2	84.1	19.9	64.5	67.6	61.4	5.2	66	134.1	97.7	61.6	150	S.	27.68	68	49	50	
Bellary.	Inches.	Inches.	°	°	°	°	°	°	°	°	Cents.	°	°	°	°	°	°	°	°	°	°
	28.471	0.154	72.8	59.4	89.4	30.4	58.6	63.1	53.2	9.9	43	136.4	100.0	54.8	80	E. S. E.	0.00	...	...	41	90
	28.450	0.153	79.1	67.0	94.4	27.4	63.1	...	...	...	29	141.7	104.9	64.4	111	East.	0.04	1	...	42	78
	28.400	0.163	84.9	72.4	101.2	28.8	63.0	...	...	...	37	152.5	112.6	69.5	127	S. by E.	0.00	...	...	32	83
	28.330	0.174	87.4	76.6	104.2	27.6	67.4	70.0	63.8	6.2	37	155.3	114.6	74.5	178	W. S. W.	...	...	...	40	89
	28.292	0.152	87.1	77.3	103.4	26.1	69.6	73.2	66.2	7.0	43	158.1	114.8	75.1	173	West.	2.62	7	...	45	55
	28.259	0.138	83.9	75.9	97.8	21.9	70.1	71.6	67.7	3.9	51	153.1	105.9	74.7	...	W. S. W.	0.19	4	...	33	38
	28.284	0.102	80.7	72.8	92.8	17.6	69.4	70.7	67.5	9.2	58	138.8	98.8	73.7	308	W. S. W.	0.07	5	...	84	19
	28.315	0.135	81.1	73.3	94.8	21.5	69.6	70.9	67.6	3.3	58	146.5	102.9	71.9	281	W. S. W.	0.07	5	...	84	19
	28.351	0.145	79.8	72.6	91.8	19.2	68.8	70.7	66.8	3.9	60	145.0	101.8	71.4	246	W. by N.	3.41	10	...	29	29
	28.380	0.137	77.1	68.9	88.9	17.9	68.9	70.7	66.3	4.4	68	133.1	99.7	68.7	88	W. by E.	2.21	8	...	34	29
	28.502	0.142	73.9	63.9	88.5	24.6	63.6	67.2	59.4	7.8	58	132.6	99.5	59.1	68	E. N. E.	9.46	16	...	35	52
28.501	0.140	73.0	61.9	89.2	27.3	61.3	65.8	56.4	9.4	52	130.8	100.1	57.0	67	E. by N.	1.15	3	...	37	53	
Mean...	28.278	0.145	80.0	70.5	94.7	24.2	66.1	69.4	63.5	5.9	50	143.6	104.6	67.9	157	S.	20.90	59	37	53	

January	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
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Mean Monthly Meteorological Results at the different Meteorological Stations in the Madras Presidency for the year 1873.

1873.	Barometer.	Dry Bulb Thermometer.			Wet Bulb Thermometer.			Sun Ther- mometer.		Wind.		Rain.		Clear Sky.	General Weather.	
		Mean.	Max. min.	Range.	Mean.	Max. min.	Range.	Humi- dity.	In Vacuo.	Ex- posed.	Daily Velo- city.	Mean Direction.	Amount.			Days.
	Reduced to 32°.															
January	Jacobus. 29.471	73.9	84.7	65.8	68.1	71.3	64.8	70	133.3	99.5	59.9	139	6	42	67	Fine with passing clouds.
February	29.461	74.1	85.7	70.6	72.3	74.9	69.2	47	127.8	98.4	65.6	131	7	44	63	Rainy till 4th, passing clouds.
March	28.813	78.9	88.2	70.7	77.3	79.1	74.9	56	134.3	101.6	65.5	143	11	36	82	Chiefly fine.
April	29.400	83.8	93.3	79.0	81.3	83.8	78.8	42	137.4	107.3	75.6	207	12	51	71	Chiefly fine after 10th.
May	29.723	88.3	98.8	81.4	85.6	88.3	83.8	33	136.9	107.3	78.4	212	13	37	75	
June	29.657	97.4	101.6	85.4	92.7	97.4	92.7	56	137.9	110.6	79.3	238	20	30	34	Cloudy and showery.
July	29.711	89.2	99.5	79.7	84.7	89.2	84.7	49	135.3	107.1	77.2	227	23	36	27	
August	29.765	83.5	94.1	77.8	81.3	83.5	78.8	40	134.7	104.1	75.8	176	19	48	26	
September	29.444	81.3	91.6	74.8	77.3	78.8	73.4	48	138.3	...	75.5	173	13	36	41	
October	29.414	81.3	91.6	74.8	77.3	77.2	72.3	44	131.3	...	72.5	136	29	30	28	
November	29.450	81.3	91.6	74.8	77.3	74.1	69.4	47	127.8	98.7	69.6	206	17	56	34	
December	29.479	81.3	91.6	74.8	77.3	73.2	68.1	51	128.4	99.6	69.5	155	1	43	60	
Mean	29.559	80.9	90.3	74.7	78.8	75.9	71.0	48	133.6	103.4	71.3	177	10	40	51	
January	29.470	73.7	87.9	65.6	68.0	71.3	63.4	79	131.8	103.0	67.8	124	5	62	59	Passing clouds.
February	28.447	77.9	92.5	70.0	70.6	72.7	67.1	5.6	129.9	...	68.9	116	7	73	46	Passing clouds and shower.
March	29.410	82.0	95.2	72.8	73.4	75.8	65.5	10.3	140.4	...	69.6	92	10	31	53	Fine with passing clouds.
April	29.344	86.6	97.0	74.5	75.1	76.6	72.1	4.8	140.0	...	71.4	79	11	47	58	Changeable; fine from 20th.
May	29.313	93.1	106.1	76.1	76.7	77.0	73.5	3.5	142.0	...	72.4	74	14	37	51	
June	29.273	94.2	99.6	76.9	77.1	77.8	71.0	4.8	135.3	...	73.6	133	34	32	40	Passing clouds.
July	29.313	94.5	98.8	76.9	77.0	77.8	70.6	...	142.3	...	73.7	131	25	...	51	
August	29.339	83.8	99.9	75.6	74.5	...	...	...	141.7	...	73.4	93	24	...	48	
September	29.259	85.0	98.0	76.8	74.5	...	...	...	143.2	...	73.3	90	22	...	53	
October	29.334	80.1	91.9	74.3	76.7	76.9	71.7	5.2	130.6	...	72.9	60	25	...	40	
November	29.472	79.5	87.9	70.7	73.5	73.9	67.9	4.7	131.9	...	71.2	113	1	...	45	
December	29.435	77.6	89.9	72.6	72.1	73.0	68.7	6.3	135.1	...	67.8	120	4	...	58	
Mean	29.384	81.4	90.7	75.4	78.2	75.2	69.4	5.9	136.0	105.9	69.4	102	11	47	51	

Extreme Monthly Meteorological Records kept at the different Meteorological Stations in the Madras Presidency for the year 1873.

Station.	1873.	Barometer.			Dry Bulb Thermometer.			Wet Bulb.		Greatest Solar Heat.		Ground Thermo- meter.	Wind.		Rain.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		Highest.	Lowest.	Range.	Highest.	Lowest.	Range.	Lowest.	Lowest.	In Vacuo.	Freely exposed.	Lowest.	Highest.	Lowest.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
Bangalore.	January	Inches.	Day.	0.259	17	48.4	16	36.5	46.5	17	22	6	408	16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...</

Station.	1873.	Barometer.			Dry Bulb Thermometer.			Wet Bulb.		Humidity.		Greatest Solar Heat.			Ground Thermo- meter.		Wind.			Rain.
		Highest.	Lowest.	Range.	Inches.	Day	°	°	°	Day	°	In Vacuo.	Freely exposed.	Lowest.	°	Day	Miles.	Lowest.	Greatest Fall.	
Columbatore.	January	28.742	28.454	0.288	91.0	18	55.6	17	35.4	47.1	17	147.5	19	119.9	17	47.0	17	140	13	0.00
	February	28.697	28.389	0.308	95.2	24	59.8	11	35.4	57.7	11	147.4	26	123.6	27	53.5	11	230	2	0.40
	March	28.687	28.399	0.288	100.4	25	63.2	24	37.2	56.0	11	153.6	7	128.2	9	53.8	24	136	57	2.000
	April	28.622	28.318	0.304	99.9	16	66.5	22	33.4	64.2	2	152.7	10	134.4	30	64.2	3	187	14	0.99
	May	28.613	28.250	0.363	99.4	5	70.8	20	28.6	66.4	30	152.8	8	134.4	10	66.5	10	237	30	1.09
	June	28.527	28.320	0.207	95.7	22	68.7	28	27.0	63.5	28	152.8	8	134.4	10	66.5	10	237	30	1.09
	July	28.577	28.339	0.238	91.4	30	68.3	26	23.1	58.5	21	148.2	9	134.4	10	64.3	21	352	2	1.23
	August	28.606	28.318	0.288	92.1	15	69.1	25	23.1	65.1	25	148.8	5	134.4	10	65.2	31	276	24	1.18
	September	28.607	28.379	0.228	92.9	8	66.2	16	26.7	63.3	16	149.4	18	134.4	10	64.3	16	330	21	1.96
	October	28.677	28.348	0.329	94.5	30	67.3	22	27.2	64.2	22	149.4	18	134.4	10	64.3	3	224	34	2.87
	November	28.737	28.413	0.324	91.9	29	63.1	19	28.8	59.8	20	145.4	1	145.4	10	59.4	19	176	16	2.2
	December	28.752	28.467	0.285	90.1	1	55.5	27	34.6	50.2	27	144.9	10	144.9	10	49.4	27	140	22	0.09
Karnool.	January	29.186	28.882	0.304	97.3	17	62.6	12	44.7	45.9	12	147.9	17	119.9	17	44.9	12	176	6	0.00
	February	29.155	28.822	0.333	101.4	27	63.2	12	38.2	56.8	27	153.4	22	123.6	27	58.1	12	126	4	0.00
	March	29.075	28.796	0.279	107.1	25	63.2	12	43.9	56.9	8	153.0	9	128.2	9	69.4	8	173	17	0.00
	April	29.013	28.679	0.334	111.7	30	73.9	13	37.3	61.9	24	153.4	9	134.4	30	71.1	4	278	13	0.00
	May	29.000	28.577	0.423	110.6	1	72.2	13	38.4	61.4	5	151.0	28	134.4	10	67.5	21	221	12	1.77
	June	28.887	28.606	0.281	101.8	7	70.3	8	31.5	66.9	8	151.0	28	134.4	10	67.5	21	221	12	1.77
	July	28.932	28.645	0.287	97.4	16	71.1	3	26.3	67.0	12	151.0	28	134.4	10	67.5	21	221	12	1.77
	August	29.034	28.662	0.372	99.5	13	69.5	4	30.0	65.7	17	151.0	13	134.4	10	66.0	30	571	15	0.68
	September	29.001	28.697	0.304	98.0	30	69.0	9	29.7	65.8	9	151.0	13	134.4	10	66.0	30	571	15	0.68
	October	29.112	28.775	0.337	99.2	1	63.6	31	35.6	58.0	31	151.0	2	151.0	9	60.4	31	206	2	1.01
	November	29.225	28.892	0.333	91.6	9	55.0	22	36.6	49.3	22	145.0	2	145.0	9	49.6	21	207	26	1.17
	December	29.220	28.930	0.290	91.6	11	58.3	28	33.3	52.8	28	144.4	2	144.4	9	55.0	27	240	8	0.29
Madras.	January	30.109	29.847	0.262	87.5	31	60.9	17	26.6	60.3	17	140.4	4	103.0	27	52.2	17	189	22	0.01
	February	30.081	29.775	0.306	94.7	23	65.4	27	29.3	63.9	27	137.6	18	103.0	27	57.4	27	313	3	0.01
	March	30.021	29.784	0.237	91.5	24	65.3	12	26.2	63.6	12	139.5	15	106.8	31	59.5	2	203	26	4.63
	April	29.961	29.656	0.305	102.3	15	73.6	4	28.7	71.0	4	145.6	15	117.3	15	71.4	1	294	29	1.07
	May	29.969	29.499	0.470	102.3	2	75.4	19	26.9	73.1	20	145.6	1	115.4	2	71.2	19	353	29	0.02
	June	29.785	29.533	0.252	106.3	1	77.0	25	29.3	70.9	5	145.6	1	115.4	2	71.2	19	353	29	0.02
	July	29.669	29.544	0.125	108.9	17	75.8	23	28.1	68.5	10	143.4	17	114.6	10	73.4	4	275	13	0.34
	August	29.921	29.568	0.353	99.1	31	74.2	3	24.9	70.5	30	143.4	17	114.6	10	73.4	4	275	13	0.36
	September	29.953	29.642	0.311	101.9	13	72.2	23	29.7	69.2	15	143.4	17	114.6	10	73.4	4	275	13	0.36
	October	29.993	29.633	0.360	95.2	1	70.6	31	24.6	69.6	31	144.4	2	114.4	9	57.3	3	353	29	0.36
	November	30.093	29.783	0.310	89.4	10	64.0	3	25.4	61.7	29	140.8	9	114.4	7	53.9	29	283	23	1.16
	December	30.111	29.841	0.270	87.7	7	61.2	29	26.6	60.2	29	137.6	8	105.9	7	53.9	29	283	23	1.16

Malabar.	January	29.614	29.348	0.266	90.7	17	60.4	17	30.3	58.2	17	147.5	17	110.0	31	53.4	17	194	0.00
	February	29.515	29.282	0.285	95.2	24	63.8	27	31.4	61.3	27	145.0	22	110.0	31	53.4	17	194	0.00
	March	29.474	29.270	0.283	98.4	16	66.4	1	32.0	62.0	10	146.9	26	110.0	31	53.4	17	194	0.00
	April	29.439	29.191	0.283	102.9	24	69.4	20	33.5	68.4	20	146.9	26	110.0	31	53.4	17	194	0.00
	May	29.386	29.151	0.345	103.8	24	72.8	28	31.1	70.6	20	146.9	26	110.0	31	53.4	17	194	0.00
	June	29.356	29.187	0.199	103.8	26	74.4	5	29.4	69.3	6	146.9	26	110.0	31	53.4	17	194	0.00
	July	29.131	29.176	0.255	102.9	15	71.6	16	30.3	69.4	22	146.9	26	110.0	31	53.4	17	194	0.00
	August	29.498	29.200	0.238	101.9	15	72.5	19	29.9	69.4	22	146.9	26	110.0	31	53.4	17	194	0.00
	September	29.167	29.235	0.232	98.9	1	71.4	31	27.5	69.4	22	146.9	26	110.0	31	53.4	17	194	0.00
	October	29.540	29.220	0.320	92.4	4	69.4	19	23.0	67.4	19	146.9	26	110.0	31	53.4	17	194	0.00
	November	29.585	29.300	0.285	92.4	4	69.4	19	23.0	67.4	19	146.9	26	110.0	31	53.4	17	194	0.00
	December	29.627	29.318	0.279	91.9	2	63.5	31	28.4	62.4	31	146.9	26	110.0	31	53.4	17	194	0.00
Mysore.	January	30.130	29.845	0.285	87.8	16	60.3	15	27.5	57.5	11	146.9	26	110.0	31	53.4	17	194	0.00
	February	30.099	29.770	0.349	95.9	23	65.3	27	30.7	62.5	27	146.9	26	110.0	31	53.4	17	194	0.00
	March	30.017	29.770	0.247	97.7	20	67.0	17	30.7	62.5	27	146.9	26	110.0	31	53.4	17	194	0.00
	April	29.949	29.587	0.362	108.0	15	72.3	1	35.7	67.6	6	146.9	26	110.0	31	53.4	17	194	0.00
	May	29.950	29.435	0.515	106.1	9	74.3	31	31.8	70.0	3	146.9	26	110.0	31	53.4	17	194	0.00
	June	29.709	29.462	0.247	106.7	25	76.2	9	30.5	70.2	23	146.9	26	110.0	31	53.4	17	194	0.00
	July	29.781	29.470	0.311	101.5	30	75.4	9	26.1	70.3	10	146.9	26	110.0	31	53.4	17	194	0.00
	August	29.881	29.536	0.345	99.6	13	74.0	4	25.6	69.4	18	146.9	26	110.0	31	53.4	17	194	0.00
	September	29.865	29.539	0.326	99.1	14	75.2	29	23.9	70.7	7	146.9	26	110.0	31	53.4	17	194	0.00
	October	29.934	29.679	0.255	94.8	1	69.0	31	25.8	69.2	31	146.9	26	110.0	31	53.4	17	194	0.00
	November	30.136	29.823	0.313	88.5	6	65.6	23	22.9	60.4	3	146.9	26	110.0	31	53.4	17	194	0.00
	December	30.148	29.841	0.307	86.0	10	60.8	25	25.2	58.0	25	146.9	26	110.0	31	53.4	17	194	0.00
Negapatnam.	January	30.088	29.824	0.264	85.4	25	63.2	18	22.2	61.4	16	150.5	19	101.7	29	56.0	18	268	0.00
	February	30.017	29.763	0.254	88.5	27	67.0	27	21.5	61.2	27	150.5	19	101.7	29	56.0	18	268	0.00
	March	29.949	29.778	0.239	89.7	27	67.5	2	22.2	61.0	3	150.5	19	101.7	29	56.0	18	268	0.00
	April	29.937	29.650	0.299	98.8	15	69.8	6	29.0	68.8	6	150.5	19	101.7	29	56.0	18	268	0.00
	May	29.817	29.561	0.256	103.0	23	73.7	10	29.3	71.7	10	150.5	19	101.7	29	56.0	18	268	0.00
	June	29.878	29.575	0.303	103.2	16	75.0	10	28.2	71.7	10	150.5	19	101.7	29	56.0	18	268	0.00
	July	29.832	29.625	0.307	100.5	17	73.9	19	26.6	70.2	29	150.5	19	101.7	29	56.0	18	268	0.00
	August	29.923	29.679	0.244	100.0	13	73.9	24	26.7	70.2	29	150.5	19	101.7	29	56.0	18	268	0.00
	September	29.999	29.759	0.317	92.9	1	72.8	19	20.1	66.4	2	150.5	19	101.7	29	56.0	18	268	0.00
	October	30.047	29.824	0.288	89.6	4	70.5	2	19.1	66.4	2	150.5	19	101.7	29	56.0	18	268	0.00
	November	30.108	29.824	0.284	89.0	6	63.8	30	23.2	63.2	30	148.1	7	108.3	6	60.3	29	318	0.00
	December	30.108	29.824	0.284	89.0	6	63.8	30	23.2	63.2	30	148.1	7	108.3	6	60.3	29	318	0.00
Salem.	January	29.190	28.908	0.282	92.7	17	52.3	17	40.4	50.7	17	147.6	19	119.1	19	45.3	17	166	0.00
	February	29.154	28.833	0.321	97.8	24	60.5	11	37.3	58.7	16	145.4	28	128.9	28	55.1	11	171	0.00
	March	29.105	28.844	0.261	102.9	25	62.4	2	40.5	55.9	11	148.7	25	128.9	25	53.9	2	202	0.00
	April	29.058	28.719	0.339	105.3	28	70.1	20	35.0	66.7	20	149.5	23	128.2	27	65.2	2	164	0.00
	May	29.054	28.661	0.393	106.2	23	72.6	14	33.6	65.4	11	150.8	21	128.5	23	69.5	14	233	0.00
	June	28.952	28.697	0.255	101.4	18	71.2	6	30.2	65.7	13	145.8	24	128.0	25	68.6	28	227	0.00
	July	28.917	28.719	0.298	100.4	21	71.5	6	28.9	65.7	21	145.8	24	128.0	25	68.6	28	227	0.00
	August	29.017	28.719	0.300	96.9	9	69.7	16	27.2	68.0	16	145.8	24	128.0	25	68.6	28	227	0.00
	September	29.057	28.793	0.264	97.1	17	63.6	24	27.5	68.0	16	145.8	24	128.0	25	68.6	28	227	0.00
	October	29.104	28.780	0.324	93.1	28	69.4	4	23.7	67.5	4	145.8	24	128.0	25	68.6	28	227	0.00
	November	29.165	28.857	0.308	92.1	5	62.7	2	29.4	60.9	2	145.8	24	128.0	25	68.6	28	227	0.00
	December	29.190	28.911	0.279	91.5	4	57.8	30	33.7	54.8	30	145.8	24	128.0	25	68.6	28	227	0.00

Station.	1873.	Barometer.				Dry Bulb Thermometer.				Wet Bulb.		Humidity.		Greatest Solar Heat.			Ground Thermometer.		Wind.		Rain.		
		Highest.		Lowest.	Range.	Highest.		Lowest.	Range.	Lowest.	°	In Vacuo.		Freely exposed.	Lowest.	Day.	°	Lowest.		Greatest Fall.			
		Inches.	Day.	Inches.	Day.	Inches.	°	Day.	°	Day.	°	°	°	°	°	°	°	°	°		°	°	
Secunderabad.	January	28.327	23	28.039	6	0.288	90.5	18	47.9	15	42.5	44.2	14	10	156.0	26	107.6	26	27.5	13	...	...	9.02
	February	28.318	3	27.988	21	0.330	98.4	25	60.6	8	37.3	55.3	3	22	160.1	9	111.4	11	52.6	3	...	...	0.00
	March	28.236	30	27.964	57	0.272	104.4	24	62.9	8	41.5	63.9	1	18	165.6	24	121.1	16	53.3	8	...	...	0.00
	April	28.187	1	27.858	5	0.329	106.3	26	68.3	2	38.0	60.5	24	21	167.9	26	126.6	16	64.4	2	...	...	0.00
	May	28.186	9	27.709	30	0.477	105.6	23	70.9	9	34.7	61.9	4	22	168.3	12	122.5	4	68.7	7	...	...	0.41
	June	28.069	24	27.754	1	0.255	98.8	7	70.3	30	28.5	68.0	20	27	164.8	17	112.9	27	66.7	23	...	...	0.41
	July	28.065	30	27.757	19	0.308	90.7	17	69.1	9	21.6	67.7	4	23	151.5	16	99.3	26	65.9	9	...	...	0.32
	August	28.144	12	27.802	25	0.342	95.8	14	68.3	31	27.5	66.4	6	45	162.5	17	113.8	30	64.3	9	...	...	0.30
	September	28.122	18	27.821	4	0.301	89.4	22	66.1	9	23.2	64.6	7	43	163.4	30	118.8	30	62.5	29	...	...	0.32
	October	28.240	30	27.936	12	0.304	90.6	1	57.0	30	33.6	...	...	...	165.4	31	119.1	1	52.1	31	...	...	0.77
	November	28.353	16	28.051	28	0.302	89.7	9	52.7	24	37.6	...	...	...	165.4	31	119.1	1	52.1	31	...	...	0.77
	December	28.360	16	28.046	7	0.314	87.5	10	53.9	31	33.0	...	...	...	161.6	2	115.3	2	45.8	30	...	...	0
Trichinopoly.	January	29.831	18	29.529	2	0.302	89.5	18	60.1	17	29.4	59.3	17	38	143.2	31	104.8	18	51.4	16	...	...	0.00
	February	29.816	8	29.471	24	0.345	94.0	24	64.5	27	29.5	63.5	23	35	138.9	1	109.6	23	57.2	27	...	...	1.88
	March	29.750	18	29.471	57	0.279	93.5	25	66.1	1	33.4	67.2	11	25	148.7	25	113.2	17	63.4	2	...	...	0.00
	April	29.677	1	29.342	5	0.335	103.4	15	69.2	7	34.2	67.2	7	29	145.6	29	113.3	13	70.0	4	...	...	0.00
	May	29.738	9	29.317	29	0.421	108.7	23	74.4	26	32.3	69.9	14	25	144.1	17	122.0	13	71.3	15	...	...	0.00
	June	29.612	13	29.326	7	0.286	101.0	19	74.2	26	26.8	67.6	6	30	143.8	26	111.7	25	73.5	1	...	...	0.00
	July	29.687	31	29.369	16	0.318	100.0	12	72.7	29	27.3	65.3	21	26	144.8	26	111.7	25	73.5	1	...	...	0.00
	August	29.711	12	29.378	22	0.333	102.0	14	70.6	15	31.4	69.3	26	36	139.4	9	...	...	70.4	20	...	...	0.4
	September	29.679	8	29.428	22	0.251	99.0	13	72.4	19	26.6	65.6	16	32	141.4	9	...	...	71.4	18	...	...	0.18
	October	29.738	31	29.387	12	0.351	97.2	1	70.3	30	26.9	68.8	22	...	147.4	30	...	...	59.3	2	...	...	0.37
	November	29.804	17	29.439	28	0.365	89.4	5	69.3	2	20.1	65.1	19	49	147.4	30	...	...	...	...	...	...	0.46
	December	29.863	16	29.554	2	0.309	98.5	7	61.5	31	29.0	...	...	...	149.2	9	...	...	...	...	...	...	0.18
Wellington.	January	24.821	16	24.124	1	0.697	71.9	17	39.3	15	32.6	32.3	15	15	140.7	19	87.6	15	...	...	...	...	0.00
	February	24.818	13	24.150	24	0.668	72.6	28	45.7	3	26.9	42.3	15	27	141.3	17	89.1	15	...	...	...	...	0.00
	March	24.826	25	24.151	3	0.675	77.2	26	46.7	3	30.5	43.9	18	27	148.3	3	91.8	30	...	...	...	...	0.00
	April	24.800	20	24.088	56	0.712	79.1	16	52.8	8	26.3	45.5	1	26	148.1	12	97.5	20	...	...	...	...	0.00
	May	24.297	9	23.927	26	0.370	78.0	24	53.8	14	24.2	49.7	6	34	142.6	16	95.5	23	...	...	...	...	0.00
	June	24.195	6	24.013	8	0.182	76.1	18	50.8	21	25.3	48.2	22	23	142.6	16	91.8	19	...	...	...	...	0.00
	July	24.212	30	24.061	4	0.151	77.9	23	44.3	9	33.6	48.6	9	50	141.9	80	90.8	39	...	...	...	...	0.00
	August	24.292	12	24.034	23	0.258	74.7	14	43.8	15	20.9	51.0	13	53	146.7	9	90.8	39	49.5	13	...	...	0.00
	September	24.273	7	24.097	2	0.176	76.1	14	49.8	15	26.3	43.5	15	43	152.7	9	91.6	11	46.3	17	...	...	0.00
	October	24.299	30	24.073	5	0.226	72.2	2	42.6	27	19.6	40.6	17	56	151.3	5	90.0	15	49.3	27	...	...	0.00
	November	24.370	9	24.110	25	0.260	72.2	...	43.8	19	...	38.7	19	39	141.7	15	86.6	15	38.3	19	...	...	0.00
	December	24.354	10	24.174	5	0.180	72.9	26	44.7	27	28.2	31.7	27	...	142.7	23	89.5	1	31.5	27	...	...	0.00

SECTION IV.

PRICES OF FOOD.

411. The following table shows the average prices of the staple food grains in the several districts for each month of the year. The figures indicate the number of standard *seers* purchasable for one rupee. From this table we see that rice, in most of the districts, was rather dearer in the end of the year than in the beginning; that with regard to dry cereals, cholam and raggy, prices had generally advanced at the end of the year in a higher ratio than rice. This was no doubt due in some degree to the irregularity and uncertain character of the rainfall being unfavorable to the dry crops in certain parts of the country. Thus in Trichinopoly raggy which could be bought in January at 36.1 seers for the rupee, in December was valued at 27.2 seers for the rupee, while cholam, another dry grain staple, had risen from 31 to 22 seers for the rupee. The increase in the price of the dry cereals is of greater moment to the poor than a slightly enhanced value of rice, because four-fifths of the poorer classes of this Presidency depend upon the dry cereals, and not on rice, for their nutriment. The famine in Bengal has had the effect of increasing the activity of the export rice trade, and has probably tended to the rise in prices in Southern India; but, so far as can be ascertained, the rice crops in Southern India during 1873 were fair average crops, and the yield equal to more than local consumption. The dry cereals, pulses, &c., did, however, undoubtedly fall short of average crops in some districts, and hence the almost universal rise in prices towards the end of the year.

412. In Vizagapatam raggy and cholam were cheaper at the end of the year than at the beginning, and in Bellary, a great dry grain district, prices had remained stationary; but in all other districts there was a distinct advance in the prices of dry cereals, an advance which seems likely to continue during the present year, and which, with the active exports of rice to famine districts, will probably tend to the pinching of the poorer classes in this Presidency, and thus affect the public health.

Average Number of Imperial Seers of Grain per Rupee in the Districts of the Madras Presidency.

Districts.	2nd Semi Rice.												Coconut.												Ragoi.																
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.		
Ganjam	22.6	24.3	25.8	26.2	26.7	25.6	25.3	23.1	24.2	25.9	25.3	21.3	24.8	35.7	37.7	36.1	32.8	34.5	32.4	30.7	29.6	30.1	30.0	30.6	30.6	32.4	39.4	37.7	35.6	34.6	34.9	32.9	33.4	29.2	32.0	40.7	40.8	36.8	35.7		
Vizagapatam.	16.1	18.2	24.4	23.1	23.3	23.1	23.2	21.4	20.3	21.0	22.0	21.3	21.4	25.2	30.2	39.6	59.1	89.2	37.5	38.6	36.0	34.2	35.4	38.7	38.2	37.5	25.7	28.0	34.5	34.0	34.3	33.5	30.7	29.6	30.8	35.8	37.4	35.6	32.5		
Gudavary	21.2	...	16.4	19.2	19.1	18.6	18.0	17.4	17.6	17.9	18.3	17.8	18.2	27.8	...	26.5	27.7	26.8	25.6	25.6	25.0	24.6	25.4	25.4	25.4	26.1	26.1	26.7	...	29.7	30.5	31.4	30.4	30.5	29.5	29.5	30.0	30.8	31.0	30.9	
Kistna	13.0	13.2	15.1	14.8	14.7	14.3	13.6	13.1	13.2	13.5	14.0	14.1	13.9	18.0	16.9	19.9	20.0	19.6	19.6	18.0	17.1	16.9	17.5	17.8	20.2	18.8	21.2	24.0	25.9	25.8	27.9	27.0	24.6	23.5	19.7	19.8	21.2	23.9	23.9		
Nellore	15.6	16.2	19.1	15.8	15.2	15.3	17.4	15.9	15.4	15.1	15.1	15.0	15.9	26.6	28.3	32.7	26.6	23.9	22.9	23.6	22.5	19.9	19.9	19.3	19.4	22.7	31.0	31.4	36.8	39.4	23.1	27.7	28.6	26.0	23.5	23.0	22.0	21.5	27.5		
Cuddapah	13.3	13.0	15.0	15.1	15.6	14.5	14.3	15.4	13.8	14.1	14.2	14.1	14.4	22.5	22.1	26.6	26.0	26.1	23.7	22.5	22.9	20.9	20.5	2.7	22.3	23.1	25.0	35.7	38.8	29.3	29.9	26.5	26.1	23.3	23.7	24.1	25.0	24.8	26.4		
Bellary	13.2	13.1	14.6	14.7	15.3	15.1	16.0	14.5	14.5	14.5	14.4	14.5	14.5	26.8	26.7	30.4	30.6	30.1	29.2	27.4	25.9	25.4	25.7	26.3	26.1	27.5	30.2	32.3	34.8	35.0	35.5	36.0	32.4	31.0	29.3	29.1	30.9	30.7	32.2		
Kurnool	13.6	12.5	11.9	12.2	12.5	12.4	12.4	12.1	12.3	12.4	12.1	12.3	12.4	12.1	21.8	20.5	21.6	24.6	24.3	24.5	23.1	21.8	20.5	21.6	22.6	23.3	25.2	25.2	23.3	23.0	27.6	28.2	28.3	28.0	27.6	22.9	25.7	24.0	25.1	26.7	
Madras	14.1	14.1	14.7	15.2	15.4	15.7	14.0	13.9	13.7	13.7	13.7	13.0	14.3	23.3	23.5	19.3	23.6	23.8	23.7	22.1	21.1	18.3	21.0	21.0	21.0	21.0	22.3	31.4	31.4	29.1	29.1	28.9	29.5	25.6	25.0	23.7	24.4	23.6	23.7	23.7	26.2
Chingleput	16.1	16.7	19.0	19.9	19.8	19.8	18.2	17.4	16.9	16.7	16.5	15.6	17.7	20.0	20.0	19.9	20.1	20.8	20.9	21.6	21.6	21.3	19.1	21.6	...	20.6	28.4	27.6	29.4	29.1	28.7	29.5	25.6	25.0	23.7	24.2	24.2	24.7	24.1	26.7	
North Arcot.	18.5	17.8	19.7	20.5	20.7	20.6	18.9	18.0	20.6	18.2	18.2	16.4	19.0	30.0	29.1	30.1	32.2	32.7	29.5	28.6	29.2	25.6	27.5	24.1	23.3	23.7	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	31.6	
South Arcot.	17.2	16.9	20.1	19.6	19.2	19.7	18.6	17.8	17.7	17.2	17.0	15.8	18.1	30.1	36.4	41.8	41.8	41.6	33.7	26.2	24.4	24.8	24.5	26.0	25.9	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	29.0	
Tanjore	17.0	17.9	15.9	15.3	15.2	15.0	14.5	14.2	14.2	14.2	15.0	15.8	14.7	15.4	25.4	30.7	25.8	23.2	23.6	23.3	21.8	19.4	24.7	20.9	27.1	28.9	24.8	34.3	34.8	32.5	30.4	28.6	26.0	23.2	24.8	26.9	26.5	29.5	31.6	29.1	
Trichinopoly.	16.1	16.8	17.2	16.1	15.8	15.1	15.0	15.0	14.9	14.8	15.2	15.0	15.6	31.4	34.8	31.4	31.1	30.5	24.4	22.9	22.3	21.0	20.3	21.0	23.3	25.1	36.1	35.4	31.6	30.4	29.4	27.2	26.6	24.7	24.4	25.8	27.1	27.2	28.8		
Madura	13.4	13.6	15.6	15.6	15.7	15.6	15.6	15.5	15.3	14.8	14.6	14.4	15.0	34.0	32.6	35.2	35.2	35.6	36.1	36.3	36.2	31.5	32.5	32.2	31.5	34.3	34.0	31.4	35.6	36.2	35.5	33.4	33.4	32.1	32.7	31.3	30.8	31.7	33.2		
Thiruvelli	12.5	12.5	13.9	13.9	13.8	13.3	13.1	13.3	13.0	13.3	13.1	12.1	13.1	21.9	24.4	22.3	23.5	25.5	25.7	25.5	24.9	25.1	25.0	23.3	23.7	24.9	28.3	27.0	27.4	26.6	25.3	24.7	24.2	23.3	24.3	24.6	23.9	25.0	25.4		
Coimbatore...	12.9	13.0	14.7	14.1	14.3	14.1	13.5	13.4	13.4	13.4	13.4	14.0	13.7	13.4	22.4	22.8	27.0	24.7	20.6	21.8	21.1	19.6	19.7	19.3	21.6	20.9	21.9	30.6	28.7	31.7	30.3	24.6	20.0	26.0	25.5	24.3	25.8	28.6	29.4	27.9	
Neigherries.	9.7	9.7	9.9	10.4	9.9	9.6	9.7	9.2	9.7	9.4	9.6	9.9	9.7	18.0	16.4	20.2	19.1	16.2	16.1	16.9	17.8	17.1	16.2	16.3	17.1	17.9	21.2	20.9	20.1	20.7	19.6	18.7	18.4	18.4	17.7	16.5	18.1	19.8	19.2		
Salom	16.8	16.6	15.9	15.5	17.3	16.2	14.3	14.5	14.9	15.5	15.3	15.3	15.7	29.3	29.3	28.1	27.4	26.5	30.7	24.4	25.6	28.0	26.3	25.4	25.3	35.8	37.3	34.1	31.5	33.1	30.1	28.3	19.2	29.0	30.8	31.2	30.3	31.0			
South Canara	14.3	14.7	15.6	14.6	14.2	13.8	13.1	13.0	13.5	13.9	14.2	14.2	14.1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	26.2	25.1	23.1	22.0	22.9	21.4	20.9	20.6	20.7	20.2	20.4	22.2	22.1	
Makbar	12.9	13.7	13.5	13.3	13.0	13.1	13.8	13.2	13.9	13.7	14.0	13.0	13.4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23.8	23.1	21.2	24.4	22.5	23.6	23.2	22.9	16.7	23.6	22.3	22.8	22.0

SECTION V.

RECORD OF PERSONAL PROCEEDINGS.

413. As explained in the report of 1872, I had been requested by Government to undertake the superintendence of the tabulation of the Census schedules of the Presidency in addition to my current duties, and this special work necessitated my presence in Madras for almost the whole of the year 1873. The first volume of the printed Census tables, including my report, was despatched to Government in December 1873, and a second volume of tables is now nearly ready for issue. My duties in connexion with the Census Office were, therefore, practically completed by the end of 1873.

414. In the month of January 1873, I was desired by Government to proceed to Cannanore to ascertain how far any insanitary conditions of the barracks or station of Cannanore might have contributed to the outbreak of typhoid fever in Her Majesty's 43rd Regiment, recently arrived from England. I had the advantage of meeting Dr. Massy, c.B., Deputy Surgeon-General, Mysore Division, and of inspecting with him the barracks and surrounding area, and of obtaining the weight of his support in recommendations for the sanitary improvement of the barracks and neighbourhood. On our recommendation Government has been pleased to insist upon the inclusion of the private property of the Beebee of Cannanore within the area of municipal control, so that the nuisances arising on such property will hereafter be dealt with promptly by the municipal authorities.

On the occasion of this visit to Cannanore I inspected the Military and Civil establishments generally of the station, and the same at Calicut on my return.

415. In November I visited Coimbatore, in reference to an outbreak of sickness in the Central and District Jails, and subsequently proceeded to Trichinopoly, Vellore, and Chittoor, in reference to certain questions connected with the health of prisoners in jail. These were all the tours made in the course of the year, my time being so fully taken up in the supervision of the large establishment of the Census Office, and in the compilation and revision for the press of the Census report and tables.

416. By G. O. No. 975, of 12th July 1873, the Sanitary Commissioner was appointed a member of a committee for the revision of the Municipal Act for the town of Madras. The committee commenced its sittings in August, and met once a week regularly, until the end of the year, when its labors were still unfinished.

417. By G. O. No. 921, of 18th September 1873, I was also nominated a member of a committee for the re-organization of establishments for the General Hospital, Madras. This committee began its labors in October, and did not complete them before March 1874, meeting weekly for the transaction of business.

418. During the year also the Sanitary Commissioner was nominated a member of a committee for the selection of a site for a ^{Military Hospital, Madras.} European Military Hospital in Madras. This question has been recently decided by Government, the committee having finally chosen an excellent site on the sea beach, now occupied by the Public Works Department Workshops, and which will be suitable both as a marine sanitarium for up-country invalids, and for the sick of the corps in garrison.

SECTION VI.

SANITARY PROGRESS.

419. The sanitary work done in a single year bears but a small proportion to the work requiring to be done, but still, on the whole, it is satisfactory to note that we are not standing still, even if our progress is not so rapid as the most earnest reformers could desire.

^{Working of the Local Funds Acts.} 420. As regards our Local Funds administration, there has not been so much done as was at one time expected.

The Local Funds Act of 1870 contemplated the imposition of a house-tax to meet the special needs of educational and sanitary expenditure, but it has not been thought advisable to resort to this method of raising money, and consequently the expenses connected with education and sanitary improvements have to be met out of the general funds of the Local Boards, which funds are mainly raised from an addition of one anna to the rupee of land assessment.

In all the Local Fund circles some provision is made in the annual estimates for sanitary works, such as cleansing and deepening of public wells and tanks, drainage and improvement of village sites, scavengering small towns, &c., and the moneys so set aside are usually spent in works of improvement, but they necessarily are inadequate to the general sanitary improvement of whole circles. Here and there a village tank may be cleaned, a new well built, or streets supplied with public scavengers, but the means at disposal do not permit of these things being done on a systematic plan.

I have already recommended to the Board of Revenue the establishment of the principle of expending the sanitary allotments, preferentially, in the form of grants-in-aid to towns and villages which undertake to tax themselves to meet a moiety of the cost of the desired works. In this way the amount of money appropriated for sanitary works will be made to go much further, and the fact of communities expressing their readiness to find a portion of the funds out of their own pockets will be a guarantee for economical expenditure, and also for the appreciation of the work by the people.

^{Municipal Towns.} 421. The municipal system has not made much growth in Madras. In the beginning of the year there were 46 towns under municipal government, and only one town has been added to the list during the year.

The progress of municipalities in sanitary improvements would be more marked but for the fact that their resources are so crippled. The people are

poor, and the utmost that local taxation by municipalities has extracted from the inhabitants does not quite average two shillings per head of the town populations. It will be obvious from these figures that when ordinary provision has been made for the repair of roads, lighting, conservancy, primary education, and medical aid to the poor, very little remains for expenditure on works of permanent improvement. During the past year, moreover, intimation has been given by the Government that the tax "on trades and professions" must in future be abandoned, so that the towns will in future have to still further curtail their expenditure, or to resort to new methods of raising money.

If the municipal system is to expand, so as to include all the town populations for which it is adapted, it will be advisable to permit a certain latitude of action, as to the raising of ways and means. A tax that may be unsuitable in one locality may be well adapted for another, and it would seem to be inadvisable to draw a hard and fast line in this respect. In the North-West Provinces, and other parts of India, the chief source of municipal revenue is an *octroi* duty on certain articles of common consumption, but this source of revenue has been, as yet, untried in the Madras Presidency.

^{Town Populations.} 422. The Census of the Presidency shows us that in 1871 there were 403 towns or villages with populations of more than 5,000 and less than 10,000 inhabitants, 52 towns of more than 10,000 and less than 15,000, 14 towns with populations of from 15,000 to 20,000, 27 with populations of from 20,000 to 50,000, and six with populations over 50,000 persons; and to most of these groups of population the principles of municipal self-government, as regards sanitary questions, are applicable. But taking only the places with 10,000 and upwards of inhabitants, there are 99 towns that it would be proper to place under municipal control, instead of the existing number of 46. If we deduct the *Amshorns* (large village areas of scattered population) of Malabar, there are about 300 large villages and towns in this Presidency of more than 5,000 inhabitants which ought to be self-dependent for the means of cleanliness. In a large number of these towns and villages the chief requirements are scavengering and good water, and these objects might probably be secured by some simple form of local taxation.

^{Difficulties in the extension of municipal government.} 423. But while on public grounds it would seem desirable to extend the system of municipal taxation, it must be borne in view that we have to deal with a people who are very ignorant and very poor, and who are mainly devoid of that form of public spirit which enables communities to bear with equanimity the burden of local taxes for local objects.

To establish municipal institutions in places where there are no educated men, or leaders of public opinion, would assuredly end in failure, and I should myself prefer to see the gradual development of the system, rather than run the risk of defeating our objects by a too hasty organization of municipal establishments amongst communities that are unable to appreciate them at their right value.

^{Progress in existing Municipalities.}

424. I shall now notice briefly the leading features of the various municipal towns during the past year.

Berhampore.

Population	...	...	21,670
Births registered	...	...	869, or 17.02 per mille.
Deaths do.	...	...	402, or 18.55 "
Vaccinated	...	...	157, or 7.24 "
Estimated income	...	...	Rs. 19,750, or 0.14-6 per head.
Do. expenditure	...	...	" 18,870
Do. do. for sanitary purposes	...	...	" 12,610

425. During the year V-shaped cut stone drains, to the extent of 1,857 yards, were constructed, five new roads were completed, and two are under construction. A trench latrine was introduced for the use of the regiment, as an experimental measure, and has been found to be useful.

426. The public health in the town was fairly good during the year. No cholera prevailed. Vaccination was but differently carried out.

Chicacole.

Population	...	...	15,587
Births registered	...	...	361, or 23.1 per mille.
Deaths do.	...	...	442, or 28.3 "
Vaccinated	...	...	152, or 9.7 "
Estimated income	...	...	Rs. 11,720, or 0.11-11 per head.
Do. expenditure	...	...	" 10,760
Do. do. for sanitary purposes	...	...	" 6,320

427. During the year the principal streets were furnished with masonry drains to the extent of 6,256 running yards; additional dust-bins were provided; a dozen latrines under construction.

428. Public health in the town fairly good during the year. Vaccination was not satisfactory in proportion to population.

Vizagapatam.

Population	...	...	32,191
Births registered	...	...	908, or 28.2 per mille.
Deaths do.	...	...	817, or 25.3 "
Vaccinated	...	...	1,296, or 40.2 "
Estimated income	...	...	Rs. 24,760, or 0.12-3 per head.
Do. expenditure	...	...	" 24,260
Do. do. for sanitary purposes	...	...	" 11,458

429. Tanks and wells were cleaned and deepened, two new wells sunk, 16,358 yards of prickly-pear removed, surface drains, 441 yards in length, constructed, reclamation of a swamp proceeded with, 3,458 square yards of the land filled up.

Public health.

430. Public health good, except that small-pox was more fatal than usual. The number of vaccinations was good.

Bimlipatam.

Population	...	...	8,744
Births registered	...	...	259, or 29.5 per mille.
Deaths do.	...	...	210, or 24.01 "
Vaccinated	...	...	350, or 40.02 "
Estimated income	...	...	Rs. 9,400, or 1.1-2 per head.
Do. expenditure	...	...	" 9,400
Do. do. for sanitary purposes	...	...	" 6,944

New works.

431. None.

Vizianagram.

Population	...	...	20,169
Births registered	...	...	462, or 22.9 per mille.
Deaths do.	...	...	453, or 22.4 "
Vaccinated	...	...	572, or 28.3 "
Estimated income	...	...	Rs. 12,830, or 0.10-2 per head.
Do. expenditure	...	...	" 12,830
Do. do. for sanitary purposes	...	...	" 7,063

New works.

432. One hundred and thirty-three yards of tunnel drains, 256 yards brick arched tunnel drains, 714 yards rough stone open drains, and one new latrine constructed. Many repairs to existing drains and latrines and wells.

Public health.

433. Dengue and small-pox prevalent. No cholera.

Palconda.

434. The Municipality in this town was abolished during the year, as owing to the want of public spirited residents to interest themselves in the subject, the municipal taxes could neither be properly raised nor expended.

Rajahmundry.

Population	...	...	19,738
Births registered	...	...	270, or 13.6 per mille.
Deaths do.	...	...	308, or 15.6 "
Vaccinated	...	...	987, or 50.005 "
Estimated income	...	...	Rs. 22,578, or 1.2-3 per head.
Do. expenditure	...	...	" 18,216
Do. do. for sanitary purposes	...	...	" 11,575

New works.

435. Eight tunnels, two brick drains, 81 dust-bins. Of 948 private latrines 750 were brought under the control of the municipal scavengers. Prickly-pear and croton plants eradicated from the station.

436. Fever and small-pox prevalent in the district. In 1872 I found small-pox prevailing in the town, and recommended a temporary increase in the vaccine staff. The result of the vaccine operations in that year, and in 1873, was that only two persons died of small-pox in 1873. The birth and death registration in this town is unreliable.

Cocanada.

Population	...	...	17,839
Births registered	...	...	502, or 28.1 per mille.
Deaths do.	...	...	518, or 29.03 "
Vaccinated	...	...	895, or 50.1 "
Estimated income	...	...	Rs. 24,000, or 1.5-6 per head.
Do. expenditure	...	...	" 24,000
Do. do. for sanitary purposes	...	...	" 14,240

437. Eight new latrines provided, twenty-two wells excavated for the hot weather, contagious disease wards built in connection with the hospital. The water supply of this town is provided from the canal which is fed by the Godavery river, but as the canals are usually dry for three months in the year, local sources have to be depended upon for the hot months.

Public health.

438. Deaths from fever and small-pox were numerous, but there was no cholera during the year. Vaccination had been neglected prior to 1872.

Ellore.

Population	...	...	25,487
Births registered	...	...	704, or 27.6 per mille.
Deaths do.	...	...	782, or 30.6 "
Vaccinated	...	...	663, or 26.01 "
Estimated income	...	...	Rs. 16,430, or 0.10-3 per head.
Do. expenditure	...	...	" 16,346
Do. do. for sanitary purposes	...	...	" 9,080

New works.

439. Seven temporary latrines built. A dispensary established.

Public health.

440. Small-pox very fatal, causing 165 deaths. No cholera. Fever prevalent in the surrounding district. The vaccine operations in this town have not been sufficiently attended to.

Masulipatam.

Population	...	...	36,188
Births registered	...	...	854, or 23.5 per mille.
Deaths do.	...	...	665, or 18.3 "
Vaccinated	...	...	1,327, or 36.6 "
Estimated income	...	...	Rs. 30,800, or 0.13-7 per head.
Do. expenditure	...	...	" 30,800
Do. do. for sanitary purposes	...	...	" 19,610

441. Extension of the water-supply works, including the building of five new conduits and dipping reservoirs; strengthening of the water-supply channel; erection of a new fish market; additions to Dispensary buildings, repairs of wells, reservoirs, conduits, latrines, &c., and oval of 20,000 square yards of prickly-pear.

442. Small-pox and fevers were rather prevalent, but there was no cholera.

Guntoor.

Population	...	...	18,033
Births registered	...	...	350, or 19.4 per mille.
Deaths do.	...	...	433, or 24.01 "
Vaccinated	...	...	1,272, or 70.5 "
Estimated income	...	...	Rs. 32,924, or 1.13-2 per head.
Do. expenditure	...	...	" 32,586
Do. do. for sanitary purposes	...	...	" 22,586

New works.

443. None of any importance.

Public health.

444. Small-pox epidemic prevalent and fatal in the town.

Nellore.

Population	...	...	29,922
Births registered	...	...	650, or 21.7 per mille.
Deaths do.	...	...	451, or 15.07 "
Vaccinated	...	...	590, or 19.7 "
Estimated income	...	...	Rs. 30,250, or 1.0-2 per head.
Do. expenditure	...	...	" 28,700
Do. do. for sanitary purposes	...	...	" 14,926

New works.

445. An important work for the supply of the town with water from the large Nellore tank was commenced during the year, but as it is estimated to cost from 30,000 to 35,000 Rupees, it will take some years to complete, unless money be borrowed specially for the purpose. The portion of the town within the old fort is badly in want of a water supply, all the wells being more or less impregnated with sewage matters. The works in progress are a masonry channel from the tank to the Cutcherry square, where there is a reservoir, and from which it is intended to distribute the water by pipes throughout the town.

Public health.

446. Good; no small-pox or cholera; fever rather prevalent.

Madras.

Population	...	...	397,552
Births registered in 1873	...	...	9,382, or 23.5 per mille.
Deaths registered in 1873	...	...	14,609, or 36.7 "
Vaccinated in 1873	...	...	16,083, or 40.4 "
Estimated income for 1873-74	...	...	Rs. 5,54,400, or 1.6-3 per head.
Do. expenditure for 1873-74	...	...	" 5,61,077
Do. do. for sanitary purposes	...	...	" 1,91,266

447. During the year some new latrines were built in addition to those already existing; 250 dust-bins were erected; some of the drains in the 2nd and 3rd divisions were flushed with water from the Travelyan Water Works, and some of the Cariah villages remodelled.

448. Small-pox prevailed with great intensity during the year, carrying off 1,062 persons, the greater number of the victims being young children unprotected by vaccination. Fevers were not so prevalent as in 1872, and there was an entire absence of epidemic cholera; but bowelcomplaints were more fatal than usual.

Conjeevaram.			
Population	...	...	37,327
Births registered	...	...	762, or 20.4 per mille.
Deaths do.	...	...	885, or 22.8 "
Vaccinated	...	...	657, or 17.6 "
Estimated income	...	...	Rs. 37,490, or 1-8-4 per head.
Do. expenditure	...	...	37,180
Do. do. for sanitary purposes	...	...	25,950

449. The projected improvements of the water supply, as recommended by me four years ago, are still in abeyance. Nothing was done during the year, except to complete a survey of the feeding channel. There appears to have been no expenditure during the year on works of a sanitary character.

450. Small-pox was epidemic, causing considerable loss of life. No cholera.

Cuddalore.			
Population	...	...	40,290
Births registered	...	...	966, or 23.9 per mille.
Deaths do.	...	...	674, or 16.7 "
Vaccinated	...	...	724, or 17.9 "
Estimated income	...	...	Rs. 25,120, or 0-11-2 per head.
Do. expenditure	...	...	27,990
Do. do. for sanitary purposes	...	...	16,180

451. During the year some latrines have been added to those formerly built; 100 new dust-bins have been put up; surface drainage has been extended and improved; a Lying-in Hospital has been established in addition to the two Civil Dispensaries already maintained at the cost of the Municipality in this town.

452. The health of the people has on the whole been good, and they have been free of epidemics.

Chellumbrum.

Population ... 15,519

This is an important pagoda town in the South Arcot district, which late in the year was constituted a municipality. The President reports: "There has

been a powerful opposition to the introduction of the Act, and previously to its being brought into force numerous petitions praying that its provisions might not be extended to the town were presented. Since its introduction the same clique, aided, I am sorry to say, by some of the Native Commissioners, has done its best to render nugatory the endeavours of the official members to inaugurate improvements."

This quotation is enough to show that the extension of the system of municipal government to the smaller towns is no easy matter. There seems to be an impression with some persons in England, who have no practical knowledge of India or its people, that the latter are but too anxious to tax themselves to secure good water and cleanliness, but this is not my experience. I find everywhere the people ready enough to acknowledge the benefits of good water, street conservancy, lighting, medical aid to the poor, &c.; but when the question arises who is to pay for these advantages, the invariable reply is the "Circar" or "Government," and this I may state is the real feeling of intelligent and educated native gentlemen who have had experience of municipal government. They lose sight of the fact that before a Government can expend money for the benefit of local communities, it must augment its collections from the people at large. The "ignorant impatience of taxation" is so great that, otherwise sensible and reasonable, men have no hesitation in avowing their belief that the Government should do everything, and the town populations nothing for their sanitary welfare. It is this deep-rooted feeling that Government officials have to contend against in municipal administration, and which mars the successful working of municipalities where the official element is absent or but feebly represented.

Trichinopoly.

Population	...	...	76,530
Births registered	...	...	1,678, or 21.9 per mille.
Deaths do.	...	...	1,486, or 19.4 "
Vaccinated	...	...	3,846, or 50.2 "
Estimated income	...	...	Rs. 78,390, or 1-0-4 per head.
Do. expenditure	...	...	78,170
Do. do. for sanitary purposes	...	...	44,754

451. The chief sanitary work during the year has been the filling up of the moat around the old fort, and the construction of drains for the discharge of flood waters from the town. The Commissioners have under consideration provision for house and street drainage.

The filling up of the fort ditch has been a severe tax on municipal funds, and the work will yet take one or two years to complete.

452. Small-pox prevailed to some extent, causing 111 deaths, but otherwise the town has been fairly healthy. The vaccine operations were prosecuted with much vigour.

Sreerungum.

Population ...	11,271
Births registered ...	447, or 39.6 per mille.
Deaths do. ...	456, or 40.4 „
Vaccinated ...	237, or 25.4 „
Estimated income ...	Rs. 16,320, or 1-7-2 per head.
Do. expenditure ...	„ 16,320
Do. do. for sanitary purposes ...	„ 11,054

Tanjore.

Population ...	52,175
Births registered ...	1,680, or 32.1 per mille.
Deaths do. ...	1,592, or 30.5 „
Vaccinated ...	1,378, or 26.4 „
Estimated income ...	Rs. 56,300, or 1-1-3 per head.
Do. expenditure ...	„ 56,300
Do. do. for sanitary purposes ...	„ 32,522

453. Nine drains, 7 furlongs and 46 yards in length, constructed; main drain completed; four sets of latrines erected; two large wells excavated; minor works of repair executed; new markets are in course of erection; the water-supply was improved by deepening and widening the feeder of the Sivagunga tank.

New works.

454. This is almost the only municipal town in which numerous deaths by cholera have been reported. There are twenty fatal cases entered in the register, spread over eight months of the year. The deaths from small-pox were not so numerous as might have been expected, considering the inefficiency of the vaccination in the town. The Commissioners report that they had ceased to pursue the system of payment by results to vaccinators, on the ground of the difficulty in checking the returns, but difficulties of this kind have not been apparent in Vellore, and other towns, where the system has been successfully worked, in combination with small money awards to the person brought up for vaccination.

Public health.**Combaconum.**

Population ...	44,444
Births registered ...	1,044, or 23.4 per mille.
Deaths do. ...	1,219, or 27.4 „
Vaccinated ...	1,123, or 25.2 „
Estimated income ...	Rs. 48,000, or 1-1-3 per head.
Do. expenditure ...	„ 46,710
Do. do. for sanitary purposes ...	„ 28,980

New works.

455. Three latrines erected. New detached wards to the Civil Hospital, for caste patients, built.

Public health.

456. Fairly good. No epidemic.

Mayaveram.

Population ...	21,165
Births registered ...	637, or 30.09 per mille.
Deaths do. ...	576, or 27.2 „
Vaccinated ...	591, or 27.9 „
Estimated income ...	Rs. 19,600, or 0-14-9 per head.
Do. expenditure ...	„ 19,600
Do. do. for sanitary purposes ...	„ 11,480

New works.

457. Twelve tunnels at the junction of roads for drainage purposes. Temporary latrines repaired.

Public health.

Small-pox prevalent, otherwise good.

Negapatam.

Population ...	48,525
Births registered ...	1,498, or 30.8 per mille.
Deaths do. ...	1,298, or 26.7 „
Vaccinated ...	721, or 14.8 „
Estimated income ...	Rs. 51,660, or 1-1-0 per head.
Do. expenditure ...	„ 51,660
Do. do. for sanitary purposes ...	„ 31,964

New works.

458. None reported.

Public health.

459. Small-pox prevalent. Vaccination requires to be prosecuted with greater vigour in this town.

Mannargoody.

Population ...	17,703
Births registered ...	586, or 33.1 per mille.
Deaths do. ...	511, or 28.8 „
Vaccinated ...	531, or 29.9 „
Estimated income ...	Rs. 20,150, or 1-2-2 per head.
Do. expenditure ...	„ 20,150
Do. do. for sanitary purposes ...	„ 11,506

New works.

460. The water-supply channel to fill the tanks in this town, which had been under construction for the last three years, has been completed. An abundant supply of good fresh water has thus been secured, and all the tanks in the town have been replenished.

Public health.

461. Small-pox prevalent; a few deaths also from sporadic cholera.

Madura.

Population	...	...	...	51,987
Births registered	...	...	...	1,516, or 29.1 per mille.
Deaths do.	...	...	...	1,261, or 24.2 "
Vaccinated	...	...	...	2,630, or 50.5 "
Estimated income	...	...	...	Rs. 83,835, or 1-9-9 per head.
Do. expenditure...	...	...	...	" 65,325
Do. do. for sanitary purposes	...	...	...	" 44,286

462. A new Civil Hospital was under construction. The Commissioners have set aside the sum of Rupees 5,000 to pay a Sanitary Engineer to draw up a scheme for the water supply and drainage of the town. These works were pointed out by me in 1870 as urgently needed.

463. The public health of the town has been fair. Only 20 deaths are recorded from small-pox. The low mortality from this epidemic, which has been rife over all the district, I attribute to the exertions of Dr. Gamack, the Civil Surgeon, aided by his brother Commissioners, in extending the practice of vaccination.

A type of fever, known to the Tamils as "*sella kachal*," has been prevalent and fatal, but no professional description of the fever has reached me.

Dindigul.

Population	...	...	...	12,865
Births registered	...	...	...	434, or 33.7 per mille.
Deaths do.	...	...	...	230, or 17.8 "
Vaccinated	...	...	...	1,250, or 97.1 "
Estimated income	...	...	...	Rs. 12,920, or 1 per head.
Do. expenditure	...	...	...	" 9,468
Do. do. for sanitary purposes...	...	...	...	" 3,720

464. Drains have been constructed in a number of streets. Brickly-pear is being removed. The number of latrines has been increased.

A project for the supply of the town with water is hanging fire for want of funds. This town will soon have railway communication with Trichinopoly and Madura, and will probably increase in size and importance.

465. Dengue fever prevailed slightly. Vaccination has been well kept up in the town, so that the small-pox mortality was only 14.

Tinnevely.

Population	...	...	...	21,044
Births registered	...	...	...	693, or 32.9 per mille.
Deaths do.	...	...	...	666, or 31.6 "
Vaccinated	...	...	...	500, or 23.7 "
Estimated income	...	...	...	Rs. 20,920, or 0-15-10 per head.
Do. expenditure	...	...	...	" 20,420
Do. do. for sanitary purposes	...	...	...	" 10,810

468. Two new streets opened out through densely-populated parts of the town to which access was previously difficult, and where scavenging was impossible. Seven narrow streets and lanes widened to facilitate ventilation and traffic. Seven new drainage tunnels built, and many repaired. The bed of three large irrigation channels running through the town were cleaned of mud and filth. Progress was made in the masonry aqueduct for bringing water from the tank near the town to flush the drains.

469. Bowel-complaints were prevalent during the year, but there were not many deaths from small-pox.

Palamecottah.

Population	...	...	...	17,945
Births registered	...	...	...	678, or 37.7 per mille.
Deaths do.	...	...	...	458, or 25.5 "
Vaccinated	...	...	...	615, or 34.2 "
Estimated income	...	...	...	Rs. 21,460, or 1-3-1 per head.
Do. expenditure	...	...	...	" 20,500
Do. do. for sanitary purposes	...	...	...	" 12,035

470. A latrine was built and a new mortuary constructed, also sheds for dry earth for the existing latrines. Parapet, walls and flooring before public wells, and drains for the escape of waste water, were constructed during the year.

471. The town was free of epidemic sickness. There were fourteen deaths from small-pox. Vaccination was in abeyance during the latter part of the year, through the misconduct of the municipal vaccinator who was subsequently dismissed.

Tuticorin.

Population	...	...	...	10,565
Births registered	...	...	...	532, or 50.3 per mille.
Deaths do.	...	...	...	419, or 39.6 "
Vaccinated	...	...	...	1,512, or 143.2 "
Estimated income	...	...	...	Rs. 15,750, or 1-7-10 per head.
Do. expenditure	...	...	...	" 15,385
Do. do. for sanitary purposes	...	...	...	" 9,920

472. The conduit for bringing fresh water into the town was completed during the year, and this most important work will be of great benefit to the people, as the well water was nearly all bad, and brackish. Another important work is the construction of a sea wall and the reclamation of the foreshore facing the town. This work is now nearly complete. About 700 houses of the poorer people have been swept away for the site of the new railway station, and the new huts have been laid out on a better site. Tuticorin lies so low that drainage is very difficult. The railway will be of great advantage to the town, and a better style of building will probably spring up as the trade and traffic of the port increase.

473. There were eight deaths from small-pox, and dengue fever prevailed in the beginning of the year, but no other epidemic disease prevailed. Vaccination was well kept up.

Bellary.

Population	...	...	...	51,766
Births registered	...	...	...	1,016, or 19.6 per mille.
Deaths do.	...	...	...	718, or 13.8 „
Vaccinated	...	...	...	1,369, or 26.4 „
Estimated income	...	...	...	Rs. 70,598, or 1-5-9 per head.
Do. expenditure	...	...	...	„ 66,088
Do. do. for sanitary purposes	...	...	...	„ 40,178

474. A new slaughter-house and one additional latrine constructed during the year. A system of house-to-house inspection of private latrines instituted. Bridges, tunnels, and drainage attended to. A new feeding channel to the large tank constructed.

The measures taken of recent years to enlarge the water supply of this town have been successful, and during the two last years there has been no scarcity.

475. The health of all classes have been fairly good during the year. Small-pox was rather prevalent in the district.

Ghooty.

Population	...	...	...	6,730
Births registered	...	...	...	211, or 31.3 per mille.
Deaths do.	...	...	...	168, or 24.9 „
Vaccinated	...	...	...	297, or 44.1 „
Estimated income	...	...	...	Rs. 7,780, or 1-2-5 per head.
Do. expenditure	...	...	...	„ 7,496
Do. do. for sanitary purposes	...	...	...	„ 3,326

476. Four new latrines were erected.

477. Small-pox prevalent. No other epidemic.

Anantapoor.

Population	...	...	...	4,918
Births registered	...	...	...	156, or 31.7 per mille.
Deaths do.	...	...	...	90, or 18.3 „
Vaccinated	...	...	...	268, or 54.4 „
Estimated income	...	...	...	Rs. 7,120, or 1-7-1 per head.
Do. expenditure	...	...	...	„ 6,120
Do. do. for sanitary purposes	...	...	...	„ 3,410

478. None of any note during the year. The income is barely enough for the support of the ordinary establishment.

479. No deaths from small-pox. Population healthy.

Adoni.

Population	...	...	...	22,723
Births registered	...	...	...	1,098, or 48.3 per mille.
Deaths do.	...	...	...	788, or 34.6 „
Vaccinated	...	...	...	1,708, or 75.1 „
Estimated income	...	...	...	Rs. 20,238, or 0-14-4 per head.
Do. expenditure	...	...	...	„ 18,586
Do. do. for sanitary purposes	...	...	...	„ 13,858

480. Two large masonry latrines under construction, cleaning of wells, &c.

481. In connection with the vaccination in this town, which appears to have been very successfully conducted on the results' system, it may be noted that only five deaths from small-pox occurred during the whole year. There was no epidemic, but deaths from malarious fevers seem to have been numerous.

Kurnool.

Population	...	...	...	25,579
Births registered	...	...	...	616, or 24.08 per mille.
Deaths do.	...	...	...	891, or 34.8 „
Vaccinated	...	...	...	344, or 13.4 „
Estimated income	...	...	...	Rs. 21,000, or 0-13-1 per head.
Do. expenditure	...	...	...	„ 21,000
Do. do. for sanitary purposes	...	...	...	„ 15,874

482. The drainage of the town has been proceeded with, and in those parts provided with drains and flushed by the water supply, the house cesspits have been closed.

The number of vaccine operations shows that the population is but inadequately protected from small-pox.

The general establishment for conservancy of the town has been maintained.

483. Small-pox caused 10 deaths, fevers 408. Malarious fevers have been very prevalent, not only in the town, but throughout the district of Kurnool for the last two years.

Cumbum.

Population...	7,295
Births registered ...	286, or 39.2 per mille.
Deaths do. ...	292, or 40.02 "
Vaccinated...	107, or 14.6 "
Estimated income ...	Rs. 7,203, or 0-15-9 per head.
Do. expenditure ...	7,161
Do. do. for sanitary purposes...	2,786

484. Some work has been done in improving the drainage of the town. Cumbum is surrounded by irrigated land, and from its situation is very malarious. It is the head-quarters of the Assistant Collector, but the health of the European residents has lately been so bad, that it has been suggested to remove them elsewhere.

485. No cholera, and only three deaths from small-pox. For the past two years intermittent fever has been most prevalent.

The Vice-President of the Municipality observes: "While I write this, there is hardly a house in Cumbum, in which some one is not suffering, or has not suffered within the last month (December and January) from fever. All the public business is impeded by repeated absence from work on account of fever." All the servants of the Vice-President (15 in number) were down with fever when he wrote, in January. The vaccine operations are insufficient.

Cuddapah.

Population ...	16,275
Births registered ...	558, or 34.2 per mille.
Deaths do. ...	601, or 36.9 "
Vaccinated ...	326, or 20.00 "
Estimated income ...	Rs. 31,838, or 1-15-3 per head.
Do. expenditure ...	31,838
Do. do. for sanitary purposes ...	21,832

486. Five new latrines and a slaughter-house were built. The new market is still under construction.

A temporary channel in the Boogra river was kept open during the hot weather, whereby a supply of wholesome water was available for the townspeople during the dry hot months.

I have already urged upon the Commissioners the propriety of tapping this stream some three miles above the town, and bringing the water by a pipe into the centre of the town for distribution, but the execution of this work is delayed from various causes.

487. No epidemic during the year. Fever rather prevalent in the cold season. The vaccination department requires to be worked with more effect.

Vellore.

Population ...	38,022
Births registered ...	612, or 16.09 per mille.
Deaths do. ...	742, or 19.5 "
Vaccinated ...	1,688, or 44.3 "
Estimated income ...	Rs. 55,170, or 1-7-2 per head.
Do. expenditure ...	54,000
Do. do. for sanitary purposes ...	31,560

488. Numerous drains, bridges, and tunnels; a new latrine, slaughter-house, sheds, &c.; cleaning of the supply channel of the large tank.

489. Fever prevalent, and small-pox; great exertions made to control the latter by vaccination. The registration of births and deaths is defective.

Wallajahpett.

Population ...	12,103
Births registered...	424, or 35.03 per mille.
Deaths do. ...	384, or 31.7 "
Vaccinated ...	227, or 18.7 "
Estimated income ...	Rs. 12,340, or 1-0-3 per head.
Do. expenditure ...	12,340
Do. do. for sanitary purposes ...	6,040

490. Tanks and wells repaired and cleaned. Three hundred and twenty-two dust boxes provided. Three new latrines designed. Stone drains built for carrying off flood waters. A new slaughter-house commenced.

This Municipality is under native management, and is very creditable to the intelligence and public spirit of the residents. The town is kept neat and clean.

491. Very fair. Small-pox prevailed. The vaccine operations are fewer than they should be, considering the population.

Ootacamund.

Population ...	9,982
Births registered ...	434, or 43.4 per mille.
Deaths do. ...	282, or 28.2 "
Vaccinated...	742, or 74.3 "
Estimated income ...	Rs. 23,700, or 2-5-11 per head.
Do. expenditure ...	23,700
Do. do. for sanitary purposes ...	9,878

492. The water-supply projects of this station were constructed by Government, and the distributing works have been in progress during the year. It is the intention of the municipal authorities to lay earthenware pipes wherever the water-supply channels run near public roads or places where the surface drainage falls into the channels. Earthenware pipes of fair quality are manufactured on the hills, and are now being used.

The upper portion of the lake bed is being reclaimed, and the prisoners have been at work on it for the whole of the dry season. It will take one or two years more to complete this work.

The Municipality are now manufacturing a manure from the contents of the latrines, ash-pits, slaughter-houses, &c., which is in demand by planters, and the proceeds of which are expected to yield about 3,000 rupees a-year.

There has been a marked improvement in the conservancy of the bazaars of this station of late years.

493. Very good; a few cases of small-pox occurred, the disease being introduced from the low country.

Coonoor.

Population	...	...	...	3,058
Births registered	...	...	...	88, or 28.7 per mille.
Deaths do.	...	...	...	107, or 34.9 "
Vaccinated	...	...	...	640, or 209.2 "
Estimated income	...	...	...	Rs. 8,600, or 2-12-11 per head.
Do. expenditure	...	...	...	8,228
Do. do. for sanitary	...	...	...	objects
	...	...	...	3,480

494. A new survey for the improvement of the water-supply has been completed. Water is at present distributed by open channels, and those running along public roads are much defiled. A scheme is prepared for distributing clean water to the bazaar. A large number of latrines are provided, and the refuse is readily bought by the planters. The present arrangements for the storing of refuse are unsatisfactory. The station is kept fairly clean.

495. Some cases of small-pox occurred during the year. Many of the deaths were of coolies, not inhabitants of the town, brought in from estates on the ghaut for treatment.

Salem.

Population	...	...	...	50,012
Births registered	...	...	...	1,527, or 30.5 per mille.
Deaths do.	...	...	...	1,205, or 24.09 "
Vaccinated	...	...	...	1,563, or 31.2 "
Estimated income	...	...	...	Rs. 41,900, or 0-13-4 per head.
Do. expenditure	...	...	...	41,900
Do. do. for sanitary	...	...	...	purposes
	...	...	...	25,220

496. The embankment of the river running through the town was proceeded with during the year, and roads opened along the banks. This is an important work, tending to the preservation of the water from fouling. It will take some years to accomplish.

Four new latrines were completed, and land purchased for the construction of others, in suitable localities.

The cart-stand was enlarged, metalled, and drained at a cost of Rupees 1,500. A new poor-house for the old and infirm was built.

Many wells were cleaned and repaired, and a staff of watchmen maintained to guard the river banks from fouling.

A Pariah settlement was removed to a more suitable locality.

497. Small-pox was prevalent and fatal, but confined almost entirely to young children. Of a total of 358 fatal cases of the disease, 336 were of young children.

The municipal vaccination in former years must have been neglected to allow of so many unprotected persons being ready to take the disease.

The health of the town was otherwise good, and only one doubtful case of cholera was reported.

Coimbatore.

Population	...	...	...	35,310
Births registered	...	...	...	682, or 19.3 per mille.
Deaths do.	...	...	...	394, or 11.1 "
Vaccinated	...	...	...	2,451, or 69.4 "
Estimated income	...	...	...	Rs. 28,516, or 0-12-11 per head.
Do. expenditure	...	...	...	26,256
Do. do. for sanitary	...	...	...	purposes
	...	...	...	13,183

New works.

498. The drainage of the town has been improved. A new lying-in ward has been built in connection with the Civil Hospital.

The town is extending towards the Mettapolliem road, and a new suburb in that direction has been laid out. The conservancy of the town has been well maintained.

499. Small-pox appeared as a violent epidemic in the beginning of the year, but its ravages were evidently shortened by the successful result of vaccine operations of the previous year, when about 3,000 children were successfully operated on. One hundred and four persons (mostly young children) died of small-pox. The registration of vital statistics in this town is very imperfect.

Erode.

Population ...	10,201
Births registered ...	119, or 11.6 per mille.
Deaths do. ...	213, or 20.8 „
Estimated income ...	Rs. 6,150, or 0.9-7 per head.
Do. expenditure ...	5,190
Do. do. for sanitary purposes ...	2,700

New works.

500. Two latrines were built; two public wells constructed and another repaired.

501. Small-pox caused 59 deaths; efforts were made to extend vaccination.

Public health.

The registration of births and deaths is not very trustworthy as yet in this town.

Mangalore.

Population ...	29,712
Births registered ...	625, or 21.03 per mille.
Deaths do. ...	593, or 19.9 „
Vaccinated ...	1,242, or 41.8 „
Estimated income ...	Rs. 30,595, or 1.0-5 per head.
Do. expenditure ...	29,600
Do. do. for sanitary purposes ...	17,200

New works.

502. None of any importance reported. The conservancy of about 2,000 houses in the town is under municipal control, and public latrines in suitable places are maintained.

Palghat.

Population ...	30,752
Births registered ...	962, or 31.2 per mille.
Deaths do. ...	654, or 21.2 „
Vaccinated ...	3,467, or 112.7 „
Estimated income ...	Rs. 24,900, or 0.12-11 per head.
Do. expenditure ...	24,900
Do. do. for sanitary purposes ...	7,817

New works.

An additional cart-stand was built.

Public health.

503. Dengue and small-pox prevailed. Three extra vaccinators were employed to meet the prevailing epidemic of small-pox, and, as will be seen from the large number of vaccinated, with some success. Fifty-two deaths occurred from small-pox.

Tellicherry.

Population ...	20,504
Births registered ...	615, or 29.9 per mille.
Deaths do. ...	456, or 22.2 „
Vaccinated ...	1,104, or 53.8 „
Estimated income ...	Rs. 19,750, or 0.15-4 per head.
Do. expenditure ...	19,750
Do. do. for sanitary purposes ...	8,160

New works.

504. A new latrine and rest-house were built.

505. Small-pox prevailed and caused 75 deaths, chiefly amongst the fishermen and lower castes, who had been neglected in vaccination. There was very little disease otherwise.

Public health.

Cannanore.

Population ...	21,503
Births registered ...	549, or 25.5 per mille.
Deaths do. ...	460, or 21.4 „
Vaccinated ...	904, or 42.04 „
Estimated income ...	Rs. 25,450, or 1.2-11 per head.
Do. expenditure ...	25,450
Do. do. for sanitary purposes ...	9,404

During the year the operations of the municipality were extended to include the Karar limits of the cantonment, and the old town of Cannanore, but the measure has not been carried without strong opposition, and there have been no funds for the extension of sanitary works to the portions of the town but recently brought under control.

506. Roads have been made and repaired. Three latrines have been constructed and old ones improved. Dust-bins provided. Land purchased for widening of streets in the old town, and for constructing a new road.

New works.

Public health.

507. Small-pox prevalent. Enteric fever in the 43rd Regiment. No cholera.

Calicut.

Population ...	47,962
Births registered ...	1,293, or 26.9 per mille.
Deaths do. ...	1,182, or 24.6 „
Vaccinated ...	3,874, or 80.7 „
Estimated income ...	Rs. 42,312, or 0.14-1 per head.
Do. expenditure ...	42,101
Do. do. for sanitary purposes ...	25,313

New works.

508. No new works of any importance undertaken.

Public health.

509. Small-pox prevailed severely in the beginning of the year, and the Municipal Commissioners employed eight temporary vaccinators to subdue the disease. They also granted an allowance of two annas for each child brought up for vaccination, and in this way succeeded in reaching a large number of children who could not otherwise be vaccinated. The Mapilah population are generally prejudiced against vaccination. Three hundred and thirty-seven persons died of small-pox.

Cochin.

Population...	...	...	13,840
Births registered ...	...	...	327, or 23·6 per mille.
Deaths do. ...	...	...	712, or 51·4 „
Vaccinated ...	...	...	2,607, or 188·3 „
Estimated income...	...	...	Rs. 18,770, or 1-5-8 per head.
Do. expenditure ...	...	...	„ 14,220
Do. do. for sanitary purposes ...	...	...	„ 6,130

New works.

510. Two covered drains were constructed. A new fish market built.

Public health.

511. A most violent epidemic of small-pox raged in the town, and chiefly amongst the hybrid Mussulman population, during the earlier part of the year, causing 453 deaths. The Commissioners exerted themselves to extend vaccination at this time, and procured additional temporary vaccinators from Calicut. Two thousand six hundred and seven persons were vaccinated, or nearly one-fifth of the entire population. The epidemic has now subsided. It is well known that small-pox is always more violent in the western coast districts, when the epidemic season comes, than in the eastern districts, though it is not easy to explain why it should be so.

Military Cantonments.

512. The work of sanitary improvement has not been limited to the municipal towns. The military cantonments are also sharing in the general advance. In Secunderabad the new Cavalry barracks are rapidly approaching completion, and the arrangements for the water supply of the troops at Trimulgherry are nearly completed. In a short time, moreover, the Nizam's State Railway will bring this important station in communication with the general railway system of India, to the general comfort and convenience of the military residents.

In Bangalore the Native Infantry Regiments will soon be housed in their new quarters, and a scheme for a new water supply for the town and cantonment is under consideration. In all the cantonments the conservancy of the barracks, bazaars, native lines, &c., is well cared for.

W. R. CORNISH, Surgeon-Major, F.R.C.S.,

MADRAS, 17th April 1874.

Sanitary Commissioner for Madras.

APPENDIX I.

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IN THE VALUE (FOR ASSURANCE PURPOSES) OF EUROPEAN LIFE
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By W. R. CORNISH, F.R.C.S., SURGEON-MAJOR, SANITARY COMMISSIONER FOR MADRAS.

1. During the past year there has been a considerable amount of controversy, and a great variety of opinion expressed, on the subject of the alleged improvement in the rates of mortality of Europeans in India. The origin of the discussion was due to the action of a young Insurance Company (The Positive) which commenced its career by the announcement that uniform (but not low) rates of premium would be charged for all parts of the world, and that no special payments would be demanded from policy-holders for the extra risks incurred by prolonged residence within the tropics. The older Insurance Companies doing business in India lost no time in denouncing the rashness of their younger brother in accepting risks on such terms, when all the available statistics of Indian mortality demonstrated that the dangers to life in India were much beyond those of temperate climates. In support of the soundness of the views of the promoters of the new Insurance Company, an appeal was made to Dr. F. Mount, a gentleman for many years holding important official positions in Bengal, and to Lord Sandhurst, late Commander-in-Chief in India, and both of these gentlemen have given their general impressions regarding the improved value of European life in India, in favor of the system introduced by the Positive Insurance Company, but, unfortunately, have adduced no trustworthy statistical evidence in favor of the views they hold. Dr. Mount, it is true, has referred to the statistics of railway employes in India; but these statistics are not kept in such a manner as to be thoroughly reliable for the settlement of the question in dispute.

On the other hand, Dr. Ewart, of Calcutta, on behalf of the Standard Life Office, has criticised the general statements of Lord Sandhurst and Dr. Mount, and has adduced a good deal of statistical evidence to show that the European in India *does* incur risks to life beyond those of temperate climates, and that these risks are of a nature that should not be overlooked by any Insurance Office desirous of doing a safe and profitable business.

2. It is, I think, to be regretted that a subject of so much practical importance should have been discussed in a spirit of partizanship, and in reference to the policy of this or that Insurance Office. That there has been a great improvement in the sanitary condition of troops serving in India is sufficiently evident, when we consider that from the beginning of the century up to 1856, the mean death-rate of the European Army averaged 69 per thousand, while since 1860 it has fallen in the three Presidencies to less than 28 per thousand, and as regards the armies of Bombay and Madras to 22 per thousand. In these figures, moreover, are included the deaths of all invalids on the passage home. This improvement has been due, in a slight degree, to greater facilities of invaliding; but on the whole, no one acquainted with the subject can reasonably doubt that the troops in India are much less subjected to undue mortality than they were 30 or 40 years ago. The matter is beyond dispute, and rests on the basis of the clearest statistical evidence. But it has been argued that the statistics of the Home Army, as compared with those of the Indian Army, show that the mortality of the latter is still more than double that of the former, and that the evidence of these army statistics, so far as it goes, is against the supposition that the value of life is equal in India and England. There is, however, a fallacy in the comparison which destroys its value. It has been quite overlooked that the invaliding of the Home Army, that is, the discharge of men from the service on account of ill health, is on a far higher scale than the discharges from the Indian Army on the same grounds, and that the death ratios of the Home Army are kept abnormally low by sending back into civil life all those of weakly constitution, or organic disease, who in the Indian Army would to a great extent become casualties, before their removal from the country could be effected. The conditions respecting invaliding of the Home and Indian Troops being radically different, it follows that the mortality ratios of the two armies cannot be properly compared in regard to this question of the improved value of European life in India.

3. To obtain evidence on this subject, we must seek for information in the statistical history of bodies of men exposed to continuous residence in the country, like the Indian Staff Corps, the Civil and Medical Services, and it would be somewhat strange if the ameliorated conditions of existence, which have reduced the mortality of the army from 69 to 28 per thousand, had exercised no influence in regard to the class of men who contribute to the profits of Insurance Companies. There are,

however, very few statistical data of recent years which exhibit the mortality of Europeans in India of easy circumstances. The standard reports of Davis, Neison, and Brown, from which the value of European life in India is usually computed, refer to the statistics of the past—to the time when soldiers died in the ratio of 69 per thousand—rather than to the Indian risks of the present day, and bearing this fact in mind, it has seemed to me important to review the actual mortality ratios of the officials of the Civil, Military, and Medical Services for the past twelve years, and to compare the results with those obtained by eminent actuaries from earlier data.

The numbers of the classes under observation in the Madras Presidency are perhaps too few to allow of the data derived from them being made applicable to the whole of India, but this paper may be accepted as a contribution towards the solution of the very important question, whether there has been an improvement in the value of life of Europeans of the higher classes, corresponding in some degree with what we know to have taken place in the rank and file of the army.

4. Before I enter upon the statistics of the European officials of recent years, it will be proper to notice broadly the main points of divergence in the India of the period to which the actuaries' statistics refer, and the India of more recent periods and of the present day. Half a century ago it was the fashion to send out raw and ignorant boys of immature frames to recruit the ranks of Writers, Cornets, and Ensigns. They had no acquired knowledge of the best means of suiting their living to the requirements of a tropical climate, and the example of their elders was but of dubious advantage to them in guiding them into safe and steady habits. They ate and drank in quantity and quality beyond their years; they lived in houses, or more often in tents, unprotected from the extremes of temperature. The punkah was unknown, and the idea was then pretty generally entertained that a man's powers of endurance were strengthened by hardship and rough usage. If the officials of that period fell sick, as they often did, they were physicked *secundum artem*, with blue pill and drastic purges, and bled to the verge of extinction, and if their strong inherent vitality enabled them to survive the Doctor, there was no thought of aiding the restorative powers of nature by change of air and scene. In those days there were no roads, no railways, no steamers, no mountain retreats. If a man lost health in an inland station, he must stop there until death or recovery. The victim of disease had every thing against him, and nothing in his favor, while the mode of life and the utter neglect of domestic and public hygiene predisposed the Indian resident to the forms of disease specially abounding in warm climates. In contrast with this state of things we may briefly glance at the India of the present day. The climate remains unchanged; the plains of India are still hot, malarious, and inimical to the white races of mankind; but by the exercise of prudence and self-control Europeans may exist, and even enjoy good health, in them. An important consideration in the review of the circumstances of India of recent years is that the European officials arrive in the country as educated and mature men, who have been examined with reference to their *physical*, as well as to their mental, capacity for public service. They have had the advantage of acquiring the accumulated experience of those who have preceded them in an eastern career, and they find on arrival no longer a barbarous country in which their fellow countrymen have lost all home associations, and are ignorant of modern ideas of rational enjoyment, but a land in which there has been a vast improvement as regards the extension of agriculture and commerce, in which the native inhabitants are becoming sensible of the benefits of civilization, and where their fellow exiles for the most part lead lives of laborious toil.

The India of to-day is a land rapidly advancing in civilization. Its internal communications and commerce are yearly increasing; its agriculture extending; its people enjoy the blessings of peace, law, and order; and its crowded communities are being brought to see the necessity of measures for the protection of the public health. All these things have a direct and beneficial bearing on the longevity of the European officials in the country. A man who is slowly breaking down from climatic or other causes need no longer die at his post. The regulations of the Government provide for all its servants a certain amount of relaxation in the shape of privileged leave, and a sick man, wherever he may be serving, can travel without unnecessary fatigue or exhaustion to cooler regions within Indian territory, or to coast stations from which he may pass without exertion to his native land. The fashions of European countries as regards living are now very generally followed in India. Intemperance here as at home is no longer tolerated amongst decent people. The light wines of France and Germany have superseded the heady beer, and wines, and brandy of former days. The European community is better housed and better fed than of yore, although as regards the latter particular there is still room for improvement.

5. From a consideration of all these circumstances, it must be evident that the conditions of existence of Europeans, of the official classes, and of those in corresponding circumstances in India,

have undergone a long process of amelioration, and the natural conclusion must be that these changes have in the main contributed to the health and efficiency of those whose lot has been cast in the country.

6. I propose now to examine briefly the recent statistics of certain official bodies serving in India, with a view to ascertaining whether the improvement in the value of life, which all actuaries admit to have been progressive up to the dates of their investigation of the several Service Funds, has been continuous up to the present time; and for this purpose I shall examine the recorded statistics of the Madras Civil Service, the Madras Medical Service, and the Madras Staff Corps.

I might have added to the number of lives under observation by including the statistics of officers of the British Army and the military officers of the Indian Service who have not joined the Staff Corps; but, as regards the former body, I have thought it best not to complicate the question by their inclusion, as there are frequent changes in the *personnel* of the British Army, and their residence is not prolonged or continuous like that of the officials of the local services.

The data in regard to the few local officers who have not joined the Staff Corps I have omitted also, because it was not ready to hand, nor very material to the question at issue.

7. **CIVIL SERVICE.**—The Madras Covenanted Civil Service is composed of 157 members, and I am indebted to Mr. H. E. Stokes, the able Secretary of the Madras Civil Service Fund, for an analysis of the vital statistics of the members on active service for the period of twelve years, from 1861 to 1872 inclusive, as compared with the results for the longer period from 1848 to 1872 inclusive.

From this investigation I learn that for the extended period of a quarter of a century, from 1848 to 1872, there were 4423.0 lives at risk, and that the ratio of mortality for the whole service was 14.0 per thousand; of withdrawals from the service 6.8 per thousand; and of retirements, after completion of service of not less than 21 years' actual residence in India, 26.7 per thousand.

During this period the rates of mortality of the several classes of subscribers were—

Bachelors	...	...	...	...	...	10.1	per mille.
Married members	...	...	...	...	...	15.2	"
Widowers	...	...	...	...	...	33.5	"
And for the whole service	...	...	...	...	...	14.0	"

But for the last twelve years of the series there has been evidently an improvement in the value of life. For this period there were 2084.0 lives at risk, and the mortality during this period had diminished to 11.0 per mille, the withdrawals being 8.2 per mille, and the proportion living to complete their service of 21 years and upwards 30.2 per mille.

Amongst the several classes, the rates of mortality were as follow:—

Bachelors	...	...	...	...	...	5.7	per mille.
Married members	...	...	...	...	...	14.1	"
Widowers	...	...	...	...	...	27.4	"

The bachelors in both these cases represent chiefly the young members below 30 years of age, while the members from 25 years to 50 and upwards are mostly married or widowers.

8. By recent regulations the limit of Indian service (inclusive of leave) is 35 years, and it will be seen in the following abstract table that in recent years the members under observation have been between the ages of 20 and 55, while in the more extended period of 25 years there were a few members of more advanced ages. But looking to the results of the more recent period, it is shown that the mortality has decreased by 3.0 per thousand, as compared with the more extended period dating back to 1848, and that a larger proportion of members have lived to retire and enjoy their well-earned repose in their own country.

Table showing Mortality, &c., of the Madras Civil Service from 1848 to 1872.

MADRAS CIVIL SERVICE, 1848—1872 (INCLUSIVE), ACTIVE.																
Age.	Bachelors.				Married Members.				Widowers.				Whole Service.			
	Exposed to Risk.	Died.	Withdrawn.	Retired.	Exposed to Risk.	Died.	Withdrawn.	Retired.	Exposed to Risk.	Died.	Retired.	Withdrawn.	Exposed to Risk.	Died.	Withdrawn.	Retired.
19	15.5	...	...	...	96.5	2.07	1.04	...	1.5	...	...	...	15.5	...	...	...
20	560.5	0.36	0.71	...	384.0	1.30	...	...	12.0	...	...	...	955.0	1.26	0.42	...
25	559.0	1.43	0.72	...	411.5	1.46	1.22	...	21.5	9.30	...	...	695.5	1.58	1.44	...
30	262.5	1.14	1.91	...	531.5	0.94	0.38	...	32.5	6.15	...	...	680.5	1.32	0.88	...
35	116.5	1.72	3.43	...	503.0	2.56	...	0.20	44.5	...	4.50	...	656.0	2.13	0.46	0.31
40	103.5	0.97	2.90	...	391.0	1.53	0.26	9.47	42.0	...	9.53	...	488.0	1.44	0.21	11.11
45	53.0	1.89	...	24.53	30.77	1.14	0.56	15.91	19.5	5.13	30.77	...	208.5	1.44	0.43	18.23
50	13.0	...	...	200.0	55.5	...	...	32.43	3.5	...	28.57	...	59.5	...	...	33.61
55	0.5	...	...	...	6.0	...	...	66.67	...	...	...	...	6.0	...	...	66.67
60	...	...	...	...	...	...	...	...	2.0	50.00	...	...	2.0	50.00	...	...
70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1684.0	1.01	1.19	1.07	2560.0	1.52	0.39	3.44	179.0	3.35	6.71	...	4423.0	1.40	0.68	2.67

1861—1872 (INCLUSIVE).																
19	2.5	...	...	...	...	...	...	...	...	...	...	...	2.5	...	...	...
20	259.5	...	0.77	...	40.0	...	2.50	...	2.0	...	...	...	301.5	...	1.00	...
25	359.5	0.33	0.56	...	194.5	1.54	...	...	7.5	...	...	...	561.5	1.07	0.36	...
30	144.0	0.69	1.39	...	186.5	0.54	1.61	...	9.5	10.53	...	...	340.0	0.88	1.47	...
35	53.0	1.89	1.89	...	201.0	1.49	1.00	...	14.0	...	...	...	268.0	1.49	1.12	...
40	43.5	...	6.89	...	231.0	1.73	...	...	15.0	...	6.66	...	289.5	1.38	1.04	0.35
45	13.5	...	...	51.85	174.5	2.29	0.58	11.46	14.0	7.14	7.14	...	202.0	2.43	0.50	13.86
50	2.5	...	...	120.00	90.0	1.11	...	23.33	11.0	...	27.27	...	103.5	0.97	...	26.08
55	...	...	...	...	15.5	...	...	45.16	...	...	...	...	15.5	...	...	45.16
60	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
75	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	878.0	0.57	1.14	11.4	1133.0	1.41	0.62	4.24	73.0	2.74	6.85	...	2084.0	1.10	0.82	3.02

I have not at hand the "causes of death" in the fatal cases of the Civil Service during the last twelve years.

9. **MEDICAL SERVICE.**—I now come to consider the rates of mortality of the members of the Madras Medical Fund from the period of 1862—78, inclusive. The circumstances of these members are peculiar, for during the period in question they have been simply a decreasing body, and have had no new members coming in at the bottom of the list to fill vacancies.

From 1860 to 1865 there were no admissions to the Indian Medical Service; but since that year the service has again been opened to young men. I have not included any of the members admitted under the new conditions, but have confined myself to the history of the members of the old Medical Fund, of whom all particulars, as to age, service, retirement, and death, are accurately recorded.

10. The subscribing members of the Medical Fund on the 1st January 1862 numbered 225, and on the 31st December 1873 they had diminished to 118. In the course of twelve years the total decrement was 107 members, or 47.5 per cent. of the strength, at the beginning of the period. There were 34 deaths and 73 retirements from the service during the twelve years.

The aggregate strength of the service for these twelve years was 2,157, and calculating the mortality on this strength, we find that the death-rate for all ages, from 20 to 60 and upwards, was only 15.7 per mille, while upwards of 33 per thousand retired to end their days at home, after various lengthened periods of service in India.

11. In the following table the mortality and retirements are shown according to age. As in the Civil Service we find a remarkably low rate of mortality (6.4 per mille) for the ages below 30. From 30 to 40 the mortality stands at 15 per mille, and curiously enough the mortality of members from 40 to 50, for the period in question, has been actually less than for the earlier decennial period, the death-rate for this period of age being only 10.5 per mille.

As regards retirements, it may be noted that only 8 out of 73 retired before they were 40 years of age, and that the great bulk of these retirements (65) occurred between 45 and 60 years of age, or after periods of service varying from 22 to 35 years in India.

Madras Medical Fund 1862—73. Table showing Mortality and Retirements at different Ages.

Ages.	Strength.	Died.	Retired.	Ratio per cent. of	
				Deaths.	Retirements.
20-25	10	...	...	...	...
25-30	145	1	1	0.68	0.68
30-35	409	6	3	1.50	0.75
35-40	504	8	4	1.58	0.79
40-45	426	4	4	0.93	0.93
45-50	335	4	17	1.19	5.08
50-55	241	7	13	2.90	7.46
55-60	95	4	21	4.70	24.70
Above 60	11	...	5	...	45.45
Total	2,157	34	73	1.57	3.38

12. Now we have some means of comparing the mortality of the medical service in the past with the present. Mr. Samuel Brown examined this question not very long ago, and has given tables showing the mortality according to age from the commencement of the Fund in 1807 down to 1866. His results are compared with the above figures in the following table :—

Mortality according to Age, past and present periods.

	Ages.								
	20-25.	25-30.	30-35.	35-40.	40-45.	45-50.	50-55.	55-60.	Above 60.
Mr. Brown's results 1807-1866.	14.2	35.1	34.1	33.4	34.1	25.1	28.8	43.1	87.3
Actual mortality from 1862-1873	...	6.8	15.0	15.8	9.3	11.9	29.0	47.0	...

We now see that as regards this particular branch of the public service there has been a vast improvement in the value of life at nearly all ages during the period under investigation, so that the mean mortality at all ages has fallen from 33.4 to 15.7 per mille.

13. It is worthy of note that in Mr. Brown's statistics of the service for a period of nearly 60 years the mortality of the members was higher for the quinquennial period 25 to 30 than for the more advanced ages of 35 to 50, and the true explanation of the higher death-rates of young Assistant Surgeons I believe to be this; that in the days gone by the younger men were continually on the march from station to station, living in tents, exposed to vicissitudes of climate, and existing on bad and indifferent food.

There are still remaining in the service men who for the first six or seven years of their Indian career had no settled employment, but were engaged in travelling all over the country in charge of military detachments. All this is now changed; land marches are infrequent, and travelling is done by railway, steamer, or transit-coach, with fewer risks to life than in the period referred to.

14. In the following table is given a list of the members dying through these twelve years, with ages at the time of death, period of Indian service, and causes of death.

Amongst the 34 casualties there were three accidental or violent deaths, viz., one lost at sea, one from injuries received in falling from the roof of a house, and one from hydrophobia, the unfortunate officer being bitten by a dog sent to him for professional examination.

In this period there were only two deaths from cholera. Both occurred in the year 1865, in the Central Provinces, while marching through a tract of country in which the pestilence was rife. Had a railway been then as now in existence, it is probable that the lives of both these officers might have been spared. There was one death from fever, one from dysentery, five from heart disease or aneurism, five from apoplexy or affections of the brain and nervous system, eight from hepatic disease, three from phthisis, and three from kidney disease.

Madras Medical Fund. Roll of Deaths from 1862—1873.

Number in Effective List, 1st January 1862.	Age at Death.	Service in India.	Cause of Death.	Year of Death.
		Years.		
12	57	31.008	Heart disease	1863
20	55	30.718	Aneurism	1867
27	53	26.775	Drowned at sea	1864
31	57	28.595	Abscess of liver	1867
35	48	24.140	Heart disease	1863
36	46	22.622	Apoplexy	1862
38	52	28.392	Abscess of liver	1868
43	57	32.652	Do.	1873
50	47	21.066	Do.	1862
55	51	25.301	Do.	1866
57	53	23.849	Heart disease	1865
58	51	23.649	Cholera	1865
59	46	22.863	Heart and kidney disease	1864
65	44	20.107	Phthisis	1862
88	51	26.740	Kidney disease	1873
104	38	13.373	Dropsy	1863
105	41	16.685	Phthisis	1867
109	37	11.863	Mania	1862
119	42	16.611	Bright's disease	1869
129	32	10.674	Rheumatism	1864
135	37	7.901	Remittent fever	1862
139	37	14.403	Apoplexy	1869
145	34	11.574	Liver disease	1866
146	51	17.863	Albuminaria	1873
151	38	8.501	Abscess of liver	1864
152	32	9.195	Cholera	1865
155	40	12.093	Abscess of liver	1868
166	36	7.285	Compound fracture of thigh	1863
177	34	10.449	Phthisis	1867
193	41	13.386	Heat apoplexy	1871
194	39	10.233	Phthisis and psoas abscess	1868
206	33	9.022	Hydrophobia	1868
221	32	9.795	Dysentery	1870
224	30	5.115	Delirium tremens	1865

NOTE.—The mean age at the time of death was 43.3 years, and the average period of service in India of the dying members 17.776 years.

15. I have already alluded to the fact that the surviving members of the Medical Fund have been simply a decreasing body during the last twelve years, and it follows that the survivors are yearly increasing in age. Thus, on the 1st January 1862, the mean age of the members then in the service was 38.67 years, while on the 1st January 1874 the mean of the aggregate ages of existing members was 45.52 years, while for the whole period the mean of age of the 21-57 lives was 41.41 years. We thus see that, notwithstanding the advanced and advancing ages of the lives at risk, the annual mortality during the twelve years ending 1873 was only in the low ratio of 15.7 per thousand of strength—a most conclusive proof that the conditions of existence in India have undergone great improvement.

Mean Age of existing members.		Mean Age of existing members.		Mean Age of existing members.	
1862	38.67	1867	38.78	1872	44.32
1863	39.36	1868	41.57	1873	45.01
1864	39.44	1869	41.98	1874	45.52
1865	40.11	1870	43.00		
1866	40.79	1871	43.65		

16. It is alleged by Dr. Ewart that Europeans of the official classes are necessarily exposed, in the course of their duties, to the various pestilential diseases which still afflict the population of India, and that the fact of their having to serve in unwholesome climates must necessarily involve higher risk to life. There is, of course, a good deal of truth in this view of the case. High official position is no guarantee that the holders shall not succumb to epidemic disease. The members of the Medical Service, from the nature of their duties, are peculiarly exposed to the kind of influences alluded to, and yet, as a matter of fact, we notice that the mortality of this class has not been high from cholera,

dysentery, or fevers, the three forms of epidemic disease which mostly prevail in India. I shall show later on that there has been a remarkable diminution in the mortality of the official classes from these forms of disease of late.

17. The places of residence of the members of the Madras Medical Service include most of the military and civil stations within the Madras Presidency, Hyderabad, Central India—Mysore—British Burmah, the Straits Settlements, China, and the Andaman Islands. Throughout this wide range of country the Medical Officers have been exposed to the ordinary climatic risks, in addition to those which specially attach to the practice of their calling, and the result is shown in the figures now recorded.

18. **THE MADRAS STAFF CORPS.**—On the assumption of the Government of India by the Queen, in 1858, it was determined to amalgamate the British Forces of the East India Company with those of the British Army, and to reorganize the Native Army on a new system.

Consequent on these changes was formed the Indian "Staff Corps" of the three Presidencies, into which all officers of the old Indian Army had the privilege of entry on certain defined conditions. The Madras Staff Corps was formed in the latter part of the year 1861. On the 1st January 1862 352 officers of the army had joined the Staff Corps. It continued nearly stationary as regards numbers until 1867, when, in consequence of some changes as to the terms of admission, the average numbers rose to 769. On the 1st of January 1874, or the day after the date to which this report refers, the numbers stood at 693, the mean strength for the year 1873 being 701.

The strength of the Staff Corps for each year has been computed by taking the numbers living of each rank as they stood in the Army List on the 1st January, April, July, and October of each year, and by taking the mean strength of these four periods.

By this calculation we find that the mean annual strength of the Staff Corps for the twelve years ending 1873 was 585 officers of all ranks, and that 7,021 lives were at yearly risk during this period.

19. The following table shows the mean strength and deaths of each grade for each year of the period in question:—

Mortality in Madras Staff Corps, 1862—73.

	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	Total.
Lieutenants.													
Strength ...	55	62	46	78	70	201	165	116	67	37	41	49	1,018
Deaths ...	1	1	1	1	...	1	2	3	1	...	...	1	12
Ratio of mortality.	11.1	16.1	21.7	12.8	...	4.9	12.0	25.8	14.9	...	...	20.4	11.7
Captains.													
Strength ...	172	163	151	153	151	244	250	261	273	292	278	257	2,644
Deaths ...	1	...	...	2	2	3	3	8	4	5	3	7	38
Ratio of mortality.	5.8	...	...	13.0	13.2	12.2	12.0	30.6	14.7	17.1	10.7	27.2	14.3
Majors.													
Strength ...	100	94	103	109	119	199	200	192	195	180	155	130	1,785
Deaths ...	4	6	4	1	1	5	3	7	5	4	6	...	46
Ratio of mortality.	25.0	63.8	38.8	9.1	8.4	25.2	15.0	36.4	25.6	22.2	38.0	...	25.8
Lieut.-Colonels and Colonels.													
Strength ...	7	25	33	49	50	123	131	178	195	219	237	256	1,537
Deaths ...	...	...	...	...	3	4	3	4	3	3	4	6	30
Ratio of mortality.	...	...	...	...	60.8	32.5	19.8	22.4	15.3	13.6	16.8	23.4	19.5
Major-Generals.													
Strength ...	...	...	...	...	...	...	3	4	6	7	9	9	37
Deaths ...	...	...	...	...	...	...	...	1	...	...	...	...	1
Ratio of mortality.	...	...	...	...	...	...	...	250.0	...	...	...	...	27.02
Total of all Grades.													
Strength ...	364	344	338	389	399	767	767	747	729	728	711	701	7,021
Deaths ...	6	7	5	4	6	13	11	22	13	12	13	14	127
Ratio of mortality.	16.4	20.3	14.7	10.2	15.0	16.9	14.3	30.6	17.6	16.3	18.0	19.7	18.04

From this table we see that of 7,021 lives at risk, of all grades and all ages, there were 127 deaths, or a mortality ratio of 18.04 per mille.

The mortality of each grade was as follows:—

Lieutenants ...	11.7 per mille.	Lieut.-Colonels and Colonels.	19.5 per mille.
Captains ...	14.3 "	Major-Generals ...	27.02 "
Majors ...	25.8 "	All grades ...	18.04 "

20. India is a country in which some years are more remarkable for mortality than others, and the year 1869 was peculiar in this respect. It was a year of epidemic cholera; but besides this, the year was a singularly unhealthy one for Europeans in India. The ratios of mortality for each year in the Staff Corps are abstracted below:—

1862 ...	16.4 per mille.	1868 ...	14.3 per mille.
1863 ...	20.3 "	1869 ...	30.6 "
1864 ...	14.7 "	1870 ...	17.6 "
1865 ...	10.2 "	1871 ...	16.3 "
1866 ...	15.0 "	1872 ...	18.0 "
1867 ...	16.9 "	1873 ...	19.7 "

21. I have not been able to ascertain the exact ages of all the officers of the Staff Corps, so that Mortality according to age. I am unable to give a very accurate table of mortality according to age in quinquennial periods; but from the fact that promotion in the Staff Corps is regulated by periods of service in each grade, it is easy to calculate, roughly, the probable ages of the members of the various grades. Thus, for instance, the average age on admission to the service of late years has been from 19 to 20; and, as no one can be promoted to the rank of Captain in the Staff Corps until the completion of twelve years' service, and to the grade of Major except after eight years' service as Captain, and to Lieutenant-Colonel except after six years' service in the rank of Major, and to Colonel after twelve years' service as Lieutenant-Colonel, it follows that all Lieutenants must be from 19 to 31 or 32 years of age, Captains from 31 to 39 or 40, Majors from 39 to 45 or 46, and Lieutenant-Colonels, Colonels, and Major-Generals from 46 upwards.

When the Staff Corps was first formed, many officers who had been unfortunate in regimental promotion joined it, and many of these were beyond the ages here shown as the normal age limits for those entering the Staff Corps at an early period of their service, so that the ages of Lieutenant-Colonels, Colonels, and Major-Generals will be found to range somewhat higher than they do in the case of more recent promotions.

22. The following abstract shows the grouping of mortality calculated according to age, so far as the data will admit:—

Mortality to Age.—(Probable Ages.)

	Ages.	Number exposed to risk.	Deaths.	Ratio of Mortality.
Lieutenants ...	20—32	1,018	12	11.7
Captains ...	32—40	2,644	38	14.3
Majors ...	40—46	1,785	46	25.8
Lieut.-Colonels, Colonels, and Major-Generals.	46—60 and upwards.	1,574	31	19.6

23. The following abstract shows the actual ages of the members of the Staff Corps who died in the twelve years arranged in quinquennial periods, and from this we can see that the assumed ages above are not absolutely correct, as one Captain died who was under 30 years of age, and two above the age of 45, and five Lieutenant-Colonels died who were under 45 years of age. But for all practical purposes, the data compare very favorably with those given by General Hannington and Mr. Samuel Brown:—

Mortality to Age.—(Actual Ages.)

Ages.	20 to 25.	25 to 30.	35.	40.	45.	50.	55.	60.	All Ages.
Lieutenants ...	...	10	1	...	...	...	...	...	11
Captains ...	...	1	23	10	2	...	...	...	38
Majors ...	...	...	23	20	3	...	...	...	46
Lieutenant-Colonels ...	...	...	...	5	12	2	...	...	19
Colonels and Major-Generals	...	...	...	...	1	4	3	5	13
Total ...	...	11	49	35	18	6	3	5	127

24. In a "Report on a scheme for granting pensions to the Widows and Orphans of the Indian Establishments," dated 1871, Mr. Samuel Brown has given a table showing the combined experience of the Bengal, Madras, and Bombay Military Funds. Some of these data are brought down to 1858, 1865, and 1869, but include also the earlier years of the present century. From this table Mr. Brown shows the mean death-rate of military men in India to have been 27.6 per thousand, while the facts now brought forward show that the experience of the past twelve years has given a death-rate of only 18.0 per thousand in this particular class of public servants.

Mr. Brown remarks further of the recent statistics of the Service Funds: "They show also the marked improvement in the rate of mortality in India in recent years, as compared with the earlier periods of the present century."

25. The "causes of mortality" in the Staff Corps I am only enabled to give partially.

The officers composing this branch of the service are scattered all over India. Some are employed in civil and military situations under other administrations, and the particulars of fatal cases of illness or death do not ordinarily reach the Madras Government. Others, moreover, who have lost their health in India, have proceeded to Europe on leave, and have died while absent from their duty. Of the total of 127 casualties, I find the places of death recorded as follows:—

Died in the Madras command ...	66
Do. other Presidencies ...	12
Do. Europe ...	30*
Do. on the homeward voyage ...	15
Lost at sea by shipwreck ...	3
Died at the Cape of Good Hope ...	1
Total ...	127

26. Of these 127 fatal cases, I have been able to ascertain the causes of death in 99 only, the medical history not being forthcoming in 37 instances.

The diseases proving fatal to life are classified as follows:—

Cholera ...	4
Fevers ...	6
Dysentery and diarrhoea ...	8
Liver diseases ...	12
Apoplexy, sunstroke, and diseases of the nervous system ...	12
Delirium tremens ...	4
Diseases of the lungs and respiratory organs ...	5
Heart disease, aneurism, &c. ...	13
Diseases of the kidneys ...	6
Venereal affections ...	1
Pyæmia ...	2
Cancer ...	2
Dropsy ...	3

Violent deaths, viz.:—

Accidental ...	8
Suicidal ...	3
Homicidal ...	1
Cause of death unascertained ...	37

Total ... 127

27. In this list of diseases it will be seen that cholera, fevers, and dysentery do not figure very largely. Liver diseases are undoubtedly high, but against these specially tropical diseases must be noted the very low proportion of mortality from diseases of the respiratory organs. Diseases of the brain and nervous system are, however, more fatal in India than in temperate climates, and diseases of the organs of circulation appear also to be high in comparison with British rates. The deaths from violent causes are also high.

* Some of these have been Colonels who have permanently settled in Europe.

28. The annual summary of the Registrar-General of England shows the following proportions of deaths in London from the five great classes of diseases, contrasted with the proportions in the Madras Staff Corps during the past twelve years:—

	London, 1873.	Madras Staff Corps.
Zymotic diseases ...	19.8	23.3
Constitutional ...	18.7	7.7
Local ...	46.1	55.5
Developmental ...	11.2	...
Violent causes ...	3.7	13.3

It must be remembered that the death classification for London includes both sexes and all ages, while those of the Staff Corps refer only to adult and aged males.

Amongst the violent deaths in the Staff Corps eight were accidental, three suicidal, and one homicidal. Of the accidental deaths, three were occasioned by shipwreck and one by drowning otherwise. Four were the result of injuries in the pursuit of field sports; two of these occurred in Europe and two in India; of the former, one was the result of a fall in hunting, the other of an accident with a gun; of the latter, one was injured by a tiger, and the other was accidentally shot by his servant carrying a spare gun.

The three suicidal cases were all gun-shot wounds, and the homicidal one was that of an officer of a native regiment shot by a sepoy.

29. With regard to the habits and mode of living of the 127 officers of the Staff Corps dying in the last twelve years, the following particulars have been ascertained:—

Temperate ...	70
Intemperate ...	29
Not ascertained ...	28
Total ...	127

30. I have already stated that intemperance in living is no longer a characteristic of the European community in India. Unfortunately the craving for drink is in many instances a disease inherited from intemperate progenitors, and individual instances of the excessive use of stimulants are not uncommon. But the habit is one most fatal to life if indulged in a country like India. It predisposes to fatal diseases of the brain and nervous system, to cirrhosis of the liver, to atheroma of the blood-vessels, and structural changes in the kidneys, while there is no reason to suppose that the use of alcohol exercises any protective influence as regards diseases peculiar to the country.

31. The average age at the time of death of the 70 officers of temperate habits was 42.7 years, of the 29 of recorded intemperate habits 37.4 years, and of the 28 persons whose habits were unrecorded 39.7 years, from which we may observe the degree in which intemperate habits in India tend to shorten the average duration of life.

32. Some years since I tabulated the medical histories of 684 officers of the Civil and Military Services of the Government of Madras, who had died in India in the years from 1840 to 1861, but the results still remain unpublished.

Of these, I noticed that—

340, or 49.7 per cent.,	were of temperate habits.
203, or 29.6 do.	of intemperate do.
141, or 20.5 do.	of habits undefined.

The causes of death in these classes were as follow:—

	Temperate.	Intemperate.	Unknown.	Total.
ZYMOTIC DISEASES.	Small-pox ...	10	3	1
	Cholera ...	67	17	34
	Fevers ...	80	15	28
	Dysentery and diarrhoea ...	51	25	21
CONSTITUTIONAL	Syphilis ...	1	...	1
		10	3	1

LOCAL DISEASES ...	Brain and nerves ...	25	27	8	60
	Delirium tremens ...	...	66	...	66
	Sunstroke ...	4	5	6	15
	Heart diseases ...	5	3	2	10
	Lung diseases ...	15	5	8	28
	Liver do. ...	37	21	23	81
	Other local diseases ...	14	5	7	26
DEVELOPMENTAL DISEASES ...	...	...	...	...	...
VIOLENT CAUSES ...	...	21	8	2	31

33. In this period we find that of the total number of 684 deaths, 367, or 53·6 per cent. of the whole, were the result of diseases of the zymotic class, and we have already seen that in the later period the returns of the Staff Corps show only 23·3 per cent. of mortality from this class of diseases, so that the proportion of mortality from diseases, especially climatic, appear to have diminished by more than one half.

And as regards deaths directly resulting from the intemperate use of alcoholic drinks, we see that the proportion in the former period was 9·6 per cent. of the whole mortality, while in the later period only 4 deaths out of 127, or 3·1 per cent. of the whole, is so recorded.

34. In this distant period we see that the mortality of officials from cholera alone was 17·2 per cent. of the whole deaths, while in the later period the combined results of the Medical Service and Staff Corps show only a percentage of 4·8 from this common and fatal disease. There can be no question but that the official classes in India have been much less liable to die from cholera, fevers, and dysentery of late years. As regards the first of these, the hygienic conditions have improved; and in regard to the two latter diseases, medical treatment has advanced and materially diminished the risks to life.

35. The experience of the British Army in India, however, corroborates that of the official classes in showing that there is still much fatal disease of the liver, and that degeneration of the structure of the heart and blood-vessels is much too common amongst Europeans in India.

36. We have now seen that in the past twelve years the mortality of Indian officials of the Madras Presidency has diminished to a very marked extent. The members of the Civil Service have experienced a mortality ratio of 11·0 per thousand; the Medical Officers, consisting of a yearly decreasing body of elderly men, have died in the ratio of 15·7 per thousand, and the members of the Staff Corps in the proportion of 18·04 per thousand; and, if these ratios are compared with the standard tables of eminent actuaries who have reported on Indian mortality, it will at once be seen that the heavy premia demanded by most Insurance Offices for the acceptance of Indian risks are wholly unwarranted by the present rates of mortality of Europeans of the better classes in India.

37. The recent experience of the improvement in the value of European life in India is confirmed by the action of certain Insurance Companies doing business in the country. The "Madras Equitable,"* a mutual office of the highest character, and financially sound and satisfactory, has for many years past been reducing its premia on policies of five years' standing by 50 to 60 per cent. of the fixed rates, and the "Universal," also a highly respectable office, announces a reduction of rates equivalent to 50 per cent. on policies of a certain standing, thereby endeavouring to give to policy-holders the benefit of the changed conditions under which they now pursue their career in India.

38. It is confirmed, moreover, by the yearly increasing accumulation of elderly military officials in India, who, according to all actuarial calculations, have no business to survive to claim their "Colonel's allowances," or to live long in the enjoyment of them, but who nevertheless persist in refusing to die to confirm the predictions of actuaries who forecast the future from the experience of the past. In this remark I have no wish to underrate the value of actuary's work as regards Indian mortality, but I think that facts of recent years show they have not and do not sufficiently allow for the changed and improving conditions of existence in India, conditions which will, I trust, continue to improve until the risks to health and life of an Indian career shall cease to be reckoned of an extraordinary

kind. As it is, the brandy bottle is a greater enemy to Insurance Offices than the Indian sun, and those offices seeking to do business in India should omit no precautions to guard against the acceptance of risks that are necessarily aggravated by intemperate living. While the competition of rival offices continues so keen, there is always the probability of bad lives finding acceptance at ordinary risks, and I have no doubt that, if the Indian experience of Assurance Companies could be honestly analysed, as regards the past, we should find their excess of mortality due more to imprudent and reckless living than to climate.

OORACAKUND,
1st May 1874.

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

* This office in the Annual Report for 1873 has adopted my suggestion, of publishing a statement showing its experience from year to year of the mortality of policy-holders. The ratio of mortality "to the total number of lives covered during any portion of the year" is stated by the Directors to be 19·72 per mille.

Of the ten deaths, seven were of policy-holders who had been paying premia for from 20 to 31 years.—
W. R. C.

APPENDIX II.

REPORTS ON CHOLERA IN H. M.'S 45TH REGIMENT AND F BATTERY,
20TH BRIGADE, R.A., AT THAYETMYO, BY
DRS. HUNGERFORD AND ROBERTSON.

APPENDIX II.

DETAILED REPORT OF OUTBREAK OF CHOLERA IN HEAD-QUARTER WING OF HER MAJESTY'S
34TH REGIMENT AT THAYETMYO, FROM 12TH APRIL TO 1ST AUGUST 1873.

On the 12th April 1873, the regiment up to that period having enjoyed good health from the time of its arrival in Thayetmyo in the early part of last year, a case of cholera took place in the Head-Quarter Wing of the 45th Regiment.

The case above referred to was the wife of Private P. Maher, and the circumstances attending it, as far as I have been able to learn, are these:—The woman, who was a Roman Catholic, had been fasting on the previous day (Good Friday); she had gone to the bazaar to make purchases, and, among other things, had bought a piece of native pork, of which, her husband says, she did not partake; she, however, supped heartily on raw onions and bread, and went to bed apparently in good health. The husband states that to his knowledge she had one pint of porter only; what she may have had when at the bazaar I have been unable to find out.

She awakened her husband about 5 A.M. on the morning of the 12th April, and asked him to make some tea, and went to the latrine a couple of times between that and 6 o'clock; at 6-30 A.M. she came to hospital, when collapse set in almost immediately accompanied with purging, vomiting, and cramps, and she died in that state about noon.

She was treated in a separate room at the female hospital, which was closed and fumigated after she died. Mrs. Maher lived in No. 9 room of No. 11 married quarters of the European Infantry lines; the house contains fifteen quarters, and, like all the others, is built on a brick platform surrounded with a drain and raised 10 feet from the ground. The house, as well as all the other barracks, is well ventilated, and the general sanitary condition of all is good. There is no overcrowding.

The case was reported, through the Commanding Officer, to the Station Staff Officer.

The room in which Mrs. Maher was taken ill was at once closed and fumigated, and on the following day the occupants of the rooms adjoining it on each side were moved to No. 12 married quarters, distant about 250 yards, where there were several rooms unoccupied. They were placed in the centre of the building with empty rooms between them and any other families. The rooms at each side of that occupied by Mrs. Maher were also fumigated; the latrine at once closed and disinfected; straw bed and pillows burned. In this as well as other cases the urine tubs and latrine pans were burned and re-tarred in addition to the ordinary mode of disinfection by McDougall's powder or chloride of lime.

A minute inspection of barracks was made, and all were cautioned about the necessity of reporting sick at once in case of diarrhoea or uneasiness of any kind.

From the 12th to the 20th there were no cases of cholera, and hopes were entertained that we had simply had a sporadic case, and that the regiment might escape further sickness. On that day, however, Private W. Cox was admitted from No. 7 soldiers' barracks, suffering from looseness of the bowels and vomiting; the matter passed being undigested food; at about 10 o'clock choleraic vomiting and purging set in. I at once applied to the Station Staff Officer to have tents pitched for the treatment of cholera cases at a convenient place near the river bank; two tents were pitched, and the patient removed to one of them as soon as possible. He had not been placed in the room with other patients, and the ward where he had been was disinfected in a most careful manner.

Other tents were pitched as necessary both for treatment of cholera cases, observation of suspected cases, and for men who had volunteered their services as orderlies.

I had hopes of Cox's recovery, as he got through the stage of collapse; but possibly, from his having been weakened by a previous attack of dysentery, he succumbed during that of imperfect reaction.

As soon as this man was found to be suffering from cholera the end of the barrack occupied by him was cleared; the punkah fringes taken down; walls whitewashed; furniture scalded; the place in general thoroughly disinfected with Condy's fluid and sulphurous acid fumes.

On the 21st the men were paraded in their own quarters and warned by me at every bungalow not to neglect the slightest indication of illness, but to report themselves sick at once.

All the barrack rooms were emptied this morning, and the contents exposed to the sun for several hours.

On the evening of this day the daughter of the Bandmaster, aged eight years, living in a detached house containing five rooms, was attacked about 4 o'clock with purging and vomiting. She was seen by Mr. Lawrence, the Apothecary of the regiment, about 6 P.M., and at once removed to the tents, where she speedily became collapsed. Her case, however, progressed favorably, and she was discharged from hospital on the 30th April.

The room in which she had been was closed, disinfected, and fumigated, on her removal to hospital, and the clothes and bedding used were taken away, fumigated, and boiled according to instructions.

On this day I applied to the Station Staff Officer that a camp should be formed on the Brigade parade ground, and steps were taken to be in readiness to proceed to the other side of the river in case of an extension of the disease.

No cases occurred.

On the 23rd, at 6-30 A.M., the wife of Private M. Mayberry came to hospital from a room in No. 13 married barracks (she had suffered from simple diarrhoea on the previous day, and got some astringent mixture which relieved her for the time), complaining of vomiting and purging, but the stools had not then assumed a choleraic character; shortly afterwards they did so however, and violent cramps set in. She was removed to the tents, became speedily collapsed, and died at 1-30 P.M. on the 24th in that state.

The occupants of the rooms adjoining her's were removed to No. 12 married quarters, the same as those to which the families from No. 11 had been moved before; and ten days having now elapsed since the date of the case of cholera in that building, the other families were allowed to return to their own quarters, which had been in the meantime thoroughly disinfected and fumigated.

Private R. E. Cox, of the Band, No. 9 bungalow, had performed with his comrades after mess last evening, and afterwards came to hospital not feeling very well, but not suffering from diarrhoea. He was detained for the night, admitted to cholera tents early this morning as he had shown unmistakable symptoms of the disease; collapse set in about 2 P.M., and on the following day he began to amend, was transferred from cholera tents to hospital on 1st May, and discharged 8th May.

The band and drums occupying No. 9 bungalow were at once removed to the camp previously pitched on the Brigade parade ground; also the family of Private Lees, at whose house Cox had spent the early part of the evening on which he had been attacked.

Their numbers were thirty-five men, one woman, and three children. Medicine for immediate use in case of diarrhoea was entrusted to the Serjeant in charge. No further cases took place among them.

At 1 A.M., 28th April, Private Massey was brought to the tents from No. 5 bungalow in one of the Serjeants' quarters, at the angle of which he resided with his family; collapse rapidly set in, and he died at 3-30 P.M. the same day.

The occupants of this bungalow, "F" Company, viz., seventy-nine men, one woman, three children, were sent across to Tyrangoon on evening of same day.

Assistant Surgeon Carew, who had been for some time suffering from derangement of liver, with constant febrile attacks, proceeded in medical charge of the party; considering it necessary, under these circumstances, that, in case of his being laid up, further medical aid should be at hand, I wrote to the Officer Commanding the station, requesting him to telegraph for assistance.

Private J. Griffiths, residing in No. 12 room, No. 12 family quarters, brought to tent hospital from off guard at 2-30 P.M., vomiting and purging; these symptoms, together with cramps, continued during the night; collapse set in about 8-30 A.M. on the 29th, and he died during the period of imperfect re-action at 7 P.M. the same day.

This man had been detained at hospital under the effects of drink (being then a prisoner) on the

25th and 26th, returned to the guard-room on the 27th, and went on duty at 6 A.M. on the day of attack.

Private S. Dwyer was on duty with the fire-engine in the town of Thayetmyo; on the way back was attacked with vomiting and purging, was taken to the tent hospital at 8th case. 2-15 P.M., and died in collapse at 11-30 P.M. same night.

He resided in No. 7 bungalow, and the occupants of this bungalow (the same as that from which Private Cox was admitted on the 20th instant) were ordered to cross the river on the morning of the 29th, as well as those from No. 12 family quarters.

Private Kennedy from No. 5 bungalow was attacked as "F" Company was starting to cross the river this evening at 5 P.M. On arrival at hospital was detained in observation tent till undoubted choleraic symptoms appeared, when he was removed to cholera hospital. He recovered and was discharged on the 12th May. 9th case.

This morning the families already mentioned, as well as the whole of H Company, crossed 29th April. Tyrangoon, viz., seventy-seven men, five women, and six children.

Privates Hunter and Ward attacked with cholera in rooms Nos. 8 and 13 of No. 10 family quarters; their families were removed to tents pitched on open piece of ground between the guard-room and the fort, with conservancy tent for their special use, and the remaining families in the bungalow, twelve in number, were ordered to cross the river this evening, viz., twelve men, twelve women, twenty-one children. 13th and 11th cases.

Private Hunter died on the evening of admission at 5-45 P.M. in the state of collapse, and Private Ward recovered slowly, having had severe secondary fever, followed by a pustular eruption on upper and lower extremities.

Lance Serjeant E. Gould, E Company, occupying a separate room in No. 8 bungalow, came to hospital complaining of looseness in the bowels at 8-30 P.M.; was kept in one of the tents set apart for observation of suspected cases; was moved to cholera tent the same night; partial collapse having taken place, but the progress of the disease being arrested at this stage, he made a rapid convalescence, and was discharged on 7th May. 12th case.

In the first detachment at Tyrangoon on the 28th April, almost immediately on landing, Private Pry, of letter F Company, who had only been discharged from hospital that morning, where he had been treated for colic, was attacked with symptoms of cholera. The disease in his case did not assume a severe type, and he became speedily convalescent, and was discharged on 8th May. 15th case.

When I was beginning to hope that the epidemic was at an end, the child of Private Lynch, aged 6 years, was attacked on the evening of the 12th May, between 6 and 7 P.M., in No. 13 married quarters. He was taken to the tents about 8 P.M., being then in first stage of collapse; re-action set in about 12-40 A.M., cerebral symptoms soon followed, and he died comatose at 7-30 o'clock on the following morning. 12th May—14th case.

As soon as I saw him I recommended to the Commanding Officer that the barrack in which he resided should be vacated as soon as possible, and by 7 A.M. on the 13th May the whole of the occupants had proceeded to cross the river to Tyrangoon, instructions being given that they were to be kept as far as possible isolated from those who had previously gone over. The numbers who crossed on this occasion were eleven men, eleven women, and nineteen children, making the entire strength 179 men, twenty-nine women, and forty-nine children.

All suffered some inconvenience from occasional showers, but enjoyed good health; and on the morning of the 31st May, the monsoons having set in, and 17 days having elapsed since the last detachment had been sent over, I wrote to the Officer Commanding representing that they might be permitted to return to Thayetmyo. Before my recommendation had been forwarded, however, a report was sent in from the medical officer in charge that Serjeant C. Stevens, who was acting Canteen Serjeant and living in the canteen (which was at once transferred to another building), had been attacked with cholera on the previous evening, and had died at 5-30 A.M. on that day. This unfortunate occurrence, of course, put a stop to the move to the discomfort of all, especially the married people, who were now beginning to suffer much discomfort from the heavy rain which beat through the roof and walls in many places, notwithstanding that the Engineer's department have had workmen constantly employed repairing them. 31st May—Tyrangoon. 15th case.

On my visiting the detachment this day, May 31st, I found that a large pool of water had formed in the low paddy ground, midway between the river and the barracks, draining the rising grounds around which was used as a latrine by the natives of the village; an offensive smell arose from it, and I on the following day addressed a letter on the subject to the Station Staff Officer, requesting him to bring the matter to the notice of the Deputy Commissioner. 31st May.

On the 1st June another case occurred at Tyrangoon; the daughter, aged 2½ years, of Color Serjeant Mason, living with a family of four persons in a bungalow containing twelve rooms, was attacked with cholera and died the same night. The rooms contain each about 2,900 cubic feet, and are each occupied by a single family. A verandah, 9½ feet wide, runs along the south side of the building; the rooms are ventilated by doors at the north and south sides, and being composed of matting only with bamboo floors, there is always an abundant supply of air. The child died eight hours after attack. The quarter and the next one to it were closed and fumigated, and the families removed to an empty bungalow. 1st June—16th case.

On the 6th June Private Farrell was attacked about 3 P.M., having suffered from diarrhoea since the previous day; he became collapsed about 8 P.M. on the evening of the 6th, and continued in that state till the following afternoon, when re-action set in. He was discharged from hospital on the 17th June. The men occupying the bungalow from which Farrell was brought to hospital were placed in tents pitched on a neighbouring hill. 6th June—Tyrangoon. 17th case.

No further cases having appeared, and the men being uncomfortable from the leaking of the huts, besides that they were drinking to excess, I represented on the 17th June to the Officers Commanding the station and regiment that the men might now be brought to Thayetmyo; this was carried into effect on the morning of the 19th; one man suffering from bubo and one woman from general debility were the only cases under hospital treatment at the time.

Eighteen days after the return of the detachment from Tyrangoon and one month after the occurrence of the last case of cholera in the regiment on the 7th July, a prisoner from the cells, Private Titus Roome, was admitted to hospital about 10 A.M., stating that he had been purged since 6 A.M. that day; almost immediately after admission he began to vomit, and purging of a dark bilious character continued; about noon he had a serous motion, and at once became collapsed; the case terminated fatally on the 9th, 57 hours after the first signs of diarrhoea and 51 hours after collapse set in. It is difficult to account for the occurrence of this case: he had been a prisoner since coming from Tyrangoon on the 19th ultimo, was detained at the hospital for a day or two on first arrival, being unfit to go before the Commanding Officer from the effects of excess in drink. He was confined in the guard-room till the 2nd July, when he was transferred to the cells by sentence of court-martial. The cells are very clean and well ventilated buildings, and there were at the time two other prisoners, neither of whom have suffered from any suspicious symptoms. 7th July—Thayetmyo. 18th case.

Cholera had been prevalent in the lines of the Royal Artillery from the 19th June, but there had been no communication between them and the cell prisoners of the 45th.

On this date two cases occurred: one Private Sands in No. 6 barrack, where none had hitherto been reported, and one a child named Colton in No. 10 family quarters; both these cases proved fatal; the men from No. 6 barrack were placed under canvas on the Brigade parade ground the same afternoon. No further cases took place among them, and they returned into barracks on the 4th August. 23rd July—19th and 20th cases.

On the 24th and 25th one case occurred each day, the first being a child named Keats from No. 4 barrack, and the second a young woman, aged 16, named Lees, from No. 10 family barrack; both these cases were of a milder type, and both recovered. The next and last case, a child named Minall, was attacked in the building used as a female hospital, where his mother resides as matron; he also recovered. This was the only instance in which any of the attendants on the sick seem to have been instrumental in causing the extension of the disease, and in no single instance have they contracted it themselves. The families in which these cases took place were isolated as far as possible, and all their quarters vacated, white-washed, and fumigated. 24th and 25th July—21st and 22nd cases.

The treatment in the first case was exclusively calomel in small doses frequently repeated, strong beef tea, chicken broth, and soda-water; in subsequent cases the saline mode of treatment recommended by Dr. Stevens was carried out, with the addition, in a few cases, of hydrochlorate of ammonia. Aromatic spirits and the carbonate of 1st August 1873—23rd case.

ammonia were used when stimulants were necessary. Sinapisms, frictions, cupping, and turpentine fomentations to loins were freely used. Beef tea well salted, chicken broth *ad libitum*, and soda-water—champagne was used in a case of secondary fever, when it was given with good effect in conjunction with sulphate of quinine, and in one other case during the stage of collapse.

In the cases of children treated at the termination of the epidemic small doses of calomel were again had recourse to.

The occupants of the rooms in which cases occurred were from the first removed, and at once isolated as far as possible; in family quarters the occupants of the adjoining rooms were also at first removed from their quarters; these were in all cases carefully cleansed, disinfected, and fumigated with sulphurous acid. Latrines were closed, thoroughly cleansed, disinfected, and the vessels burned and re-tarred.

Two men were told off from the 20th April to accompany the conservancy carts from the tents to the place set apart for the purpose in the jungle, to see that purification of the vessels in which excreta were removed was thoroughly carried out. Clothes and bedding used by patients in hospital, or brought with them from barracks, were at once fumigated and boiled before leaving the hospital, a boiler being kept on the fire all day for this purpose.

Employment of soldier orderlies was necessary on account of the difficulty of procuring natives; they were provided with separate tents, and were not again allowed to rejoin their Companies till all danger of carrying the disease had passed away. European orderlies. None of them suffered from choleraic symptoms; this may be attributed to their own attention to orders given as to strict cleanliness and use of disinfectants. Coffee was always issued to them on coming on and off duty. The native hospital servants also entirely escaped the disease.

With regard to the origin and cause of the outbreak, there is great uncertainty; one case of Origin of the outbreak. cholera only is positively known to have been brought to Thayetmyo from Prome prior to Mrs. Maher being attacked on the 12th April. Another, a prisoner from the jail at Prome, was admitted to hospital on that date, and did not reach Thayetmyo till after Mrs. Maher's death.

The first case above referred to was brought from Prome on the 15th March and treated in a shed by the river side and recovered. Other cases, in all fifteen, have been reported to the Deputy Commissioner as deaths from cholera in the district—some of them close to Thayetmyo, others twenty miles distant; but I am informed by him that whether they were really cholera or not is doubtful.

A report got abroad on the 22nd March that a case of cholera had taken place in Thayetmyo, and an order was issued by the Officer Commanding to hinder soldiers and their families from visiting the town; after an interval of a week, however, no disease being heard of, this order was no longer enforced.

Beyond the cases referred to in the previous paragraph, I have only been able to ascertain that one case occurred in the vicinity, viz., on the 24th April, when a milkman, residing about two miles from cantonment to the south of Thayetmyo, was said to have been attacked and died on the following day. There had been no cases among the camp followers of the different corps and departments, nor had there been any cases among the men of the 1st Native Infantry Regiment. Two cases of diarrhoea with vomiting, in one of which the excreta were of a serious character, occurred in that corps on the 5th April, giving rise to suspicions at the time; both recovered without distinct choleraic symptoms.

During the remainder of the time embraced by the first outbreak of the epidemic in the 45th Regiment at Thayetmyo, I did not hear of any cases of cholera among the natives. Cases were, however, said to occur at the opposite side of the river, and on the 30th May a Serjeant of the 45th Regiment was attacked at Tyrangoon, and two other cases took place between that date and the 6th June in the same place.

On the 19th June, the same day that the detachment of 45th Regiment returned to Thayetmyo, cholera appeared among the grass-cutters belonging to the Royal Artillery; from there it extended on the 24th to the men of the battery, and on the 7th July again attacked the 45th, making its first appearance in the regimental cells. In this case there was no direct intercourse between the man attacked and the artillery lines, as he had been a prisoner from the date of his return from Tyrangoon, viz., 19th June, and there had been no cases at that place since the 6th June, one month prior to his attack. On this occasion the epidemic was more extended in range than on its first outbreak, and both the inmates of the jail and inhabitants of Thayetmyo and vicinity suffered severely. One case took place in the 1st Madras Native Infantry Regiment.

Two Europeans under charge of Civil Surgeon were attacked, one an officer in the Public Works Department, the other a Serjeant in the Ordnance Department.

The total number of cases reported among natives during this second outbreak in Thayetmyo and vicinity, excluding camp followers of the Royal Artillery, was 158, of whom 31 admitted from the jail and 18 from the town of Thayetmyo were treated in a temporary hospital at a convenient distance from the town.

The dirty condition of the town of Thayetmyo, as well as of the villages outside cantonments, must always be a source of possible contamination, no matter how good may be the sanitary arrangements within cantonments; there is a nullah also to the north of cantonments which, in the dry season, is used as a latrine by the inhabitants of the villages on its banks, one of these being occupied by the horse-keepers of the Royal Artillery; this nullah being partially outside cantonments, it is impossible to prevent the nuisance complained of. Perfect isolation seems to be an absolute impossibility, though, of course, it is advisable to carry it out as well as may be.

Jungle, although kept under by cutting at certain seasons, is much too luxuriant on parts of the cantonment lands, and it will be advisable that part of them be leased for dry cultivation; this measure would have been carried out this year, but that the grazing had been let before any applicants for cultivating land came forward.

The number of tents kept in store in Thayetmyo, though sufficient during the recent epidemic, would not have been so had it been necessary to put the majority of the garrison under canvas at the same time; this may occur any season, as the cholera seems to be getting a regular visitant here, and the stock of tents should be increased.

The advantage in moving troops in seasons of cholera was evident on the present occasion by the stoppage of the disease in every instance, when the men were moved either on to the parade ground or to the other side of the river. Of course I consider that in the case of Private Fry attacked on the passage to Tyrangoon, the disease was contracted before leaving Thayetmyo.

The subsequent short epidemic at Tyrangoon did not occur for seventeen days after the last detachment were sent over, so it is probable the germs of the disease were absorbed after arrival.

With regard to the cholera station at Tyrangoon, its sanitary state is indifferent, although the site is apparently an eligible one. The huts are built on a number of small hills, and in wet weather communication between them becomes almost impossible, the gullies being soon filled with water; paths from one hill to another with foot-bridges are indispensable in case the camp is occupied during the rains.

The water-supply is procured from the Irrawaddy, below the town of Allan-myoo, and is contaminated by the filth of that town. The hills on which the huts are built increase the difficulties in supplying water, and extra water carriage should in consequence be provided.

During the recent epidemic the river water for drinking and cooking was always purified with alum and filtered before use.

Latrines are indifferent.

Huts should be kept in repair and ready for occupation at all times; they were not so when the troops were sent out on the present occasion, and though workmen were engaged on them continually till the rains began, they were not even then water-tight; this caused a great deal of unnecessary discomfort.

Between the foot of the hills on which the huts are built and the river is a piece of low paddy land, interspersed with patches of jungle; this is used as a latrine by the natives, and at the commencement of the rains give rise to a very offensive smell. It seems advisable, if Tyrangoon is kept up as a sanitary station, that the ground occupied by the military buildings, and all between that and the river should be placed under cantonment regulations, and altogether made over to the military authorities.

Camping ground at Meaday, this has been allowed to become perfectly useless as a station for encamping troops; the ground has in parts been ploughed for cultivation, and in other parts allowed to lapse into jungle; it will be well if it were properly laid out and drained, and the weeds and young jungle cleared away annually, or oftener if necessary.

It will be seen from perusal of the foregoing report, as well as from the returns and plan sent with it, that the recent epidemic of cholera was not restricted to any particular part of the station, and that it was not communicated from building to building, but pursued an erratic course invading in the lines of the 45th Regiment no less than

Concluding remarks.

thirteen buildings out of a total of eighteen occupied by that corps, and presenting in eight of these buildings only one case each.

The accompanying returns and plan will show all particulars regarding the epidemic in a tabular form.

In conclusion, I have to express my thanks to Dr. Robertson, Royal Artillery, for assistance rendered during the early part of the epidemic, when it was confined to the 45th Regiment, and for placing at my command the services of his Hospital Assistant Venkatachallam Moodeliar, who made himself very useful.

Mr. C. St. J. Lawrence, Apothecary, 45th Regiment, was indefatigable in his attendance at all times, and I have much pleasure in bearing testimony as to the value of his services.

I have also every reason to be satisfied with the mode in which his duties were performed by Assistant Apothecary H. Roberts, of whom, when on duty at Tyrangoon, Assistant Surgeon Carew spoke in the highest terms.

THAYETMYO, (Signed) R. HUNGERFORD, Surgeon-Major,
15th September 1873. H. M.'s 45th Regt., S.F.

The following returns accompany this report:—

Register of Sub-soil Water.

Progress Report of Cholera.

Effect of upper stories on proportion of Attack.

Table showing Percentage of Attacks and Deaths.

Daily Nominal Register.

Meteorological Observations.

Plan of the Barracks.

Table showing the buildings in which Cholera occurred, &c.

Register showing the Distance of Sub-soil Water, fall of Rain, Number of Cases of Cholera, &c., at Thayetmyo during the month of April 1873.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaar.	Jail and Civil Population.
April 1873.	1	...	...	...	...	...	...	...	...
	2	55	4½	...	...	...	...	...	...
	3	...	...	...	...	...	...	...	...
	4	55	7½	...	...	...	...	...	...
	5	...	...	...	...	...	...	...	...
	6	55	10	...	...	...	...	...	...
	7	...	...	...	...	...	...	...	...
	8	56	...	...	...	...	...	...	...
	9	...	...	...	...	...	...	...	...
	10	56	1	...	...	...	...	...	...
	11	...	...	...	...	...	...	...	...
	12	56	3½	...	...	1	...	...	1
	13	...	...	...	...	...	...	...	...
	14	56	6	...	...	...	...	...	...
	15	...	...	...	...	...	...	...	...
	16	56	8	...	...	...	...	...	...
	17	...	...	...	...	...	...	...	...
	18	56	10	...	...	...	...	...	...
	19	...	...	...	...	...	...	...	...
	20	56	10½	...	2	1	...	...	...
	21	...	...	...	...	1	...	...	...
	22	56	11	...	...	...	...	...	...
	23	...	...	...	...	2	...	...	...
	24	57	1½	...	...	...	...	...	...
	25	...	...	...	...	...	...	...	...
	26	57	3	...	...	...	...	...	...
	27	...	...	...	...	...	...	...	...
	28	57	5	...	18	4	...	...	...
	29	...	...	...	...	4	...	...	...
	30	57	7	...	...	...	...	...	...

True copy of return received from Civil Surgeon for months from April to August 1873.

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt. S.F.

Register showing the Distance of Sub-soil Water, Fall of Rain, Number of Cases of Cholera, &c., at Thayetmyo during the month of May 1873.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaar.	Jail and Civil Population.
May 1873.	1	...	...	...	72	...	...	...	...
	2	57	11	...	...	...	...	...	...
	3	...	...	...	...	...	...	...	...
	4	57	8	...	...	...	...	...	...
	5	...	...	...	...	...	...	...	...
	6	57	7	...	...	...	...	...	...
	7	...	...	...	...	...	...	...	...
	8	57	8	...	...	...	...	...	...
	9	...	...	...	...	...	...	...	...
	10	57	8½	...	...	...	...	...	...
	11	...	...	...	...	...	...	...	...
	12	58	...	...	...	1	...	...	...
	13	...	...	...	18	...	...	...	...
	14	58	3	...	...	...	...	...	...
	15	...	...	...	...	...	...	...	...
	16	58	5	...	...	...	...	...	...
	17	...	...	...	...	...	...	...	...
	18	...	...	...	...	...	...	...	...
	19	...	...	...	...	...	...	...	...
	20	...	...	...	...	...	...	...	...
	21	...	...	...	...	...	...	...	...
	22	...	...	...	...	...	...	...	...
	23	...	...	...	...	...	...	...	...
	24	...	...	...	...	...	...	...	...
	25	...	...	...	...	...	...	...	...
	26	...	...	...	...	...	...	...	...
	27	...	...	...	...	...	...	...	...
	28	...	...	...	...	...	...	...	...
	29	...	...	...	...	...	...	...	...
	30	...	...	2	20	...	...	...	...
	31	...	...	2	6	1	...	...	...

Register showing the Distance of Sub-soil Water, Fall of Rain, Number of Cases of Cholera, &c., at Thayetmyo during the month of June 1873.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaars.	Jail and Civil Population.
June 1873.	1	...	...	1	11	1	...	...	...
	2	...	...	...	14	...	...	...	...
	3	...	...	...	...	...	...	...	...
	4	...	...	...	22	...	...	...	...
	5	...	...	...	10	...	...	...	...
	6	...	...	...	...	1	...	...	...
	7	...	...	...	...	...	...	...	...
	8	...	...	...	...	...	...	...	...
	9	...	...	...	...	...	...	...	...
	10	...	...	...	...	...	...	...	...
	11	...	...	...	30	...	...	...	...
	12	...	...	...	70	...	...	...	...
	13	...	...	1	84	...	...	...	...
	14	...	...	...	...	...	...	...	...
	15	55	...	1	8	...	...	...	...
	16	...	...	...	...	...	...	...	...
	17	54	8	...	5	...	...	...	...
	18	...	...	...	10	...	...	...	...
	19	54	10	1	8	...	...	2	...
	20	...	...	...	19	...	...	...	...
	21	55	2	...	34	...	...	...	...
	22	...	...	...	...	...	...	...	...
	23	54	8	...	3	...	...	...	...
	24	...	...	...	20	1	...	3	...
	25	54	6	...	24	1	...	1	...
	26	...	...	...	5	...	...	...	...
	27	54	4½	...	...	1	...	...	...
	28	...	...	...	14	...	...	...	1
	29	54	3	...	1	...	...	...	1
	30	...	...	...	16	...	...	...	...

Register showing the Distance of Sub-soil Water, Fall of Rain, Number of Cases of Cholera, &c., at
Thayetmyo during the month of July 1873.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaars.	Jail and Civil Population.
July 1873.	1	54	1½	...	10	...	...	...	4
	2	...	...	...	49	...	...	...	2
	3	54	2	...	...	...	...	...	4
	4	...	...	...	...	...	...	...	...
	5	54	2	...	...	...	...	1	...
	6	...	...	...	...	...	...	2	2
	7	54	4	...	...	1	...	...	3
	8	...	...	...	21	3	...	...	1
	9	54	6	...	28	...	...	6	2
	10	...	...	...	...	...	...	3	3
	11	54	5	...	4	1	...	1	...
	12	...	...	...	...	...	...	...	1
	13	54	7	...	54	...	...	...	2
	14	...	...	...	5	...	...	1	...
	15	54	7	...	...	...	...	1	2
	16	...	...	...	18	...	...	...	...
	17	54	5½	...	54	...	...	2	...
	18	...	...	...	...	1	...	...	1
	19	54	5½	...	36	...	1	1	...
	20	...	...	...	5	...	...	...	1
	21	54	6	...	52	...	...	...	2
	22	...	...	...	14	1	...	...	2
	23	54	6	...	50	1	...	...	...
	24	...	...	...	14	1	...	...	1
	25	...	...	...	90	2	...	...	...
	26	...	...	1	24	...	...	...	...
	27	...	...	...	6	...	...	...	...
	28	...	...	1	16	...	...	...	...
	29	...	...	1	4	...	...	...	1
	30	...	...	...	5	...	...	...	1
	31	...	...	...	10	...	...	...	...

Register showing the Distance of Sub-soil Water, Fall of Rain, Number of Cases of Cholera, &c., at
Thayetmyo during the month of August 1873.

Date.		Distance Level of Sub-soil Water from Surface of Ground.		Fall of Rain.		Number of Cases of Cholera reported.			
Month.	Day.	Feet.	Inches.	Inches.	Cents.	European.	Native Troops.	Cantonment Bazaars.	Jail and Civil Population.
August 1873.	1	54	7	...	10	1	...	...	1
	2	...	...	...	38	...	...	...	...
	3	54	7	1	10	...	...	...	...
	4	...	...	...	10	...	...	...	...
	5	54	4½	1	9	...	...	...	...
	6	...	...	...	5	...	...	...	...
	7	54	4½	...	62	...	...	...	...
	8	...	...	...	12	...	...	...	...
	9	54	3	...	...	...	...	...	...
	10	...	...	...	62	...	...	...	...
	11	54	3	...	...	...	...	...	...
	12	...	...	...	...	...	...	...	...
	13	54	3	...	...	...	...	...	...
	14	...	...	...	14	...	...	...	...
	15	54	4	...	...	...	...	...	...
	16	...	...	...	14	...	...	...	...
	17	54	7	...	...	...	...	...	...
	18	...	...	...	...	...	...	...	...
	19	54	7	...	...	...	...	...	...
	20	...	...	...	13	...	...	...	...
	21	54	8	...	...	...	...	...	...
	22	...	...	...	5	...	...	...	...
	23	54	8½	...	...	...	...	...	1
	24	...	...	...	...	...	...	...	1
	25	54	8	...	...	...	...	...	1
	26	...	...	...	5	...	...	...	...
	27	54	7	...	36	...	...	...	...
	28	...	...	...	10	...	...	...	...
	29	54	6½	...	5	...	...	...	2
	30	...	...	...	...	...	...	...	1
	31	54	6	...	40	...	...	...	2

True copy of return received from Civil Surgeon for the months from April to August 1873.
THAYETMYO, (Signed) R. HUNGERFORD, Surgeon-Major,
15th September 1873. H. M.'s 45th Regt. S.F.

Progress Report of Cholera at Thayetmyo in Her Majesty's 45th Regiment "Sherwood Foresters," submitted
in accordance with No. 61 of the Revised Rules regarding means to be adopted on outbreak of Cholera.

Station.	Number or Name of Building.	Number and Detail of Occupants.	Date of First Case.	Date of Evacuation of Building.	Number of Cases before Evacuation.	Number of Cases among those remaining after Evacuation.	Date of Re-occupation.	Remarks.
Thayetmyo. Her Majesty's 45th Regiment "Sherwood Foresters."	No. 2 barracks, female ward...	6	1873. 1st Aug.	1873. 2nd Aug.	1	None.	12th Aug.	One case took place en route to Tyanngoon, evidently contracted before evacuation. Two cases contracted at Tyanngoon.
	" 4 do. library ...	4	24th July.	25th July.	1	"	6th "	
	" 5 F Company ...	81	28th April.	28th April.	2	3	19th June.	
	" 6 G do. ...	85	23rd July.	23rd July.	1	None.	3rd Aug.	
	" 7 H do. ...	81	29th April.	29th April.	2	"	19th June.	This case took place in one of the Sergeants' rooms. The room was closed, but the remainder of the building was not evacuated.
	" 8 E do. ...	81	30th "	"	1	"	10th May.	
	" 9 Band-room ...	45	24th "	24th April.	1	"	10th "	
	" 10 Family-quarters ...	53	29th "	29th "	4	"	13th June.	
	" 11 do. ...	47	12th "	"	1	"	...	Only the room in which the case occurred and one on each side of it were closed and fumigated. The entire building was not evacuated. A case other evacuation took place at Tyanngoon.
	" 13 do. ...	53	23rd "	13th May.	2	1	19th "	
	Cells ...	2	7th July.	"	1	None.	...	
	Guard-room ...	16	23th April.	"	1	"	...	
	Band Master's quarters ...	5	20th "	"	1	"	...	The room in which the case occurred was closed and fumigated; the building was not evacuated.

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt. "Sherwood Foresters."

Effect of Upper-stories on Proportion of Attacks.

Date.	Number occupying Upper-stories on that date.			Number of Attacks in Upper-stories on that day.			Number occupying Lower-stories on that date.		Number of Attacks in Lower-stories on that date.		Remarks.
	M.	W.	C.	M.	W.	C.	Gr. Guard.	Other Guards.	Gr. Guard.	Other Guards.	
12th April 1873	422	66	117	...	1	...	15	17	...	...	* One attacked en route to Tyanngoon.
20th do.	422	65	117	1	...	...	15	17	...	...	
21st do.	421	64	117	...	...	1	15	17	...	...	
23rd do.	420	64	117	1	1	...	16	17	...	...	
28th do.	419	64	117	4	*	...	16	17	1	...	
29th do.	418	64	117	3	...	...	16	17	...	...	
12th May 1873	417	64	117	...	...	1	17	17	...	...	
31st do.	413	64	118	...	...	...	17	17	1	...	
1st June 1873	413	62	120	...	...	1	17	17	...	...	
6th do.	411	61	119	1	...	...	18	17	...	...	
7th July 1873	410	61	118	...	...	...	17	17	1	...	
22nd do.	411	61	118	...	...	1	16	17	...	...	
23rd do.	410	61	118	1	...	...	15	17	...	...	
24th do.	409	61	118	...	...	1	17	17	...	...	
25th do.	406	61	118	...	...	1	19	17	...	...	
1st August 1873	400	61	117	...	...	1	16	17	...	...	

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt. S.F.

Table showing the Percentage of Attacks and Deaths from Cholera to Strength, and also the Number married and unmarried.

	Men.	Women.	Children.
Strength	447	62	117
Attacked	14	2	7
Died	8	2	3
Percentage of attacked to strength	3.13	3.22	5.98
Do. of deaths to do.	1.78	3.22	2.56
Do. of do. to attacked	57.14	100	42.85
Married	4	2	...
Unmarried	10	...	...
Percentage of married attacked to strength	6.45	3.22	...
Do. of unmarried do.	2.59	...	...

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt. S.F.

Daily Nominal Register of Officers in Her Majesty's 45th Regiment Sherwood Foresters, 18th September 1873.

Date, 1873.	Rank.	Names.	Age.	Company.	Previous Health.	Habits.	Period of Service in India.	Whether Married or Single.	Hour of Admission.	Date and Hour of Attack.	Whence admitted.			Result.			Recovered and Date.	
											Barred Numbers.	Married Quarters.	Hospital and Cause of Original Admission.	Camp at Tyngsboro.	In Stage of Collapse.	In Stage of Reaction.		How long After Admission.
1873.	Mrs.	Maher	30	E	Indif. fever.	Tempe- rate.	6 11	M.	6-30 A.M.	Uncertain	...	11	No. 9 room.	...	...	Yes.	Mrs. 6 1/2	1873.
12th April...	Private.	William Cox	31	H	Good.	Do.	8 6	S.	Do.	12-30 A.M., 30th April 1873.	7	...	...	...	Yes.	40	...	...
20th do...	Child.	Letty Brown	8	E	Delicate.	Do.	8 0	...	6-30 P.M.	4 P.M., 15th April 1873.	Staff S. J. Q.	...	...	...	...	...	...	30th April.
21st do...																		
22nd do...	Mrs.	Maybury	34	F	Good.	Do.	9 7	M.	5-30 A.M.	2 days before ad- mission.	13	...	...	...	Yes.	31	...	8th May.
23rd do...	Private.	B. E. Cox	31	F	Do.	Do.	13 1	S.	Do.	Midnight, 27th April 1873.	5	West end room.	...	...	Yes.	14 1/2	...	...
23th do...	Do.	W. Massey	37	F	Fair.	Inter- perate.	8 4	M.	1 A.M.	...	5	...	...	...	...	...	...	...
23th do...	Do.	Simon Owyer	25	H	Do.	Do.	4 4	S.	2-15 P.M.	2 P.M., 24th April 1873.	7	...	...	...	Yes.	2 1/2	...	...
28th do...	Do.	John Griffith	39	G	Good.	Do.	13 3	M.	2-30 P.M.	Between tea hours of 7 and 8 A.M., 28th April 1873.	Guard- room.	...	...	...	...	Yes.	28 1/2	...
23th do...	Do.	John Kennedy	31	F	Do.	Tempe- rate.	8 5	S.	5 P.M.	8 A.M., 28th April 1873.	5	...	...	...	...	...	...	12th May.
23th do...	Do.	Thomas Fry	35	F	Do.	Inter- perate.	13 3	S.	8-30 A.M.	Uncertain	...	...	...	Tyngs- boron.	...	...	...	8th do.
23th do...	Do.	Edward Hunter	37	E	Do.	Do.	8 5	M.	8-15 A.M.	Do.	10	No. 8 room.	...	...	Yes.	6 1/2	...	...
23th do...	Do.	Charles Ward	29	E	Indif. fever.	Tempe- rate.	8 5	M.	11 A.M.	8 A.M., 25th April 1873.	10	No. 13 room.	...	...	...	...	...	20th May.
23th do...	L. Sjt.	Ezekiel Gould	31	E	Good.	Inter- perate.	8 5	S.	8-30 P.M.	11 A.M., 26th do.	5	West end room.	...	...	...	...	...	7th do.
12th May...	Child.	William Lynch	6	G	Delicate.	Tempe- rate.	6 0	S.	8 P.M.	Between hours of 6 1/2 and 7 P.M., 12th May 1873.	13	No. 2 room.	...	...	...	Yes.	11 1/2	...

31st do.	Serjt.	Charles Stevens	29	F	Good.	Inter- perate.	8 5	S.	7 P.M.	4 P.M., 30th May 1873.	...	...	...	Tyngs- boron.	Yes.	...	10	...
1st June	Child.	Clara Mason	2	F	Delicate.	Tempe- rate.	2 0	S.	10-30 A.M.	10 A.M., 1st June 1873.	...	...	...	Do.	Yes.	...	8 1/2	...
5th do.	Private.	Christopher Farrell	27	F	Good.	Inter- perate.	8 5	S.	3 P.M.	8 P.M., 6th June 1873.	...	...	...	Do.	...	...	...	17th June.
7th July	Do.	Timas Roome	34	H	Delicate.	Do.	12 8	S.	9-45 A.M.	6 A.M., 7th July 1873.	Cells.	...	...	...	Yes.	...	50	...
2nd do.	Do.	John R. Sands	26	G	Good.	Tempe- rate.	7 11	S.	6-30 A.M.	...	6	...	...	...	Yes.	...	6 1/2	...
22nd do.	Child.	George Condon	3	E	Delicate.	Do.	...	...	6 A.M.	12 midnight, 22nd July 1873.	...	...	...	...	Yes.	...	6	...
24th do.	Do.	Ernest Keats	1 1/2	H	Do.	Do.	...	S.	12-30 P.M.	3-30 P.M., 24th July 1873.	4	East end room.	...	...	...	...	...	4th Aug.
25th do.	Girl.	Mary Lees	16 1/2	F	Do.	Do.	...	S.	6 A.M.	...	10	No. 1 room.	...	...	...	...	...	5th do.
1st August.	Child.	William Minall	1 1/2	H	Good.	Do.	...	S.	11 P.M.	11 P.M., 1st August 1873.	2	Female Hospd.	...	...	...	...	...	10th do.

THAVETMO,

18th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt. S.F.

Table showing the Buildings in which Cholera appeared, the Number attacked in each, and the Order in which cases occurred.

Number of Buildings.		Number attacked in each Building.	Date of Admission.	Number of Case.
No. 1.	Male Hospital...	1	1st August 1873	23rd case.
" 2.	Female do. ...	1	21st July	21st case.
" 3.	School ...	1	28th April	6th and 9th cases.
" 4.	Library ...	1	23rd July	19th case.
" 5.	Single-men's Barracks ...	2	20th and 28th April 1873	2nd and 8th cases.
" 6.		1	29th April 1873	12th case.
" 8.	Band ...	1	24th "	5th case.
" 10.		4	29th April, 23rd July, and 25th July 1873	10th, 11th, 20th,* and 22nd cases.
" 11.	Married Quarters ...	1	12th April 1873	1st case.
" 12.		2	23rd April and 12th May	4th and 14th cases.
" 13.		1	21st April 1873	3rd case.
1. 14.	Serjeant-Major's Quarters ...	1	28th April 1873	7th case.
2. 15.	Band Master's do. ...	1	7th July	18th case.
3. 16.	Staff Serjeants' do. ...	1		
1. 17.	Guard-room ...	1		
1. 18.	Cells ...	1		
At Tyrangoon.				
On March		1	28th April 1873	13th case.
Cartoon		1	30th May	15th "
Married Quarters		1	1st June	16th "
Single-men's do.		1	6th do.	17th "

THAYETMYO,
15th September 1873.

(Signed) R. HUNGERFORD, Surgeon-Major,
H. M.'s 45th Regt. S.F.

REPORT ON THE EPIDEMIC OF CHOLERA IN F BATTERY, 20TH BRIGADE, ROYAL ARTILLERY, STATIONED AT THAYETMYO, BRITISH BURMAH, IN THE MONTHS OF JUNE AND JULY 1873, BY SURGEON WILLIAM ROBERTSON, M.B., IN MEDICAL CHARGE OF THE BATTERY.

Outline of the Epidemic from its First Appearance in the Pegu Division of British Burmah, till its Outbreak among the Troops stationed at Thayetmyo.

The epidemic of cholera which prevailed during the present year among the European troops stationed at Thayetmyo made its first appearance in the Pegu Division of the Province of British Burmah in the month of February last, and took its origin,* as in the epidemic of 1870, in the district of Mya-noung, a large and populous tract of country lying along the course of the Irrawaddy. The position of the chief town of this extensive district will be found indicated on the accompanying sketch map. From this part of the river valley, as from an endemic focus, the disease was carried both up-country and down along the grand line of internal traffic, attacking the numerous towns and villages which occupy both banks of the river. It thus extended its influence in a downward direction as far as the town of Dalla, opposite Rangoon; but the upward course of the epidemic more immediately falls within the scope of the present report, and accordingly I shall confine myself to tracing its gradual invasion of the district and ultimate appearance within the cantonment of Thayetmyo. I may add that my position as Acting Civil Surgeon in the early part of the year brought me into immediate acquaintance

* After return from Tyrangoon.

with several of the first instances of the disease imported from the infected localities, and statement made in connexion with these cases may be implicitly relied on; but with regard to the number of deaths from cholera, which are further given as having occurred in the outlying villages of this district, and which are extracted from official records, I must confess that, owing to the very imperfect machinery of registration, I place but little confidence in their entire accuracy—a lack of confidence shared, as will be seen later on—by the highest functionary in the province.

On the 4th March a telegram was received by the Deputy Commissioner of this district from the corresponding official at Prome (pop. 24,000), reporting that cholera was prevalent at Prome—prevalent in that town, and at the same time intimating the probability of the disease being introduced into the Thayetmyo District through the agency of persons travelling along the main road in the direction of the frontier. I may add that Prome is situated on the left bank of the river, 40 miles below Thayetmyo, which lies on the right bank (see map).

On the 13th March a fatal case of cholera, occurring in the person of a wayfarer bound for up-country, was reported at Do-yeng-ga-bo (pop. 184). This small village, distant 26 miles from the cantonment, is occupied by the first Police Station which the traveller on the main road from Prome encounters with in the Thayetmyo District.

On the 15th March a death from cholera was reported at Minday, a small hamlet situated about seven miles west of the cantonment. No cases had previously been reported in any part of the district on this side of the river; and even at Kama (pop. 300), a village situated on the river bank 20 miles below Thayetmyo, the disease does not appear to have shown itself till the 7th of April.

The village of Minday consists of only a few houses occupied by about thirty persons. It lies six miles inland from the river in a very secluded position, being hemmed in by steep jungle-covered hills on all sides except towards the east, that is in the direction of Thayetmyo. At this point a gap between two of the enclosing spurs permits the passage of a rough cart-track, by which alone the inhabitants maintain communication with the outer world. The isolation of the spot, and its remoteness from the great lines of internal communication, give the outbreak here somewhat the appearance of a re-visitation of a previous epidemic, rather than a fresh introduction of the disease. But still it is open to say that a rigid inquiry into all the circumstances would evoke the fact that communication by persons or material had taken place with the infected localities lower down the river. Yet it seems strange, if such were the case, that an intermediate locality should have given evidence of infection if the cholera germs were really carried through it. It ought to be explained that there is no public road on the right bank of the river as there is on the left—nothing but cart-tracks of a very primitive description between neighbouring villages.

But the dissemination of the cholera virus was not likely to be confined solely, or even chiefly to persons travelling by land. The great river highway played a very important part in the propagation of the disease. The numerous trading boats which covered its broad waters at all seasons of the year proceed on their voyage in the most leisurely manner, halting at almost every town on their route, and always laying to for the night in proximity to some village or fishing station, with the inhabitants of which the crews enter into the freest intercourse. In this manner any infectious disease which the crews of trading boats contract in one village is carried on to the next up or down the river as the case may be. Thus, too, the first cases of cholera which were introduced into the town of Thayetmyo were brought up the river in boats from Prome.

On the 15th March a boat arrived here from Prome with one of its crew said to be ill of cholera. The man was landed and conveyed to a house in the centre of the native town, where he died the same evening. In my capacity as Acting Civil Surgeon I made an investigation into the case the following day—the case not being reported till then—and no doubt was left on my mind as to the man's death having resulted from cholera.

A strict watch was now kept on all boats arriving from down the river; and on the 19th March I was requested by the Deputy Commissioner to visit a man reported to be lying ill of cholera in a boat which also had arrived from Prome. On proceeding at once to inquire into the case I found that the sick man had already been landed, and that he was lodged in one of the temporary huts which native fishermen

are in the habit of erecting on the extensive sand bank left exposed in front of the town before and after the rains. There could be no doubt as to the nature of the man's illness—he was in the stage of collapse from cholera—even if the previous history had not been so clearly ascertained. Being allowed to remain in the hut to which he had originally been conveyed, and being carefully tended by his friends, the patient made a good recovery.

On the 21st March a boy, aged eight years, a resident in the town, was alleged to have died of cholera. The case was not reported till two days later, when I made inquiries of the boy's relatives, but failed to obtain satisfactory evidence as to the exact nature of the fatal illness.

On the 31st March I repaired to the village of Yua-doung (pop. 1,100), situated on the left bank of the river, and almost directly opposite this station, for the purpose of inquiring into certain cases of cholera rumoured to have occurred in that quarter. I obtained satisfactory evidence of the death by cholera, a few days previously, of two persons engaged in travelling up-country from the Prome direction. They had apparently been overtaken with illness while pursuing their journey along the main road, and had retired into the jungle near this village, where in a few hours they had succumbed to the fatal malady. The evidence as to cases of cholera among the inhabitants of the village itself was conflicting, some persons who had certainly not suffered from that disease being pointed out to me as having just recovered from the same train of symptoms which had terminated fatally with others. I find that no deaths from cholera have been reported by the Official Registrar at this village during the month of March, but on reviewing the whole of the evidence brought before me on this and subsequent occasions, I have no hesitation in stating my opinion that the official report is not absolutely correct.

On the 24th April, accompanied by Lieutenant Parrott, Assistant Commissioner (the officer who has kindly prepared the accompanying sketch map and plans for me), I proceeded to inquire into the rumoured existence of cholera at Hton-doung (commonly known as Cime village, population 340), a village situated about three miles below Thayetmyo on the same bank of the river and close to the stream. The villagers stated that eight persons had died of cholera within the last ten days. Here again I was shown as recent recoveries from that disease several persons who had apparently suffered from nothing more serious than sharp bilious diarrhoea; but I was also taken to see a young man evidently in the stage of collapse from cholera. In looking over the official returns I find seven deaths reported in this village between the 22nd and 31st March, but none in April, and yet I feel confident the case I saw must have terminated fatally.

During the month of April very few deaths from cholera were registered in the district, and it may accordingly be inferred that there were not many cases of the disease. Thirteen deaths were reported in and around the united villages of Meaday and Allammyoo (population 2,500), four at Minday, two at Kama, and two at Do-yeng-ga-bo. No case was reported in the native town of Thayetmyo, although, as has already been shown, the disease was introduced direct from Prome on two distinct occasions in the month of March. Again, during the month under review, the disease was imported a third time from that great centre of infection. On the 12th April a batch of prisoners was brought up from Prome by steamer, and amongst them was a man in the stage of collapse from cholera. From inquiries I made of the escort and of the other prisoners (I was then in medical charge of the District Jail) I learned that the wretched man had been suffering from vomiting and purging at the time of his embarkation the previous evening. He was conveyed through the native town and lodged inside the jail before I arrived to prevent his admission; but every sanitary precaution having been adopted, the disease happily did not spread among the other prisoners, the subsequent outbreak in the jail not taking place till the 20th June.

Summary of the Epidemic in the Cantonment and immediate neighbourhood.

In the month of April the disease first showed itself among the European troops. On the 13th instant a case (woman) occurred in the 45th Regiment Sherwood Foresters (Right Wing stationed here), and was followed on the 20th by a second case (soldier). During the remainder of the month every day or every alternate day furnished one or more cases, till at length the infected companies of the regiment were moved across the river to the temporary camp at Tyrangoon. This camp occupies a series of elevated ridges receding a little inland from the river between Yua-doung and Allammyoo. On these breezy

heights, from which there is a charming prospect over the river to the jungle-covered hills beyond a number of rough bamboo barracks have been constructed for the purpose of meeting any such emergency as that which now occurred. During the month the disease attained its climax in the regiment, there having occurred thirteen cases with seven deaths, distributed thus:—

	Cases.	Deaths.
Men	10	5
Women	2	2
Children	1	...
Total	13	7

In the month of May there were only two cases (both fatal) in the regiment—one at Tyrangoon (soldier) and one at Thayetmyo (child).

In the month of June the disease showed itself among the followers of the Royal Artillery, from whom the infection soon spread to the men of the Battery. There occurred six cases among the former (mostly children) and three cases amongst the latter with two deaths in each. In the 45th Regiment there were two cases with one death (child), a soldier having recovered.

On the 29th of this month (June) a fatal case of cholera was reported in the native town, and the inhabitants gave evidence of being impressed with the conviction that the dreaded epidemic which had been hovering so long in their neighbourhood had at length found its way amongst them. During three successive evenings, as darkness closed in, they turned out in numerous procession, provided with every kind of implement calculated to make a noise, including drums, gongs, horns, guns, and fireworks of various kinds, while those who were not so wealthy or so fortunate as to possess these scientific apparatus for making night hideous, devoted their energies to the beating of empty wooden and tin boxes, or valiantly belabouring the sides of their huts with stout bamboos. The general effect at a distance was imposing enough, and had for its object to frighten away the "haloo" or evil spirit who wickedly scatters the seeds of cholera among inoffensive human beings. To show their earnestness in the matter, the people further imperilled the safety of the town by burning fires in front of their houses. Had a breeze sprung up on these occasions, and sent a few lighted embers flying among the highly inflammable materials of which the huts are composed, the probability is that the "haloo" would have been most effectually burnt out of his haunts. These highly praiseworthy exertions on the part of the inhabitants were attended at first with only partial success. They scared, but did not expel the demon, who continued to carry off a victim nearly every day till the 13th of the following month. Accordingly, under the direction of their spiritual guides—the Phoomgyees (the least sacerdotal body of priests in the world), the people resumed their zealous efforts against the lurking fiend, and at length triumphantly succeeded in ousting him from their buildings, but not till he had carried off two additional victims on the 22nd. The total number of deaths in the town was only thirteen, which, in a population of about 9,000, gives the small proportion of 1.4 deaths per 1,000 inhabitants.

In the month of July the disease attained its greatest severity in the Royal Artillery and native followers. Three men of the Battery were attacked and two succumbed; three children were also attacked, and all died. Among the followers and other natives residing in the Syces' lines eighteen cases occurred—more than half of them children—with nine deaths. In the 45th Regiment there were five cases—two soldiers (both died) and three children—with one death. There were also during the month two cases in the European staff—both individuals resident in the cantonment. One occurred in the person of an officer of the Public Works Department, who recovered. The other case was that of Store sergeant, who had long suffered from chronic diarrhoea. He was attacked on the 25th, and died two days later.

On the 19th July a fatal case of cholera occurred in the 1st Madras Native Infantry, the only one which occurred in the regiment during the epidemic.

Number of Cases of Cholera in the Cantonment and Town of Thayetmyo during the Month of July 1873.

TABLE I.

July.	Europeans, including Women and Children.						Natives, including Women and Children.					
	Royal Artillery.		45th Regiment.		Staff.		Followers, Royal Artillery, Natives of India.		Native Town, Burmans.		District Jail, Burmans.	
Date.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
1	...	...	...	...	...	...	...	...	...	...	...	...
2	...	...	...	...	...	...	...	...	1	4	3	...
3	...	...	...	...	...	...	...	...	1	2	2	...
4	...	...	...	...	...	...	...	...	1	3	1	...
5	...	...	...	...	...	...	1	...	1	1	...	...
6	...	...	...	...	...	...	2	...	1	2	1	...
7	...	...	1	1	...	...	...	...	1	2	2	...
8	5	3	...	...	1	...	...	...	1	1	1	...
9	...	...	...	...	...	...	6	3	1	2	1	...
10	...	...	...	...	...	...	3	2	...	2	1	...
11	1	1	...	...	...	...	1	...	1	...	...	...
12	...	...	...	...	...	...	...	...	...	1	1	...
13	...	...	...	...	...	...	...	...	1	1	...	...
14	...	...	...	...	...	...	1	...	...	...	...	...
15	...	...	...	...	...	...	1	...	...	2	1	...
16	...	...	...	...	...	...	...	...	...	...	...	...
17	...	...	...	...	...	...	2	2	...	...	...	...
18	1	...	...	...	...	...	...	...	...	1	...	...
19	...	...	...	...	...	...	1	1	...	...	...	...
20	...	...	...	...	...	...	...	...	...	1	1	...
21	...	...	...	...	...	...	...	...	...	2	1	...
22	...	...	1	1	...	...	...	...	2	2	...	...
23	...	...	1	1	...	...	...	...	...	...	...	...
24	...	...	...	...	...	...	...	...	...	...	1	...
25	1	1	1	...	1	1	...	...	...	...	...	...
26	...	...	...	...	...	...	...	...	...	...	...	...
27	...	...	...	...	...	...	...	...	...	...	...	...
28	...	...	...	...	...	...	...	...	...	...	...	...
29	...	...	...	...	...	...	...	...	...	1	1	...
30	...	...	...	...	...	...	...	...	...	...	...	...
31	...	...	...	...	...	...	...	...	...	...	...	...
Total	6	5	5	3	2	1	18	8	...	12	30	18

(Note.—The village of Tsa-Eing, a quarter of a mile from eastern limit of cantonments, had eleven deaths between 7th and 12th instant.)

The District Jail (whose position close to the native town is indicated on the accompanying Outbreak in District map) was not likely to escape the all-pervading influence of the epidemic, especially as the building was greatly overcrowded at the time. About 400 persons were confined within its walls, crammed into the regulated space, cubic and superficial, allowed for a little over 300. Cholera began its work of thinning off the unhappy overplus on the 23rd June, when the first fatal case occurred. The next case took place on the 2nd July, and during that month there were thirty cases with eighteen deaths. The last case occurred on the 27th of the month.

In the village of Tsa-Eing (pop. 750) situated on the bank of the river about half a mile east of the Artillery lines, and separated from the native town of Thayetmyo by the village of Tsa-Eing, the breadth of the cantonment, there occurred eleven deaths from cholera between the 7th and 11th of July.

Course of the Epidemic in the Outlying District from 1st May to 31st July.

During the months of May and June no deaths from cholera were registered in any part of the district; but in the month of July the disease was very prevalent in the outlying towns and villages, more especially at Do-yang-ga-bo, where, out of a population of less than 200, there were reported twenty deaths. At Meaday and Allammyoo eleven deaths were reported; at Bulay (pop. under 100) twenty-two, and at Pya-lo (pop. 878) eight deaths were registered as having occurred from cholera.

Up to the end of July the total deaths from cholera recorded in the district, exclusive of those which occurred in the cantonment, but including the fatal cases in the native town and jail, amounted to 106 males and 79 females, total 185. This number, in a population of over 126,000, gives the proportion of 1.4 per 1,000 (reputed) deaths from cholera—the same proportion as that already given for the native town.

Total cases and deaths in cantonment and native town during the epidemic?

I append a table which shows at a glance the total number of cases and deaths within the cantonment limits and in the native town and jail during the late epidemic.

	Royal Artillery.	45th Regiment.	European Staff.	1st Madras Native Infantry.	Followers Royal Artillery.	Native Town.	District Jail.	Total.	
Cases	9	23	2	1	24	*	31	90+?*	90+?*
Deaths	7	13	1	1	11	13	19	64	

Retrospect of previous Epidemics in this part of Burmah.

At this point it may not be altogether uninteresting, or even unprofitable, to pause in the narrative of the present outbreak and pass briefly in review the history of cholera as it has occurred amongst our troops in this part of Burmah from the earliest period when nearly fifty years ago a British Army forced its way up-country to within a few miles of the capital of Ava.

In consequence of the frequent recurrence of the disease one is led to the belief that cholera is as much endemic in the valley of the Irrawaddy as it is in that of the Ganges. I regret that my sources of information are so meagre, the only books of reference I have at hand being "A Memoir of the campaigns of Major-General Sir Archibald Campbell's Army in Ava, by Henry Havelock, Lieutenant, 13th Light Infantry"—a name better known thirty years later; "The Second Burmese War, by Lieutenant W. Laurie, Madras Artillery," and an old sanitary report book by the Senior Medical Officer at this station, the reports, however, ending with the year 1859. The years 1869-70 I have the reports of the Army Medical Department to refer to.

During the first Burmese war, when the British troops broke up their entrenchments at Promé and commenced their march against the great native stronghold at Meaday, cholera was at the time (December 1825) very prevalent among the inhabitants along the line of country through which the invading force had to march. On arriving at the gates of the vaunted fortress—vaunted as impregnable—our troops discovered that it had been evacuated by their Burman antagonists, amongst whose masses, while cooped up within the narrow limits of the place, cholera had committed fearful havoc, ample evidence as to the appalling extent of the disease being presented by the large numbers of dead and dying left inside the works. When cholera was thus rife on every side, it was not to be expected that the conquering army should escape its fatal influence, and we find accordingly, that the British troops suffered considerably, though to what extent I have no definite information.

In the second Burmese war our troops were happily not exposed to those obnoxious climatic influences which they had been called upon to encounter in the previous campaign, when our military authorities were in total ignorance of the character and resources of the country into which they were about to carry our arms. Steam power had attained a development unknown twenty-seven years before, and our leaders availed themselves of its capabilities to the fullest extent. The operations of the campaign in the interior of the enemy's country were confined entirely to the course of the river, and were carried on by a flotilla of gun boats having a light draught. In this manner Promé was captured, and the naval force pushing farther up the river, again took possession of Meaday, which, however, they did not attempt to retain. I can find no record of cholera having at any time appeared in the force thus employed.

When peace was concluded in 1853, and the boundary line settled between British and independent territory, the old fort at Meaday was strengthened and enlarged so as to contain a considerable garrison of European and Native troops. In the course of the following year (1854) the greater part of this force was transferred to the more open and extensive ground on the right bank of the river occupied by the present cantonment of Thayetmyo, a guard of two European Companies and a Native Regiment being left to protect the ordnance and other stores still kept at Meaday, pending the completion of the fort which was being erected near the new cantonment. During the period of our occupation of the fort (several years) cholera seems to have been a frequent visitant. The old neglected graveyard within the walls (the disgraceful condition of which is a standing reproach to British authority) bears doleful testimony to the fatal ravages of the disease. Inscriptions—almost obliterated, and too frequently even detached from the tombstones to which they were originally affixed—tell of many a brave but unfortunate man done to death by an insidious foe more formidable to our troops than the whole barbaric might of Ava.

The present cantonment of Thayetmyo has been liable to visitations of cholera from the time

when it was originally cleared from its native jungle; but during the first two or three years of its existence as a station, the disease, though occurring every year, seems to have been altogether less severe than it has shown itself in latter years, the cases happening at that early period being both fewer in number and milder in character.

In 1854 only five or six mild cases are reported in a force at least four times more numerous than that which presently garrisons the station. The cases occurred in the hot weather.

In the official year 1855-56 I find that Her Majesty's 29th Regiment, with an average strength of 886, had ten cases of cholera with two deaths. In the following year, 1856-57, the same regiment, with an average strength of 992, had five cases with one death. It should be added that during both years the regiment furnished the detachment of two companies which garrisoned Meaday, and some of the cases included in the above may have occurred on that side of the river, no distinction being made in the returns before me. I have ascertained incidentally, however, from another source that a number of cases of cholera did occur in the station at this period.

In 1857-58 the Native (Madras) troops, with an average strength of about 2,000 men, had forty-seven cases of cholera with twenty-two deaths.

In the year 1858-59 there were twenty-two cases among the same troops with ten deaths.

Again in the year 1859 I find it stated that from the 7th March to the 12th June forty-six cases of cholera with twenty-one deaths occurred among the Native troops.

In Dr. Rankine's report for the year 1858-59, he thus alludes to the occurrence of cholera in the station during the previous years of occupation. "The existence of epidemic cholera must not, however, be passed over without remark. A few cases of the disease having occurred each year of residence in the hot months of April, May, and commencement of June, these may be safely termed the epidemic months of the year." Since that remark was written, the epidemic months have been extended to the whole of June to July, August and early part of September. I regret my inability, from want of records, to give an outline of the course of cholera during the decennial period from 1859 to 1869.

In 1869 (the rainfall of which year is said to have been scanty till September, and the heat very oppressive) cholera was epidemic over almost the whole of British Burmah. The disease was distinctly traced to having been introduced from Mandalay, the present capital of Upper Burmah, where it had been prevalent since the hot weather of the previous year. In Thayetmyo the first case occurred in the month of April in the coolie lines just outside the cantonment. On the 8th of May the disease appeared in the Wing of the 76th Regiment, and skipping the month of June, cropped up in the same regiment at intervals during the months of July, August, and September.

The cases and deaths in the regiment were as follows:—

	Cases.	Deaths.
Men	12	4
Women	4	2
Children	6	6
	22	12

The Royal Artillery and Native Infantry Regiment had entire immunity from the epidemic.

In the district of Thayetmyo the death-rate from cholera was 2.95 per 1,000.

In 1870 cholera was again epidemic among the troops stationed here. It broke out in the district of Mya-nong, the part of the country in which it broke out this year, early in January, and in the following month made its appearance in the Thayetmyo District, at the village of Yua-dong (distant two miles), where it remained localized for two months. It was next heard of in the coolie lines (the seat of the previous year's outbreak), where a man died from the disease on the 4th April. It raged among the troops from 7th April to 5th July with the following results:—

	7th Regiment.		Royal Artillery.	
	Cases.	Deaths.	Cases.	Deaths.
Men	28	21	8	6
Women	2	2	1	1
Children	2	2	3	3
	32	25	12	10

In the district of Thayetmyo 209 deaths, or 1.6 per 1,000 of population, occurred during the same epidemic.

Again the sepoy regiment escaped infection.

The year 1871 was marked by no case of cholera among the troops, and yet there were registered in the surrounding district twenty deaths from that disease. In the Prome District, with a population of over 251,000, six deaths were reported; and in the district of Mya-nong, with a population of over 435,000, there were registered 69 deaths from cholera. With reference to these returns and those already given from official sources regarding the number of deaths from cholera among the civil population, I may take the opportunity of quoting from the Chief Commissioner's resolution on the sanitary report for 1871. "The returns he (C.C.) regrets to say he can place little reliance on, and it is quite impossible, as the Sanitary Commissioner points out, that we can expect to obtain accurate statistics of births and deaths in a country with such a scattered and comparatively small population as British Burmah." Again, "throughout the province there were only 162 deaths from cholera, and it seems very doubtful whether the majority of these were cholera, for 140 of them are said to have occurred in the Pegu Division, where no epidemic of cholera was reported during the year; the cases were probably severe bowel-complaints." Considering that the death returns are prepared by native villagers unpossessed of any medical knowledge whatever, it will be seen how very little confidence can be placed on the diagnosis of such unskilled registrars.

Last year (1872), to the best of my recollection, only two deaths from cholera were reported as having occurred in the district. For my own part I do not believe they were cases of cholera at all.

Description of the Royal Artillery Barracks and Syces' Lines.

Before proceeding with an account of the epidemic as it occurred in the battery and amongst the native followers, it will be advantageous to give a short sketch of the quarters occupied by the former and the lines inhabited by the latter, having special regard to the sanitary conditions of both. At the same time the accompanying plan will convey an exact idea of the relative position of the different buildings to each other and to the syces' village (the original focus of dissemination in the Royal Artillery lines), and thereby facilitate the due understanding of the erratic course pursued by the epidemic. The disease showed itself in both of the single men's barracks, in the married quarters, and in the Staff Serjeants' quarters—in short, in all the buildings occupied by the battery, though it did not remain persistent in any one of them.

The single men of the Royal Artillery are quartered in two barracks, marked Nos. 1 and 2 on the plan. The buildings (like all the barracks in this station and indeed in Single men's barracks. Burmah) are constructed entirely of wood, are elevated 10½ feet above the ground, and are so well ventilated that I do not think any improvement could be effected in that respect. They consist of one long apartment, which is made up of a central division and two flanking inner verandahs, the whole forming but a single room of great size and capacity. The main buildings are protected on all sides by broad outer verandahs. The only objectionable point in the internal arrangements consists in the men's cots being placed in four parallel rows lengthwise to the building. Thus there are two lines of cots down the central division of the room and one line down each of the inner verandahs. The cubic and superficial space are both ample, averaging 2,180 cubic feet and 108 superficial feet per man.

No. 2 barrack is divided into two equal and separate divisions by a transverse wooden partition, which extends completely across the building. The space included in the eastern half is sub-divided into three apartments, which are respectively occupied as reading-room, corporals' mess, and coffee shop. The only persons who sleep on this side are the three men entrusted with the duties connected with these rooms. The western division alone is occupied as quarters for the men.

The building marked No. 3 on the plan is the married quarters. Its general construction is the same as that of the single men's barracks, only that the building is divided into separate apartments for families—fifteen in number. The general arrangements, as regards lighting, ventilation, &c., are excellent, and leave nothing to be desired. Each family quarter consists of two rooms, which have a united superficies of 544 square feet and a cubic capacity of 6,240 cubic feet. These measurements allow for a married couple, with three children, a superficial area per head of over 100 square feet and a cubic space of over 1,200 cubic feet. The block called the Staff Serjeants' quarters, marked No. 4 on the plan, contains apartments for three separate families, each of which has a somewhat larger superficial area and cubic space than those of the ordinary family quarters.

The barracks are built on sufficiently elevated ground to prevent water lodging near them

and they are kept scrupulously clean both inside and out. The surroundings are good, except to the north. At this point, as will be seen on the plan (of the cantonment), the station graveyard lies in unpleasant proximity, while the intervening ground is wet and swampy at this season of the year.

The latrines and urinals (separate for all family quarters) are cleaned out regularly twice a day, and are kept at all times in excellent sanitary condition.

The aycees and grass-cutters of the battery (mostly Madrasese) occupy a village situated at a distance of about 400 yards north-east of the Royal Artillery lines (see plan of the cantonment), a position to leeward of the Artillery Barracks during the continuance of the S. W. wind—the wind which generally blows at this season of the year. The huts are disposed in five parallel rows running north to south about 150 yards long, with lanes 10 or 12 yards wide between each. They are constructed mainly of bamboo and matting with thatched roofs, and are with very few exceptions in a very dilapidated condition. The floors are not composed of a bamboo framework elevated above the ground as they are in the native Barmen huts, but are formed on the bare ground according to the fashion prevalent on the opposite side of the Bay of Bengal. The huts are of various shapes and sizes, and there is no supervision as to the number of persons lodged in each; but, as the incidental ventilation is always very ample, the evil effects of over-crowding are less conspicuous than otherwise they would be.

The site of the village is far from good. It stands on the bank of a nullah on heavy black soil, and in close proximity to the station graveyard. The surface drainage on the south side is bad, but to the north and east a ready escape is afforded to rainfall by the natural slope of the ground in the direction of the nullah which hems it in on all sides except on the south. The proximity of this nullah is highly objectionable from a hygienic point of view. Its easy accessibility affords an irresistible temptation to the filthy and indolent native to convert it into a latrine. Its bed is quite dry for about nine months of the year, but in the height of the rains it is flooded by the rising waters of the river, and the collected impurities of the previous months are happily swept away.

The village has occupied its present site for the last 17 years, and the soil must be by this time deeply impregnated with accumulated filth. Such was the general local feeling regarding the condition of this village during the recent epidemic that I have reason to believe many honorable and well-meaning people would have expressed gratification rather than regret had some native Erastosthenes sought a temporary renown (though he would probably have found the District Jail) by burning down the plague-haunted spot.

The population of the village amounts to 700, that number including many other persons besides the native followers of the battery. These last, aycees, grass-cutters, &c., amount to 212 individuals, and their families include 158 infants and young children, which brings the total number of native followers up to 370. In addition to these persons directly connected with the battery and entitled to medical relief, there is a heterogeneous collection of unemployed persons dependent, in true native fashion, on some money-earning relative. These wails, with the families of certain persons employed privately in the station, complete the total number of 700. During the epidemic the whole population of the village had recourse to the hospital under my charge for medical aid and treatment.

Consewancy.—Separate latrines for men and women are provided in the northern extremity of the lines near the edge of the nullah. These latrines are cleaned out twice a day by a regular staff of mellers.

Outbreak of the Epidemic in the Royal Artillery.

The Royal Artillery and native followers escaped the contagious influence of the epidemic, as already pointed out, till the month of June. On the morning of the 19th of that month two cases (children) occurred in the aycees' lines. On the 24th two more cases were brought to hospital, one (a child) from the aycees' lines and one a horse-keeper living in the Commanding Officer's compound, where he had been resident for several weeks. Next day, 25th, two more cases, also children, occurred in the aycees' lines, making a total of five cases (all children) from these lines and one (an adult) from within the cantonment itself.

On the 24th June the first case occurred among the Europeans. At 7 o'clock in the evening of that day Gunner Hartnell presented himself at hospital with highly suspicious symptoms. He stated that he had been frequently purged since 5 A.M., and also that within the last hour or so he had vomited several times.

(1)—Gunner Hartnell's case.

He had an extremely worn and exhausted appearance, and very shortly after admission symptoms occurred which left no doubt whatever as to the true nature of his illness. The vomiting and purging assumed a decided choleraic character, severe cramps set in, and at an early hour next morning he was in the stage of collapse. He never rallied from that condition, and died at 8 A.M. (25th). This man was admitted from No. 1 barrack.

On the following morning (25th), at 6 o'clock, Driver McGinness was admitted from No. 2 barrack. He stated that he had gone to bed in his usual health (he was reported by his comrades to have eaten a hearty supper), and that he was awakened with an urgent desire to go to stool at midnight, from which hour till admission he had suffered from vomiting and purging. Being too exhausted to walk to hospital, he was conveyed in a dhooly. Cramps set in almost immediately on admission, and after a severe struggle for life he succumbed in the stage of collapse at 11 o'clock the same night.

Contemporaneously with the last admission Bombardier Burley, who slept in a bed next to Driver McGinness, was admitted into hospital and placed under observation on account of a sharp attack of diarrhoea which he stated had come on at 5 A.M. (I have since learned that he had suffered from diarrhoea even the day before). In spite of various remedies the purging continued, with more or less activity, during the remainder of that day (25th), the whole of the 26th till 2 A.M., on the 27th, when the infection unfolded its real character as an attack of cholera. The case was not a severe one, and the patient made a good recovery. As the man had such well marked symptoms of premonitory diarrhoea, I date his attack from the 25th, the day on which he came under observation.

The remainder of the month brought no fresh cases either among Natives or Europeans. There was a lull in the outbreak for ten days among the former and thirteen days among the latter.

On the 5th July the disease broke out afresh in the aycees' lines. On that day one case occurred; on the 6th two more cases were brought to hospital; on the 9th six more (see Table III.), there being in all eighteen cases between the 5th of the month and the 19th, on which day the epidemic finally ceased among the native followers.

On the 8th July the disease again found its way into the European quarters. Three (3) cases occurred amongst the children of soldiers. The first admission took place at 6 A.M. from the Staff Serjeants' quarters, and the two others simultaneously at 4 P.M. from the married quarters. All these cases terminated fatally, one of them after an illness of little over ten hours.

Late on the night of the 11th instant (11 P.M.) Gunner Bowles came to hospital with well marked symptoms of cholera. He stated that he had been purged very sharply three or four times in succession between 8 and 9 o'clock, and that feeling exhausted he lay down on his cot to sleep. Shortly before 11 he was roused by an urgent desire to go to stool, but directly he got out of bed the contents of his bowels were shot violently into his sleeping drawers. At the same time he was seized with sharp cramps in the calves of the legs. This was a severe case, all the symptoms of the disease being present with great intensity from the moment of admission. The patient fell rapidly into a stage of collapse and died at 7 o'clock next morning. This man was in charge of the coffee shop in the eastern division of No. 2 barrack, and slept in the verandah in front of it.

There followed a lull in the disease for a week—till the 18th. At 5 P.M. on that day Driver Raven, who stated that he had suffered from diarrhoea since 1 P.M., was admitted into hospital. In compliance with my oft-repeated instructions, he had twice in the course of the afternoon reported himself to the Apothecary for astringent medicine, but the remedies then employed having failed to check the disease, he was detained for more energetic treatment and for observation. The diarrhoea continuing in spite of all remedies, the case came to be viewed with suspicion, and the patient was isolated accordingly. At 10-30 P.M. the true nature of the attack was definitely settled. Choleraic vomiting and purging set in, followed shortly after by cramps. At 6 o'clock next morning he had sunk into collapse, which was of that almost fatal description known as "intense" in the Official Memorandum on collapse, Government Resolution No. 2,846 of 5th October 1870. For several hours his life hung in the balance. Gradually, however, the powers of vitality re-asserted themselves, and about 11 A.M. re-action was established.

He passed through the period of secondary fever without any complication, and was discharged on the 31st as convalescent, but has not yet (September 5 days later).

(2)—Case of Driver Raven.

(3)—Returned to duty 10 days later.

10th) regained his former health and vigor. This case was the second and last admitted from No. 1 barrack.

The last case in the epidemic occurred on the 24th July. At noon of that day Gunner Lyons (9)—Last case—that was admitted from the married quarters. He stated that he had been compelled to get up at 4 A.M. to go to the rear, and that he had subsequently been purged three times in the course of the morning. He further added that he had felt ailing since the previous day, a feeling which he ascribed to having eaten some lettuce at breakfast. He had gone about his duties as usual on the day of the attack, but shortly before noon he was seized with a sudden fit of vomiting accompanied with deadly faintness and attended with cramps in the calves of his legs. This happened in his own quarters, and his wife at once conducted him to hospital. For two hours after admission the symptoms of the disease remained almost entirely quiescent, but at 2 o'clock choleraic vomiting and purging set in. The stage of collapse was not severe, and I entertained hopes of a favorable issue. But the man was the object of hypertrophy of the heart, and some complication of that organ induced a sudden and fatal termination of the case at 10.30 p.m.

The epidemic lasted exactly one month, both among the men of the battery and the native followers. It will be observed that the epidemic lasted both among the native followers and the men of the battery for the period of exactly one month. In the former body the first case occurred on the 19th June, and the last on the 19th July; in the latter the first case was admitted on the 24th June and the last on the 24th July.

At no period of the epidemic was there the least panic. The duties and amusements of the men and followers went on as usual, and there was no exceptional resort to ardent spirits to supply a deficiency of manly pluck.

Statistics of the epidemic in the battery and among native followers. The following tables give the statistics of the epidemic in the battery with percentages:—

Europeans.

	Strength.	Attacked.	Died.	Percentage of Attacked to Strength.	Percentage of Deaths to Attacked.
Officers ...	6	...	...	...	...
Men ...	147	6	4	4.0	66.6
Women ...	18	...	...	...	...
Children ...	43	3	3	6.9	100
Total ...	214	9	7	4.20	77.7

Native Followers.

	Strength.	Attacked.	Died.	Percentage of Attacked to Strength.	Percentage of Deaths to Attacked.
Men ...	126	3	2	2.3	66.6
Women ...	94	2	...	2.0	...
Children ...	150	16	7	10.6	43.7
Total ...	370	21	9	5.67	42.86

NOTE.—Three (3) cases, with two deaths, which occurred among outsiders, but were treated in this hospital not included here. The ages of the children varied from three to twelve, giving an average of seven years. The large proportion of children attacked will be noticed.

Return showing the Number of Cases of Cholera in F Battery, 20th Brigade, R.A., during Epidemic from 24th June to 24th July 1873.

Strength on 24th June, Europeans 5, men 147, women 18, children 43, total 213.

Number of Case.	Date of Admission.	Rank and Name.	Age.	Previous Health.	Habits.	Period of Service in India.	Married or Single.	WHENCE ADMITTED.		Hour of Admission.	How long suffering from Symptom before Admission.	SYMPTOMS ON ADMISSION.						RESULT.				
								Barrack Number.	Married Quarters.			Premontory Diarrhoea.	Characteristic Vomiting.	Characteristic Stools.	Cramps.	Collapse.	In stage of Collapse.	In stage of Re-convalescence.	How long after Admission.	Recovered and Date.		
1	24th June	Gunner F. Hartnell	29	Good	...	9	S.	1	...	7 P.M.	14	...	...	Yes.	...	...	...	Yes.	...	13	...	9th July Dischd. Court.
2	25th do.	Driver J. McGinness	28	Do.	...	9	S.	2	...	6 A.M.	6	...	Yes.	Yes.	...	...	Yes.	...	17	...		
3	27th do.	Bombardier W. Burley	33	Do.	...	1 1/2	S.	3	...	2 A.M.	...	...	...	...	...	...	...	...	...	...		
4	8th July	Boy F. Huggins	6	Indifferent	Born India.	2 1/2	...	...	2	6 A.M.	1	Yes.	Yes.	...	...	...	...	Yes.	...	32 1/2	...	Dischd. Court.
5	Do.	Boy W. Germain	12	Good	...	2 1/2	...	...	1	4 P.M.	1	...	...	...	...	...	...	...	10	...		
6	Do.	Girl A. Bedford	1 1/4	Bad	Born India.	...	...	...	1	4 P.M.	1 1/2	...	...	...	...	...	...	Yes.	16	...		
7	11th July	Gunner W. Bowles	34	Indifferent	...	13	S.	2	...	11 P.M.	2 1/2	...	Yes.	Yes.	...	...	...	Yes.	9	...	31st July Dischd. Court.	
8	18th do.	Driver R. Raven	20	Good	...	1	S.	1	...	10 P.M.	5	Yes.	...	...	...	...	...	...	...	...		
9	25th do.	Gunner M. Lyons	36	Indifferent	Men all of temperate habits.	16	M.	...	1	12 noon.	1	...	Yes.	Yes.	...	...	...	Yes.	10 1/2	...		

NOTE.—Married Quarters No. 1 = No. 3 barrack divided into 15 family quarters. Do do. No. 2 = Staff Sergeants' quarters divided into 3 family quarters.

Return showing the Number of Cases of Cholera among the Native Followers of F Battery, 20th Brigade, R.A., during Epidemic from 19th June to 10th July 1873.
Strength on 19th June 212 young children in families 158, total 372.

Number.	Date of Admission.	Names.	Age.	Sex.	Whence admitted.	Hour of Admission.	How long suffering from Symp.	SYMPTOMS ON ADMISSION.					RESULT.				
								Premontory Diarrhea.	Characteristic Vomiting.	Characteristic Stools.	Cramps.	Collapse.	In stage of Collapse.	In stage of Reaction.	How long after Ad- mission.	Recovered and Date.	
1	19th June.	Yellan	7	M.	Syces' lines	8 A.M.	5	...	...	...	...	Yes.	...	...	12	6th July.	
2	Do.	Thayee	11	F.	Do.	8 A.M.	4	...	...	...	...	Yes.	...	...	12	27th do.	
3	24th do.	Jenaboo	3	F.	Do.	6 A.M.	4	...	...	...	...	Yes.	...	...	12	20th do.	
4	Do.	Rungamah	6	F.	Do.	5 A.M.	3	...	...	...	...	Yes.	...	...	12	7th do.	
5	25th do.	Verasawny	25	M.	Comdg. Officer's compound	7 A.M.	1	...	...	...	...	Yes.	...	...	17	10th do.	
6	Do.	Thayee	8	F.	Syces' lines	6 A.M.	3	...	...	...	...	Yes.	...	...	15	Do.	
7	5th July.	Yellamah	8	F.	Do.	6 A.M.	2	...	...	...	...	Yes.	...	...	15	20th do.	
8	6th do.	Theodorum	19	F.	Do.	6 A.M.	2	...	...	...	...	Yes.	...	...	15	Do.	
9	Do.	Deeragee	7	F.	Do.	6 A.M.	2	...	...	...	...	Yes.	...	...	15	Do.	
10	9th do.	Minnamah	7	F.	Do.	6 A.M.	2	...	...	...	...	Yes.	...	...	15	Do.	
11	Do.	Ramasawny	7	F.	Do.	6 A.M.	2	...	...	...	...	Yes.	...	...	15	Do.	
12	Do.	Theodorum*	7	F.	Do.	6 A.M.	2	...	...	...	...	Yes.	...	...	15	Do.	
13	Do.	Rungmah	21	M.	Do.	6.30 A.M.	2	...	...	...	...	Yes.	...	...	17	Do.	
14	Do.	Singaravalloo	4	F.	Do.	2 P.M.	5	...	...	...	...	Yes.	...	...	31	Do.	
15	Do.	Jellamah	4	F.	Do.	11 A.M.	5	...	...	...	...	Yes.	...	...	13	Do.	
16	10th do.	Minian*	30	M.	Do.	2 A.M.	2	...	...	...	...	Yes.	...	...	13	Do.	
17	Do.	Jasawny	4	M.	Do.	5 A.M.	2	...	...	...	...	Yes.	...	...	13	Do.	
18	Do.	Minnamah	11	F.	Do.	5 A.M.	2	...	...	...	...	Yes.	...	...	11	Do.	
19	11th do.	Sholapore	11	F.	Do.	9 A.M.	4	...	...	...	...	Yes.	...	...	11	Do.	
20	14th do.	Nagan	11	M.	Camp of Native followers	3 A.M.	2	...	...	...	...	Yes.	...	...	...	21st do.	
21	15th do.	Voornay	7	M.	Do.	9 A.M.	4	...	...	...	...	Yes.	...	...	...	Do.	
22	17th do.	Theodorum*	35	F.	Do.	7.30 A.M.	4	Yes.	Yes.	Yes.	Yes.	Yes.	...	...	60	Do.	
23	Do.	Colwallt	40	M.	Syces' lines	8 P.M.	3	...	...	...	...	Yes.	...	...	23	Do.	
24	19th do.	Yasodumah	12	F.	Camp of native followers.	10 P.M.	3	...	...	...	...	Yes.	...	...	60	Do.	

* Resident in Syces' lines, but not followers of U.O. battery.
† Surreptitiously remained in the Syces' lines after their recitation had been ordered.

Precautionary and Sanitary Measures.

I.—AMONGST EUROPEANS.

Previous to the outbreak of cholera in the battery I had repeatedly given instructions that if any man found himself suffering from diarrhoea it was his duty to report himself at hospital for a dose of medicine with the least possible delay. Every case of diarrhoea to be reported at hospital with the least possible delay.

The disease, as already stated, showed itself among the Europeans on the evening of the 24th June. On the following morning, immediately after stables, I had the whole of the men paraded in their respective barracks, and urgently impressed on them the importance of immediate application at hospital in the event of any one suffering from looseness of the bowels or vomiting, reiterating the assurance that they were allowed to present themselves at any hour of the day or night, without waiting for escort by the battery orderly, or even without the trouble of dressing properly. "Come in your shirt sleeves if you like," I added, "but don't fail to come." These recommendations were repeated in the battery orders for the day, and the non-commissioned officers warned of their responsibility in seeing them properly attended to. To ensure a still further certainty of compliance, a sentry was posted over the single men's latrines for the purpose of reporting any man who should go to the rear oftener than twice in the twenty-four hours. It was also made incumbent on the orderly over the married quarters to report any woman or child visiting the latrines oftener than twice during the day, and married men were held responsible for their wives and families during the night. The men were further prohibited from entering the Syces' lines.

These orders were directed to be read once a week on parade during the continuance of the epidemic, and were verbally repeated by me in the course of my Saturday inspections. But my examination of the men was not at this period confined to the mere routine of weekly inspections. I made a point of being frequently present in the lines, watching the men at stables both while engaged at work and when drawn up in a body at the conclusion of stable hour preparatory to marching off to quarters. Again I used to walk quietly round the barrack-rooms when the men were off duty for the day, to see if any one was lying down from the feeling of *malaise*, which often heralds an attack of cholera.

When a case of cholera was brought to hospital from barracks, the latrine which the man had used was immediately cleaned out and freely sprinkled with carbolic acid or disinfecting powder. It was then fumigated with sulphurous acid obtained by burning several ounces of sulphur in pipkins. Further, the man's bedding was conveyed out of the barrack-room and deposited in an out-house to undergo subsequent purification. The wall, floor, and fittings near his cot were well scrubbed with soap and hot water, and soused with a solution of carbolic acid. After which, the room having been vacated, the whole apartment was subjected to the searching action of sulphurous acid. I have since seen in the *Lancet* Sanitary Commissioner's report on disinfectants (26th July 1873) a statement, made in the authority of a writer in the *Chemical News*, that this conjoint use of sulphurous and carbolic acid afforded the greatest advantage in preventing the spread of the cattle plague, and I have no doubt its antiseptic powers are equally effective against other disease germs. When fumigation was completed the buildings were thrown open for a few days, then white-washed, and not re-occupied till the lapse of at least ten days. The only exception to this rule was No. 1 barrack, which was white-washed but not fumigated, and never completely vacated. The punkahs were removed and purified.

At no time during the epidemic were the men or families moved out under canvas, though most of the buildings where cases of cholera occurred were entirely vacated, accommodation being found for their late occupants elsewhere. I considered it inadvisable to recommend such a course as camping away from the lines on soft wet ground, except on the clearest evidence that the cholera miasma had established itself within the building occupied by the battery. The sporadic nature of the cases militated against any such assumptions, though no precautions were omitted on that account. There is no good camping ground in this neighbourhood, the whole surface of the country outside the station being covered with thick jungle, while the few open spaces found within cantonment limits are composed of black heavy soil, and of course deeply saturated with moisture at this season of the year. Had the evacuation of the buildings been imperatively demanded, I should have advised a move to be made to the temporary barracks at Tyrangoon on the opposite bank of the river, and that too notwithstanding

the rumours as to the prevalence of cholera in the surrounding villages. Having thus advanced my reasons for not recommending the camping out of the battery or any part of it, I shall proceed to give in detail the different moves which were effected—mostly within our own lines—as each case or set of cases occurred.

The first case occurred, as already stated, on the 24th June in No. 1 barrack. The man's cot being situated in an inner verandah, the remaining cots of that row were removed to the open space underneath the barrack, and the men who occupied them protected at night from the damp winds which blow at this period of the year by a screen of matting and gunny bags. At the expiry of ten days they were allowed to return to their old quarters. No further cases occurred among the occupants of that row, and none in the same barrack till after a lapse of twenty-three days—on the 28th July.

The second and third cases (simultaneous) occurred on the 25th June, or one day after the first case, and were furnished by the western division of No. 2 barrack. This wing was cleared out, part of the men (13) being lodged in the library in the eastern half of the building, while the remainder, twenty-seven in number, were provided with quarters in the detail hospital, a building of the same general construction as the European barracks, and situated on an elevation about three-quarters of a mile west of the Royal Artillery lines. Though not immediately connected with the subject in hand, I may here state that pills of acetate of lead and opium were issued to the non-commissioned officer in charge of this detached party with plain directions as to their use; and with further instructions that, in the event of any man being still purged after taking one pill, he was at once to be marched to hospital. Both parties returned to their quarters in eleven days, and no more cases took place in this division of the barrack.

The fourth, fifth, and sixth cases (all children) occurred on the 8th July, the first case coming from the Staff Serjeants' quarters, and the two last from contiguous apartments (Nos. 1 and 2) in the married quarters. All these buildings were at once vacated, their late occupants being accommodated partly in the school-house and partly in the separate quarters provided for non-commissioned officers in the wings of the single men's barracks. Four (4) families, for whom shelter could not be procured elsewhere, were lodged underneath the family barrack. At the expiry of ten days the married quarters were allowed to be re-occupied after having been thoroughly purified. No more cases in the Staff Serjeants' quarters, but a third case was contributed by the married quarters on the 24th July, after an interval of sixteen days.

The seventh case was taken from the eastern division of No. 2 barrack on the 11th July, or sixteen days after the two cases already noticed had occurred in the western division of the same barrack. The three apartments in which that half of the building is divided were vacated, and not re-occupied till a period of twelve days had elapsed, complete purification having taken place in the interval. No further cases were admitted from this wing of the barrack.

The eighth case was the second and last instance of the disease which occurred in No. 1 barrack. The man slept in the central division of the room which I have shown to be lined with two rows of cots. These were removed and carried underneath the barrack as described on the occurrence of the first case. On the expiry of twelve days the men ejected were allowed to re-occupy their old quarters.

The ninth and last case was drawn from the married quarters No. 8 apartment. The quarters were again cleared out, and the families disposed of as formerly. After purification they were allowed to be occupied within a period of twelve days. On both occasions the families which had furnished the cases were isolated in the old school-room.

1st case.—Number of beds in No. 1 barrack reduced.

2nd and 3rd cases.—Western division of No. 2 barrack evacuated.

4th, 5th, and 6th cases.—Married quarters and Staff Serjeants' quarters vacated.

7th case.—Eastern division of No. 2 barrack evacuated.

8th case.—Number of beds reduced a second time in No. 1 barrack.

9th case.—Married quarters vacated a second time.

Table giving Description and Capacity of all the Buildings occupied by the Battery; also the Number of Cases of Cholera which appeared in each, with Dates and the Intervals between each Case or set of Cases.

	Number of Occupants.	Per Head.		Date of first Case or simultaneous Cases in each Building.		Interval to next Case in same Building.	Date of second Case or Cases in the Buildings.		Remarks.
		Cubic Feet.	Superficial Space.	Date.	No. of Cases.		Date.	No. of Cases.	
Single men's barrack No. 1	80	2,180	108	June 24th	1	24 days.	July 18th	1	
No. 2 { Western Division	40	...	...	" 25th	2	No more cases.			
	3	...	...	July 11th	1	Do. do.			
Married quarters (Single quarters.)	Average 5	1,200	100	" 8th	2	16 days.	July 24th	1	Eastern division of No. 2 barrack occupied only by the three men in charge of reading-room, corporals' mess-and office, shop.
Staff Serjts.' quarters. (Single quarters.)	6	...	...	" 8th	1	No more cases.			

Table showing the Order of the Days and Dates on which Cases occurred, with the intervals of free days in the Series.

EUROPEANS.

Order of each Case or set of Cases.	Number in each set of Cases.	Date of Occurrence.	Intervals to next set of Cases.	Remarks.
First ...	1	June 24th.	Days. 1	
Second ...	2	" 25th.	13	
Third ...	3	July 8th.	3	
Fourth ...	1	" 11th.	7	
Fifth ...	1	" 18th.	6	
Sixth ...	1	" 24th.	...	
	9		30÷6	Five days on the average between each case.

NATIVES.

Order of each Case or set of Cases.	Number in each set of Cases.	Date of Occurrence.	Interval to next set of Cases.	Locality where occurred.	Remarks.
First ...	2	June 19th.	Days. 5	Syces' lines.	
Second ...	2	" 24th.	1	Do.	
Third ...	2	" 25th.	10	Do.	One case from Commanding Officer's compound.
Fourth ...	1	July 5th.	1	Do.	
Fifth ...	2	" 6th.	3	Do.	
Sixth ...	6	" 9th.	1	Do.	
Seventh ...	3	" 10th.	1	Do.	
Eighth ...	1	" 11th.	3	1st Lamp.	
Ninth ...	1	" 14th.	1	Do.	
Tenth ...	1	" 15th.	2	Do.	One case from Syces' lines.
Eleventh ...	2	" 17th.	2	Do.	
Twelfth ...	1	" 19th.	...	Do.	
	24		30÷12=2.5	days on the average between each case.	

The three cases treated, not followers of the battery, are included in this table.

In the last epidemic (that of 1870) which visited the cantonment, the battery stationed here, had twelve cases distributed among the respective quarters as follows:—

	No. of Cases.
No. 1 Barrack ...	5
No. 2 do. ...	...
Married Quarters ...	4
Staff Serjeants' Quarters ...	...
Cells ...	1
Hospital, Thayetmyo ...	1
Do. Tyrangoon ...	1
Total ...	12
	8

Distribution of cases among the buildings in the epidemic of 1870.

II.—NATIVES.

When the first cases were admitted from the Syces' lines the Hospital Dresser was despatched to fumigate the huts whence they had come, and also to make a house-to-house visitation for the purpose of discovering whether any other cases remained concealed from observation—a kind of inspection which was kept up at intervals during the epidemic. On the same day I ordered the whole of the inhabitants of the village to be assembled in front of it, and took the opportunity of urging on them the necessity of immediately coming up to hospital in the event of diarrhoea or vomiting occurring in their own persons or in those of their children; and I further warned the head man of the village that I should hold him responsible for proper attention to this simple injunction.

As fresh cases cropped up, the different huts implicated continued to be disinfected by the action of sulphurous acid, a general purification of every hut in the lines having been carried out on the 30th June.

These measures failing to arrest the progress of the epidemic, the complete evacuation of the native lines was effected on the 13th July. Advantage was then taken of the absence of the inhabitants to insure a thorough purification of every hut by means of fumigating and lime-washing.

When the question of evacuating the Syces' lines came to be discussed it was a matter of considerable uncertainty whether there was a sufficiency of tents in store to provide shelter for such a large number of persons (370) as were included among the native followers. The remainder of the inhabitants—those whose presence in the lines was unauthorized—were to be simply evicted and left to shift for themselves; and possibly in so doing to carry the disease elsewhere. On an application being made for native tents, twenty-nine were supplied. They were pitched on a site

selected about equidistant from the infected village, the fort and the horse followers. The position was not the best that could be desired, but it was the best available. It was partly sheltered by rows of trees, and the soil was tolerably dry on account of the slope of the ground.

There was a good deal of unavoidable overcrowding in some of the tents. Had all the individuals requiring accommodation been distributed equally throughout the tents, the average number of occupants would have been about twelve per tent. But some of the tents containing a smaller number of persons (all belonging to a certain caste who would not live under the same roof with those of inferior degree) others were burdened with a large occupancy than they were well fitted to receive. However no harm resulted from overcrowding. The ventilation was excellent, the sides of the tents being pegged up at an elevation of twelve to eighteen inches from the ground, and the doors kept constantly opened.

On a case of cholera being brought from this camp, the tent in which it had occurred was at once vacated, then fumigated, and after standing a few hours it was taken down and exposed inside out to sun and rain for twenty-four hours. When pitched again a different spot was selected, the old ground having been dug up. The late occupants were temporarily provided with a rough shelter of matting and bamboo.

There can be no doubt that this move was attended with beneficial results. Before it took place eighteen cases had occurred in the Syces' lines. Subsequent to the move only four cases were admitted from the tents, one of which occurred on the day after removal, leading to the presumption that the seeds of disease were probably imbibed prior to that event. After the orders for the evacuation of the village had been enforced, and a sentry posted to prevent re-entry, a horse-keeper contrived to elude observation and continued to sleep in nightly in his own hut. He was seized with cholera on the 17th and died next day.

At the end of a week the camp was shifted to another site (marked 2) on the plan of the cantonment), an elevated piece of ground on the river bank lying between the fort and the dhoby village. No cases occurred in the new camp, and after a lapse of five days the occupants of the tents were permitted to return to their own lines. They had thus spent twelve days under canvas, during which time they had completely shaken off the disease and had otherwise been healthy.

Hospital Arrangements.

I.—EUROPEANS.

On the occurrence of the outbreak in the battery a tent was pitched in the hospital compound for the reception and treatment of cholera patients; but in the course of the epidemic it was occupied only by those individuals who, at the time of presenting themselves at hospital, were recognized as undoubted instances of choleraic infection. Cases merely suspicious were detained under observation in a separate ward in the regular hospital; and when such cases developed into cholera, the patients were still, in deference to their earnest wishes, allowed to remain in the ward to which they had originally been conducted; and in point of fact there was little necessity for removing them on the ground of preventing infection of the apartment. The mischief had already been done, as the premonitory diarrhoea is generally believed to contain the infecting virus in greater intensity than any of the succeeding stages of the disease.

The ward thus employed for the treatment of cholera patients had a capacity of 20,000 cubic feet, and, like the rest of the building, was exceedingly well ventilated. As each case was disposed of the room was thoroughly purified. The floor was well scrubbed with hot water and soap and sprinkled with carbolic acid, special attention being directed to the part in the neighbourhood of the patient's cot. The apartment was then subjected to the pervading action of burning sulphur. This process completed, the side doors were thrown open so as to allow of the freest perfusion, while the doors and windows communicating with the interior of the building were kept shut. At the conclusion of the epidemic the walls were white-washed and repainted. The hospital tent was also purified on ceasing to be occupied by a case of cholera.

The patients were attended partly by the hospital servants, partly by extra hands specially engaged for the purpose, and in three instances by comrades who volunteered for the duty (any number of volunteers was forthcoming if wanted). The children were further attended by their own parents and the hospital matron. When a hospital servant left attendance on a cholera patient he was required to wash his hands and face, and change his clothes. Attention to this precautionary measure was also exacted of the European volunteers and parents of children.

A toty (sweeper) was kept constantly present in the ward for the purpose of removing the cholera discharges, all of which were received into vessels thickly sprinkled with disinfecting powder. These discharges being carried out of the ward were emptied into a latrine-pan deposited on the border of the waste land in rear of the hospital compound, and when a sufficient quantity had been collected the pan was conveyed 200 yards farther into the jungle, and its contents buried deep in the earth.

The patients' bedding, clothing, &c., were first subjected to fumigation by burning sulphur. They were then thoroughly washed with hot water and soap and exposed to the sun and rain for twenty-four hours. The same process of washing and bleaching was gone through a second time, the bleaching being extended over a longer period. Articles of little value were burned without further trouble, along with the straw of the mattresses and pillows.

The two men who recovered were allowed, on bathing and being furnished with a complete change of clothes, to enter the general ward, after having been convalescent for a period of seven days. This is earlier than many authorities recommend, but I am of opinion that the power of personally communicating infection ceases when convalescence is fairly established. Again, removal from an isolated apartment connected only with painful associations, and re-union with one's comrades, contribute powerfully to the more rapid restoration to health.

The native servants were kept at their work mostly by European supervision, which is absolutely necessary in such cases, while a general superintendence over every one employed was exercised by the Apothecary (Mr. James Smith), who was indefatigable by day and night in devotion to his duties, and of whose services I here desire to record my thorough appreciation.

The bodies of those who died were removed to the dead-house on an old bamboo cot, which is never used for any other purpose, and which always lies in the open air in a corner of the hospital compound. When a dhoby was used to bring a cholera case to hospital it was disinfected immediately afterwards, and kept for two or three days

exposed to the weather in the open air. The dead were conveyed to the graveyard on a gun carriage.

II.—NATIVES.

The battery followers were treated in the native hospital, situated in the same compound as the European hospital, and about seventy yards in rear of it. It is a wooded building with a thatched roof fairly ventilated, and has a capacity of 8,000 cubic feet. A tent was pitched near it for cases under observation.

The building was occasionally much overcrowded, there being at times as many as ten or eleven cases under treatment (six admissions took place in one day), on each of which an average of at least two persons were attending day and night. The overcrowding was obviated to some extent by sending such of the patients as were convalescent to be treated in the verandahs. All cases of ordinary disease were treated outside.

Two native orderlies and an extra toty was the inferior establishment of this hospital during the epidemic. But, as above stated, all the patients were also looked after by their friends, parents, or other relatives. Amongst these volunteer attendants it was simply impossible to enforce the rule as to washing and changing clothes, for few of them possessed any other clothing than that they wore. The wonderful exemption of the people from infection under circumstances so favorable to the action of the disease germ will be referred to again.

The regulations as to the disposal of choleraic discharges which obtained in the European hospital were in force here also. Disinfection of the clothing, both of those who died and of those who recovered, were carried out as far as practicable.

The dead were removed by the friends for interment or cremation according to the religious creed of deceased.

It may not be out of place, before leaving this part of the report, to state that all the native servants, with the exception of two extra hands who bolted in fright at the first death among the Europeans, behaved exceedingly well, and that they were rewarded according to their respective merits at the end of the epidemic.

Symptoms and Treatment.

These will not detain me long, as I have nothing new to offer under either of these headings. I have beside me full details of every case treated, but for the reason alleged I shall not burden my report with them.

I may, however, just glance at the general line of treatment followed. Opium was used only in the stage of premonitory diarrhoea, and was entirely omitted when the disease was seen to be fairly established. To relieve the nausea and vomiting, carminatives and stimulants were given—aromatic spirits of ammonia, tincture of ginger, chloric ether, &c., with sinapisms to the epigastrium. The distressing cramps were relieved by smartly rubbing the limbs affected with turpentine liniment and by shampooing. To allay the intense thirst, water, plain or in effervescence, was allowed *ad libitum*—fortified, when collapse began to set in, with occasional small quantities of brandy or champagne. During the period of collapse over-stimulation was most carefully guarded against, in view of the hoped for period of re-action. The declining warmth of the body was supported by hot bottles wrapped in blankets and applied where deemed necessary. No special means were adopted to restore the renal functions, my opinion being that re-establishment of the urinary secretum cannot be forced on by diuretics, but that the resumption by the kidneys of their special duty depends upon and form an integral part (symptom) of the condition of general convalescence, as the patient's frame succeeds in shaking off the specific effects produced by the action of the cholera poison. In the two cases which recovered, suppression of urine lasted thirty-two and forty-three hours, respectively.

The disease, as had been remarked in the early part of the century, was milder among the Natives than among the Europeans, the deaths among the latter being 66.6 per cent. of cases, and among the former only 45.8 per cent. It may be noted that nearly all the natives attacked were subject to worms—lunbrici—which they passed by stool and vomit.

General Remarks.

The general remarks which I am about to offer in connexion with the epidemic, I shall confine myself strictly to such facts regarding the origin and dissemination of the disease in the battery as I can personally vouch for. I have no pet theory either to advance or to support, and consequently I find myself no temptation to indulge in a deductive method of reasoning, and endeavour to make out of the facts I have collected fit into or favor any particular speculative doctrine. I believe that air, or water, contaminated with choleraic discharges, are all efficient means (the two latter are effective than the first) of introducing the specific poison of cholera into the human economy; and if I incline to the opinion that in the particular instance under review the agent of dissemination was air, that is personal communication, I shall state fully my reasons for being led to entertain such an opinion.

1. It has been shown that cholera approaches the cantonment either from the north, that is from the direction of Mandalay, or from the south, the direction of the Mya-nong District. I have also stated my belief in the endemicity of the disease in these parts of the river valley.

2. The cantonment, as already pointed out, is situated on the river Irrawaddy, the great highway of Burmese commerce, along which eleven-twelfths of the trade with Upper Burma is conducted, the remaining fraction being carried up country by way of Tonghoo, another frontier military station situated on the Sitang river to the east of Thayetmyo (see map). On an average 12,000 trading boats of various tonnage annually pass the Custom House at Alla-myoo proceeding down the river, while a corresponding number proceeds upwards. Besides these native boats, mail steamers ply weekly between Rangoon and Mandalay, calling at the numerous towns and trading ports planted along the banks of the river, on all which occasions they embark and disembark considerable numbers of passengers. Nor must we overlook the multitudinous small craft employed as ferry boats, or engaged in carrying on local commerce between the less important towns and villages; for these constitute an important chain of intercommunication composed of almost innumerable links, which serve to unite the whole course of the river from Rangoon to Bhamo. To attempt to place

Question of quarantine restrictions. quarantine restrictions on commerce within British territory on the threatened invasion of an epidemic would have the effect of throwing the whole country into confusion, and probably result in serious disturbances. Nor do I believe that such a restriction, even if effectually carried out, would be ultimately successful in preventing the importation of the disease. Vagrant Burmans from beyond the frontier on one side and from Mya-nong and Henzedah on the other would continue to find their way into the cantonment or its neighbourhood by means of the numerous foot-paths which intersect the jungle in every direction even in its densest parts.

3. So long, then, as the disease remains endemic at other points within the valley of the Irrawaddy, and continues subject to periodical outbursts of activity, while at the same time uninterrupted communication is (necessarily) permitted between the station and the centres of infection, so long must we expect to find the troops quartered here visited with recurrent epidemics of cholera. There can be no doubt that the disease, if not actually endemic in the cantonment and neighbourhood (which there is no evidence to prove, former epidemics having been preceded by outbreaks elsewhere), at least when imported finds in this quarter local conditions favorable to its reception and development. As to what these conditions are we must confess our entire ignorance, and admit also that if we did succeed in discovering them it would still be a question to what extent, if any, we should be able to counteract their influence. Though unable to beat back the invader in his insidious assault, we may yet do much by attention to hygienic measures to weaken his power for mischief when he has effected a lodgment. But we must not credit sanitation with greater power than it possesses. It will accomplish a good deal, but it is not omnipotent. In spite of all the efforts of sanitary science, as these efforts are directed by our present acquaintance with the nature of the essential morbid principles of cholera, it seems only too probable that the pestilence will continue to carry off its periodical tale of victims in the future as it has done in the past; and that this woeful cycle of death will go on recurring till the mystery of the causation of cholera has been successfully solved, or, what seems even more likely, till the disease has worn itself out like the plagues of the middle ages; and been succeeded by another malady equally destructive to the human race.

4. From the evidence adduced in the beginning of this report, I believe myself justified

(4)—The epidemic in ascribing the propagation of the epidemic from its original seat of outbreak by personal transport. Dr. Bryden's theory as to dissemination of the disease germ by wind will not hold good in this instance. The presence of moisture he considers to be an indispensable element for the efficiency of the wind as a propagator of the cholera contagion; but the wind which blows up this river valley in March and April is not a moist but a dry wind. Again if the wind were really the agent of dissemination, how came it that the disease was present in the 40th Regiment alone during the months of April and May, while the native town and jail, which lay to windward of the infected corps, and the Royal Artillery and the Syces' lines which lay to leeward, all escaped the influence of the poison-charged breeze?

5. I have been unable to trace the immediate importation of the disease into the Syces' lines.

(5)—Cannot trace As already pointed out, the official register of deaths for the district does not record any fatal cases of cholera as having taken place in the month of June; but I consider that this circumstance, for reasons stated elsewhere, by no means affords satisfactory evidence as to the non-existence of the disease among the Burmese population.

6. The first appearance of the disease among the native followers of the battery occurred on the

(6)—First appearance of the disease among Native followers. 19th June, when two children were attacked. From inquiries made on the spot at the time I satisfied myself that these cases were really the first instances of the disease which had been seen in the village. On the 24th two more children were attacked, and it is a point worthy of remark that out of the twenty-four cases of cholera admitted from this village no less than seventeen, or 70 per cent., were children between the ages of 12 and 3.

7. On the 25th a Burman employed as a servant by the head man of the Syces' village was

(7)—Case of Burman seized with cholera in Syces' lines. seized with cholera and died before he could be removed to hospital. (His master was severely reprimanded for his culpable negligence in not reporting the circumstance sooner.) I made an inquiry into the case, but it was impossible to arrive at a decision whether the man had contracted the disease in the Syces' lines or in one of the neighbouring villages which he was in the habit of frequenting. This circumstance naturally tends to direct attention to the probability of the seeds of the epidemic having been originally introduced into the lines by outsiders like the Burman alluded to; but to permit this assumption to lead one away from other points of inquiry would be a mistake, and likely to result only in defeat of the object sought to be attained. There seems rather every reason to believe that the disease was primarily imported by certain of the native followers themselves.

8. During the month of June (and for several months previously) it was the custom of the

(8)—The grass-cutters in the habit of collecting grass at Yua-doung, Allanmyoo, and Kama. grass-cutters to cross the river to Allanmyoo and Yua-doung, and even to proceed as far down the stream as Kama in search of grass, which is very scarce in this neighbourhood during the hot weather and till the rains have well set in. In these expeditions the women frequently carried their children along with them. Now although cholera was not officially reported to be present in the surrounding district, I am inclined to believe that the rumours which were prevalent about that period among the natives themselves as to the continued existence of the disease in the villages along the river's bank were, in this instance, correct; and consequently I infer that the children who furnished the first cases of the disease in the Syces' lines had caught the infection either immediately from having themselves been carried into an infected quarter, or immediately through their mothers who had returned home from pursuing their calling in such a locality.

9. As remarkable instances of exemption from the contagion of cholera under circumstances

(9)—Instances of exemption from the disease. of importation of the disease or of close inter-communication with infected localities, I may mention the following facts:—

a.—It will be recollected that persons suffering from cholera were introduced into the native

(a)—Native town, and jail in March and April. town on the 15th and 19th March, and into the jail (passing through the town) on the 12th April. Yet no cases occurred in the town or jail till the very end of June, when cholera appeared in both places almost simultaneously. The question of the cholera germ not meeting at this period of importation with soil favorable for its reception and reproduction is one which I gladly leave for others to discuss.

b.—The cooly village, where the disease broke out in the epidemics of 1869 and 1870, is now much diminished in size, and contains only about thirty inhabitants. It is

(b)—Cooly village. approached by a path leading through the syces' lines, from which it is separated by a shallow nullah about twenty yards wide. This year no cases of cholera occurred in the cooly village, though the disease was rife in the neighbouring lines, while in the epidemic of 1869 matters were exactly reversed; several cases occurred in the cooly village, but none in the syces' lines.

c.—The village of Tsa-Eing, commonly known as Shye-bustie, furnished, as already stated, eleven deaths from cholera between the 7th and 11th of July. It is separated

(c)—Dhoby village. from the dhoby village, which has about an equal population by the mouth of a nullah (see plan of cantonment), the distance between the two villages, however, not being so great as that represented in the sketch, for the houses of the respective communities almost touch each other in the bed of the nullah. The inhabitants of Tsa-Eing must pass through the dhoby village to reach the cantonment or the large bazaar. Though there is thus the closest intercourse between the two localities, not a case of cholera was reported in the dhoby village; and I am inclined to believe the place enjoyed a substantial immunity from the disease, because when the battery followers were encamped near it, the inhabitants protested to the station authorities against the undesirable proximity of an infected body of individuals. The dhoby village occupies a higher site on the river bank than Shye-bustie, which lies very low.

d.—One case of cholera occurred in the Sudder bazaar, imported in the premonitory stage

(d)—Sudder Bazaar. from a neighbouring village. The disease did not spread, and it is stated, as a remarkable fact, that the bazaar, with a population of about 1,100, has enjoyed complete immunity from previous epidemics which have prevailed in and around the station. It is situated near the western limits of the cantonment, and occupies ground having a slight slope to the east.

e.—The 1st Madras Native Infantry had only one case of the disease, though the men of the

(e)—Native Infantry Regiment. regiment were constantly engaged in passing and re-passing through the infected lines of the European troops, and had free access to the large bazaar while cholera was prevalent there.

I can suggest no explanation to account for these instances of freedom from epidemic influence.

10. There seems to me no question as to the men of the battery having contracted the disease

(10)—Men of the battery contract the disease from the syces, illustrations. from the native followers, with whom they were brought into daily contact at stables. All the men attacked were, with one exception, to be noticed presently, thus employed on stable duty at and prior to the date of seizure.

Driver McGinness, at the time of his attack, was line orderly, the duties of which office consist

Case of Driver McGinness. in seeing that the horse-keepers are all present and at their work morning and evening. A post of this description necessarily throws the owner of it into close connexion with the individuals whom it is his duty to superintend.

Bombardier Burley was battery orderly at the time of his attack. He conducted Gunner

Case of Bombardier Burley. Hartnell to hospital on the evening of the 24th and Driver McGinness on the morning on the 25th, having, during the night, occupied a bed next the latter.

Gunner Bowles is the exception above alluded to. This man's sole duty lay in looking after

Case of Gunner Bowles. the coffee-shop. Here he had employed under him a native cook who resided in the syces' lines; and it is worthy of record that the cook's sister was subsequently brought to hospital with an attack of cholera—on the 17th July. This event took place six days after Gunner Bowles' case certainly; but still the circumstance may be held to warrant the inference that the man had been living in a cholera-tainted atmosphere, which he left to take up his duties beside Gunner Bowles.

Of course all the men at stables were equally exposed to the risk of contagion, though only those were affected who happened to be at the time susceptible to the influence of the poison, whatever that unknown condition of the human economy may be, which tends to the receptivity of the cholera miasm.

In trying to trace the source of infection in the case of the first child admitted, the boy's father (Farrier Serjeant Huggins) informed me that he employed as cook in his family a woman who lived in the syces' lines. May it not then be presumed, with every semblance of probability, that this woman, though to all appearance healthy herself, was the means of conveying the seeds of the disease to a weakly ailing child, unhappily susceptible at the time of receiving and developing the poison?

With regard to the probable source of infection in the three cases (two children and a Gunner in married quarters) which occurred in the married quarters, I have the following observations to offer. It is the custom of the persons occupying the family quarters to co-operate in the employment of native servants to act as cooks for them; and during the month of July there were thus employed three women and a girl, all of whom live in the infected lines.

Now the boy Germain was frequently in the cook-house engaged in preparing tea, &c., for his mother, who was at that time ill and confined to bed. The child Bedford was an infant in arms, and consequently carried into the cook-house whenever its mother had occasion to go there. Gunner Lyons, the last victim to the epidemic (attacked five days after the disappearance of the disease from the camp of the followers), who also lived in the married quarters, was constantly in the habit of visiting the cook-house for the purpose of preparing food for himself and family, his wife being then in a delicate condition, and he, like a good husband, taking upon himself the part of saving her every avoidable fatigue or exertion.

Of course it is open to speculate on the possibility of the poison being conveyed in the food, and I am not prepared to assert absolutely that such was not the case; but my own opinion is that had the disease germ been introduced by the food, the epidemic would have been more general than it was.

11. While the above-mentioned cases seem to me fairly well authenticated instances of infection arising from personal communication, the fact must not be overlooked that other families—those of non-commissioned officers living in separate quarters—which were similarly provided with native servants from the syces' line, furnished not a single instance of choleraic infection, even though, in the case of these families, the servants were entrusted not only with the work of cooking, but also with the duty of looking after the children.

12. But the two hospitals (European and Native) afford the most remarkable illustrations of immunity from infection by personal communication: no attendant on official connected with either having contracted the disease, or even having shown symptoms, with the sole exception of the Hospital Serjeant, of an effort on the part of the system to throw off the influence of the disease. A still more noteworthy instance of exemption is to be found in the fact that the friends and relatives of the native sick, many of them women with children in arms, remained day and night enveloped in the poison-laden atmosphere of a crowded cholera ward, and yet all escaped without having furnished in their own persons or in those of their infants a single case of the disease. Of course disinfectants were freely used, and every means of ventilation rendered available to the fullest possible extent, while overcrowding was kept down as far as possible by the removal of convalescents into the outer verandah; yet there can be no doubt that the air inside the native hospital was largely impregnated with the poisonous germs of cholera.

There were very few instances among the natives of two members of the same family having been attacked during the epidemic.

General Health of the Battery before, during, and after the Epidemic.

13. The general health of the men previous to the epidemic was good, there being very few cases of diarrhoea or dysentery, and none at all of fever. The health of the native followers was also good, but after the outbreak there seemed to be among all classes a considerable increase of diarrhoeal complaints as will presently be noticed.

14. The subjoined table will show at a glance the admissions into hospital from diarrhoea and dysentery, or fever, for the last six months of the present year, and, for the purpose of comparison, those of the corresponding months of the two previous years are added:—

Months.	1871.		1872.		1873.	
	Diarrhoea and Dysentery.	Fever.	Diarrhoea and Dysentery.	Fever.	Diarrhoea and Dysentery.	Fever.
March ...	6	4	...	...	2	...
April ...	2	...	...	...	...	...
May ...	3	1	1	1	...	1
June ...	3	2	1	4	1	1
July ...	2	3	...	2	1	...
August ...	1	2	...	...	2	1
Total ...	17	12	2	7	6	3

15. Although the admissions from diarrhoeal complaints were very few, the applications at hospital on account of looseness of the bowels during the time the epidemic lasted underwent a great increase, compared with the corresponding periods of the last two years. In June mostly after the outbreak, there were among the men alone 41 applications for astringent medicine, compared with ten of the past year, and six of the year before; and in July there were 86 such applications, compared with seven and fourteen of the two previous years. The women, children, and native followers furnished a similarly proportionate increase of cases of diarrhoea. But it must not be forgotten that the augmentation of cases was partly real and partly apparent, by which expression I mean that, while there can be no question as to the greater frequency of intestinal derangements during the epidemic period of the present year than at the corresponding periods of the last two years, still we ought to bear in mind that many slight cases of diarrhoea were this year reported at hospital by the stringency of the order on the subject, which in other non-epidemic years would never have been brought under observation at all.

16. The cases of diarrhoea treated in August were but little over the nominal average. The admissions into hospital for other complaints during the months of June, July, and August were somewhat in excess of the same months last year, but fewer than those of the year before.

Duration of Premonitory Diarrhoea with notice of General Health and Habits of those attacked.

17. 1st case.—Gunner Eastnell (age 29), admitted at 7 p.m., stated that he had suffered from diarrhoea since 5 a.m. Choleraic discharges came on at 9 p.m. Duration of premonitory stage—sixteen hours. In general good health at the time of attack. I had invalidated this man last year for hydrocele, but he was sent back from Rangoon for further treatment. About a month before his admission from cholera, I had tapped him the second time since his return, and on this occasion with every prospect of success. He had left hospital a fortnight before being seized with cholera, and had quite recovered from the effects of the operation. Five years in India. Total service seven years.

18. 2nd case.—Driver McGinness (age 28), admitted at 6 a.m., stated that he had been seized with diarrhoea at midnight. Choleraic discharges made their appearance directly after admission. Duration of premonitory stage—six hours. In good health at the time of attack, but was a weakly man. He was invalidated to Poonamallee last year, and had rejoined the battery in February last. Nine years in India. Total service ten years.

19. 3rd case.—Bombardier Burley (age 39), admitted at 6 a.m. 25th June. On admission stated that he had been seized with diarrhoea at 5 a.m. 25th June. Since his recovery has informed me that he ought to have said 3 a.m., at the same time adding that he had had slight diarrhoea even the day before. Choleraic discharges did not come on till 2 a.m. on the 27th, therefore stage of premonitory diarrhoea lasted forty-seven hours, if not longer. This man was in good robust health at the time of seizure. Eleven and a half years in India. Total service fifteen years.

20. 4th case.—Boy Huggins (aged six years), admitted 6 a.m., had gone to bed in usual health. Suddenly seized at 5 a.m. with pressing diarrhoea, which sent him to stool two or three times in rapid succession. True choleraic discharges supervened at 6 p.m. Duration of premonitory diarrhoea—thirteen hours. A weakly ailing child, but seldom requiring medical treatment. Of Eurasian origin by both parents.

21. 5th case.—Boy Germain (aged 12) admitted at 4 p.m. Felt ill at dinner time (1 p.m.), but had been in usual health in early part of the day. Attacked at 3-30 p.m.

(21)—In 5th case. with diarrhoea, which assumed a choleraic character at 6 p.m. Stage of premonitory diarrhoea lasted two and a half hours. In good health at the time of seizure, but was a boy of delicate constitution. Two and a half years in India.

22. 6th case.—Child Bedford (female, aged 1½ years), admitted at 4 p.m. Diarrhoea said to have come on at 2-30 p.m. Assumed choleraic type at 6 p.m. This stage,

(22)—In 6th case. therefore, lasted three and a half hours. It would be difficult, however, to state exactly when the premonitory stage came on in this case, as the child was the subject of chronic diarrhoea, and had been so, owing to bad nursing, for the last four months. General health bad. Of Eurasian parentage by mother.

23. 7th case.—Gunner Bowles (aged 34), admitted at 11 p.m. Had been the subject of pressing diarrhoea which made him run to the rear three or four times in

(23)—In 7th case. quick succession between 8 and 9 p.m. Choleraic discharges on admission. Premonitory stage, therefore, lasted three hours. Had lately been in indifferent health, suffering frequently from diarrhoea and dyspepsia. Thirteen years in India. Total service fourteen years.

24. 8th case.—Driver Raven (age 20), admitted at 5 p.m., stated at the time of admission that he had been ill with diarrhoea since noon. Since his recovery he has

(24)—In 8th case. informed me, as did Bombardier Burley, that he had been the subject of slight diarrhoea even the day before. Choleraic discharges at 10 p.m. Premonitory stage, therefore, nine hours at least. This man was a recruit nine months out from England, and in robust health at the time of seizure. Service two years.

25. 9th case.—Gunner Lyons (age 36), admitted at noon. Compelled to run sharp to the rear at 4 a.m. Had been purged twice since that hour up to time of admis-

(25)—In 9th case. sion. Choleraic symptoms came on at 2 p.m. Premonitory stage, ten hours. This man was an old soldier in good general health at the time of his attack, but was the subject of hypertrophy of the heart, for which I had invalided him last year, expecting him to be sent to England and discharged the service on a pension to which he was entitled. He was returned to do duty with the battery, but was found quite unfit for efficient work, and since rejoining he had been employed on some light and easy duty only, hanging on till the return of the invaliding season should afford me a second opportunity of doing justice both to the man himself and to the service. Sixteen years in India. Total service eighteen and a half years.

All these men were soldiers of steady, temperate habits—temperate, not merely in the regimental sense of the word, which denotes that a man contrives to keep out of the orderly room, though probably all the while quite a toper, but they were men whose good behaviour and exemplary conduct were recognized and acknowledged both by their comrades and their officers.

From the foregoing remarks it will be seen—
That premonitory diarrhoea, varying in duration from two or three hours to two or three days, was present in every instance of the disease.

That the healthy and robust were attacked equally with the feeble and weakly, and the recruit with the old soldier

That the men of steady habits fell victims to the disease while the intemperate escaped entirely; and also

That of the six men attacked and four who died, three had been invalided from the station during the past twelve months.

26. Water-supply.—I think the origin and propagation of the disease in the battery has been sufficiently accounted for without assuming the drinking water to have been

(26)—Water-supply. the source of the evil; but, as it is my desire to afford information on all the points which constitute the subjects of investigation on the occasion of an outbreak of cholera in a corps, I shall address myself to the question of the water-supply.

Drinking water for the battery is obtained from a single well situated at the distance of about eighty yards from the nearest barrack (No. 3). It is sunk in the gravel, and has its sides lined with thick masonry. Its mouth is protected by a masonry parapet, which is encircled for a breadth of several feet by a chunamed platform. The water has been analyzed and found very good—only a little hard from the presence of lime. At this season of the year there is a depth of twenty-five feet to the surface of the water, which is drawn up by the usual native arrangement of leathern bag, rope, and pulley. The water is emptied directly into a barrel cart, and conveyed to the barracks, to be there made available for

drinking purposes by means of the customary defective arrangement of chatties. The well is at too great a distance from the barracks to be likely to undergo fouling from them, but it occupies low ground, and there is a good deal of soakage round it during the rainy season. It is not much used by outsiders, as it does not lie on any great thoroughfare; but there is an internal source of danger quite as great or even greater which I must not fail to notice.

27. The position of the well is marked on the plan of the Royal Artillery lines (near the canteen), and it will be seen that it is in far too close proximity to the native hospital.

(27)—Well into close proximity to native hospital. This during cholera times is a real source of danger which cannot be overlooked, and must not be ignored. If the attendants on cholera patients were to draw water with vessels which had been used by these patients, or to wash tainted cloths near the mouth of the well, there is a fearful probability of the specific poison of the disease being communicated to the water; and it requires very little acquaintance with the etiology of cholera to predict the disastrous consequences which would ensue if the material cause of the disease were to find its way into the drinking water supplied to a body of men.

During the present epidemic all temptation to make use of the well was removed from the friends of the sick by the liberal supply of water with which they were kept constantly provided by the hospital bheesties; and every one in attendance on the sick was strictly warned against approaching either the barrack or the hospital well on any plea whatever, under a threat of prompt and condign chastisement in event of any infringement of the order being discovered. Still, considering the propensity shown by all classes of natives to disobey orders, should they hope to elude detection, and should such disobedience accord in the smallest degree with their natural lazy and filthy habits, it will be seen that in this proximity of the water-supply to a native hospital there lies at all times a source of imminent danger.

28. One of two things ought to be done to remedy this hazardous state of matters. Either

(28)—The risk involved in the hazardous proximity of the native hospital to the water-supply ought to be obviated. another well for supplying the battery ought to be dug in a less objectionable quarter, or the native hospital should be removed from its present position. If neither of these measures is likely to be adopted on account of the expense to Government, then at least the present well ought to be covered in and fitted with a force-pump protected by lock and key, and thus rendered accessible only to those employed in drawing water for the battery.

29.—The patients in hospital, the subordinate establishment, and the native servants are all supplied with drinking water from a well situated in the hospital compound, of much the same depth as the last, allowing for the difference in level of the site. From this well, too, a large number of officers living in the neighbourhood obtain their supply of drinking and bathing water.

30.—The residents in the Syces' lines draw their water from a well which was dug only eight months ago. It also is furnished in the gravelly soil, and its mouth is protected with a masonry parapet and platform above described. That the presence of the epidemic among the native followers was not due to contamination of the water may reasonably be assumed as a fact when we find that the disease quickly disappeared on the evacuation of the village, though its late residents continued to drink from the same well as formerly.

31. Rations.—Having discussed the subject of the drinking water I may next briefly touch on that of the food of the men—with reference to its quality. The remarks made by Dr. Thomson, 26th Regiment, in his report on the epidemic of 1869 still continue to hold good. There is too little variety in the men's rations. A diet of beef of only "fair" quality (it can never aspire to a higher designation) day after day throughout the year is not calculated to keep a man's digestive apparatus in full healthy vigor, and as a matter of fact dyspeptic complaints are very common.

32. The men in barracks get mutton on Christmas and New Year's day, while patients in hospital are indulged in the luxury every alternate day, if on half or full diet. It ought perhaps to be added in explanation that sheep farming here on a sufficient scale to supply all the troops has proved a failure, the soil or climate, or both, being found inimical to the rearing of sheep.

33. Milk and butter were supplied to the single men and married families by a contractor living in the neighbourhood of the Syces' lines. These articles were furnished to the hospital by a resident in the Commissariat lines.

(33)—Milk and butter whence supplied.

34. Extra articles of diet desired by the married families had to be procured from the large bazaar in the native town, but were in some instances purchased of persons hawking their goods from door to door.

(35)—Cooks who prepared the food of the single men where resident. 35. I have already alluded to the cooks employed by the married families; those also engaged in preparing the food of the single men lived mostly in the Syceutines.

36. Soil.—The cantonment stands on alluvial soil, composed chiefly of coarse sands and gravels, which extend downward to a considerable depth, far below the water level. Beneath this superficial covering are found argillaceous compounds—silts, shales, &c., and deeper still lie strata of sandstone rock; the whole resting on a basis of nummulitic limestone, which crops up to form a considerable eminence—a single peak in a low range of hills—at a distance of about four miles from the cantonment. In many places the surface of the ground is covered with a layer of dark loam formed in part of vegetable mould, but consisting chiefly of mud, deposited at a period when the river flowed at a higher level and over a wider extent of the valley than it does at present. The ground occupied by the European lines is partially sheltered with trees, while the station itself is enclosed on every side, except riverward, with thick jungle.

Meteorology.—It is not my intention to encumber this report with deprecated “yards of meteorological tables,” though one or two statistical returns under the head of rainfall will be necessary for the information of those who desire to be furnished with data respecting a natural phenomenon which is so widely believed to have an intimate connexion with the production and diffusion of the devastating epidemic, whose history among the persons committed to my charge is under review.

37. Temperature.—An appalling array of tables which record the thermometrical observations taken at this station during the last five years I shall condense into the simple statement that, having carefully compared these returns *per menses et per annos*, I find very little divergence in any one given month or year from the general average. I may add more particularly that during the recent epidemic months there was no protracted duration of an unusually high degree of temperature, nor the occurrence of any abnormal degree of low temperature—nothing in short to be discovered in the movements of the thermometer, as far as my poor knowledge serves, which could account for the presence of a disease so little controllable by the extreme cold or heat, as to select its victims from amid the snows of Sub-Arctic Russia as well as from the burning plains of tropical India. With regard to the feeling of oppressiveness in the atmosphere which is sometimes alleged to exist where cholera is epidemic, there was nothing of that sort complained of here—rather the general impression in the station was that the hot weather and rains of this year were less “trying” than the same seasons were last year.

(38)—Wind much the same as in previous years. 38. Wind.—The general direction and strength of the wind before and during the epidemic were much the same as they have been in by-gone years.

39.—Rainfall.—I shall enter into greater detail on this division of the meteorological phenomena, because I am aware that rain is believed both popularly and by high authorities to play an important part in bringing into activity the dormant germ of the cholera virus—an opinion of respectable antiquity, having been entertained as far back at least as the outbreak in Bengal of 1817 (I wish it to be understood that I have used the word germ throughout this report merely to express the first principle of the disease, and not to imply a belief on my part that the essential cause of cholera is possessed of any vitality whatever, either animal or vegetable). I shall also take the opportunity of making a passing allusion to the fact of the rainfall as they bear on Peitkenoff's theory, though, of course, I am excluded on the present occasion, by the nature of the duty before me, from discussing that or any other speculative doctrine.

40. During the month of March, while the epidemic was travelling up country from its original focus above the head of the delta, there was no rain, as far as I have been able to ascertain, in any part of the valley. Yet the disease advanced steadily upwards.

41. In the month of April cholera broke out in the 45th Regiment, and this single month furnished thirteen out of the total of twenty-three cases which occurred in the regiment during the epidemic period extending over April, May, June, July, and August (1st day only). There was very little rainfall during this month, only two cents on the 20th and eighteen on the 28th: This occurrence of cases coincides to a certain

extent with these humid days. The first case in the regiment took place on the 12th and the second on the 20th. Several more cases occurred during the intervening days up to the 28th, when there were no less than four seizures, the largest number which took place in the corps on any single day. Two (2) more cases occurred on the 29th. Towards the end of the month there was, apart from the fall of rain, a certain amount of humidity in the atmosphere, which was occasionally loaded with heavy black clouds, whose presence seemed to betoken the advent of the coming monsoons.

42. May.—On the 1st 72 cents of rain fell, on 13th 18 cents, on the 30th 2.20 inches, and on the 31st 2.06 inches. It will thus be seen that the rains did not really set in till the very end of the month, whereas the usual time for the bursting of the monsoon in this part of the world is the first and second week in May.

There were only two cases of cholera (45th Regiment) this month, and they occurred on the 12th and 30th.

43. June and July.—As the epidemic extended its influence in the month of June to bodies of men and communities previously intact, and raged at its fiercest in the month of July, I think it better to give tables showing the rainfall and cases of cholera side by side for the purpose of facilitating the work of the theorist in making such deductions as the facts may seem to warrant.

Table showing Rainfall and Cases of Cholera in Cantonments and Native Town during the Months of June and July.

June.					July.				
Date.	Rainfall.	Cases of Cholera.			Date.	Rainfall.	Cases of Cholera.		
	Inches.	Europeans.	Natives.	Total.		Inches.	Europeans.	Natives.	Total.
1	1.11	1	...	1	1	...	...	...	...
2	.14	...	...	...	2	.05	...	5	5
3	...	...	...	...	3	.49	...	3	3
4	.22	...	...	...	4	...	...	4	4
5	.10	...	...	...	5	...	...	3	3
6	...	1	...	1	6	...	...	5	5
7	...	...	...	...	7	...	1	3	4
8	...	...	...	...	8	.21	3	2	5
9	...	...	...	...	9	.28	...	9	9
10	...	...	...	...	10	...	...	5	5
11	.30	...	...	...	11	.04	1	2	3
12	.70	...	...	...	12	...	...	1	1
13	1.84	...	...	...	13	.54	...	2	2
14	...	...	...	...	14	...	...	1	1
15	1.08	...	2	2	15	...	...	3	3
16	...	...	...	...	16	.18	...	...	...
17	.05	...	...	...	17	.54	...	2	2
18	.10	...	...	...	18	...	1	1	2
19	1.08	...	...	...	19	.36	...	1	1
20	.19	...	...	...	20	.05	...	1	1
21	.34	...	...	...	21	.52	...	2	2
22	...	...	...	...	22	.14	1	4	5
23	.03	...	...	...	23	.60	1	...	1
24	.20	1	2	3	24	.14	1	...	1
25	.24	2	2	4	25	.90	2	...	2
26	.05	...	...	...	26	1.24	...	...	...
27	...	...	...	...	27	.06	...	...	...
28	.14	...	1	1	28	1.16	...	...	...
29	.01	...	1	1	29	1.04	...	...	...
30	.16	...	...	...	30	.05	...	1	1
...	...	...	...	...	31	.01	...	...	...
...	8.05	5	8	13	...	8.69	11	60	71

NOTE.—Under the head “Europeans” are embraced cases occurring in the families of soldiers as well as among the men themselves. The term Natives includes all races except Europeans. The precise number of cases which occurred in the native town is not known, only the fatal cases are given.

44. The greater intensity of the disease during the month of July, after the rains had well set in, cannot fall to be noted. *Apropos* of the seasons at which cholera is believed most generally to manifest its power, I recollect a remark occurring in one of the series of papers “on cholera in insular positions” which have recently appeared in the *Lancet* from the pen of Inspector-General Smart, C.B., F.R.S., to the following effect: “The dry season is that of epidemic intensity, and the wet season that of dormancy or comparative freedom from activity,” (I hope I do not detach the sentence from any contextual qualification).

tion). It is not my desire to question the general correctness of this dictum, but the remark at the time of reading led me to consider how far it was applicable to the present epidemic. Here it certainly fails to establish its validity, as also it does in the case of cholera generally in this part of Burmah; for, as far as I can gather, the disease has in late years been more prevalent in this neighbourhood during the first half of the rains than at any other period of the year.

(45).—Amount of rain, fall, monthly and annual, from 1869 up to present date.

45. In the following table is presented the monthly rainfall for the present year up to date, and for the full periods of the four years immediately preceding:—

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Inches.	Remarks.
1869 ...	...	...	...	...	4.2	6.7	5.4	5.9	2.6	6.30	...	...	31.1	Epidemic year.
1870 ...	...	0.3	...	0.5	12.3	6.3	7.8	5.7	6.1	2.6	...	...	41.7	Do.
1871 ...	...	...	...	0.2	8.4	7.7	9.6	10.7	12.0	5.3	0.7	...	54.6	
1872 ...	...	...	...	0.1	7.2	11.4	6.2	7.9	4.9	3.3	...	...	41.0	
1873 ...	...	...	...	0.2	5.2	8.7	8.7	5.6	5.4	up to 12th Sept.			33.2	Epidemic year.

46. It will be seen that the largest amount of rain which fell in the given quinquennial period was registered in the year 1871; consequently if it be true, as Pettenkoffer suggests, that cholera depends on the amount of moisture contained in the soil resulting from the rainfall, the epidemic ought to have selected, for the manifestation of its activity, that year of large rainfall (and also consequent great rise of the river), or, failing it, the early part of the year succeeding. Another suggestion of Pettenkoffer's, dependent, of course, on the principle above enunciated, is "that is the time when the ground water is sinking from an unusual height that we run the greatest danger from cholera if the seeds of the disease have fallen into the soil." Now if this axiom be true, its converse ought also to be true, and we should consequently expect the epidemic months to have been characterised by the subsidence of the subsoil water from an unusual height. But such was not the case. A well has been set apart in the cantonment for the purpose of recording the rise and fall of the subsoil water in connexion with the great German theory. The registers kept for the last two years are now lying before me; but I have to regret the absence of those for 1871—if indeed operations had been commenced in that year. In examining these records, I can discover but little difference between the general level of the subsoil water during the present year and that of the corresponding months of last year. The level at the commencement of the different months is much the same in both years, and the rate of subsidence equally gradual and moderate.

47. The final disappearance of the epidemic in the end of July [there was a solitary case (child) in the 45th Regiment on 1st August] was not marked by any noticeable change either in temperature, rainfall, strength, or direction of wind currents, or by any unusual electric disturbance. To account for the absence of any allusion to other meteorological observations, I may explain that the Royal Artillery Hospital is not provided with any instruments except a common barometer, the amount of rainfall even being borrowed from the Civil Hospital.

THATERNYO,
20th September 1873.

(Signed) W. ROBERTSON, M.A., M.B.,
Surgeon, Royal Artillery.

APPENDIX III.

STATISTICAL TABLES.

EUROPEAN ARMY RETURNS.

III.

Return showing the Loss to Her Majesty's British Troops serving in the Madras Presidency by Deaths and Invaliding during the year 1873.

Diseases.	Died in and out of Hospital.*	Ratio of Deaths per 1,000 of Strength.	Diseases.	Invalided for Change of Climate.				Invalided for Discharge from the Service.				Ratio of Invalided per 1,000 of Strength from Medical Returns.		
				Artillery.	Cavalry.	Infantry.	Total.	Artillery.	Cavalry.	Infantry.	Total.	Total Invalided.	For Change of Climate.	Total.
Small-pox ...	1	0.08	Ague ...	6	1	2	8	...	...	...	...	8	0.70	0.70
Typhoid Fever ...	10	0.87	Rheumatism ...	5	1	19	25	1	...	6	7	32	2.29	2.82
Sim. Continued Fever ...	3	0.23	Scorfula ...	1	...	1	1	1	2	3	3	3	0.08	0.18
Remittent do. ...	4	0.35	Phthisis Pulmonalis ...	6	4	33	43	10	3	27	40	83	3.73	7.31
Cholera ...	12	1.03	Secondary Syphilis ...	16	7	18	31	3	...	6	9	40	2.73	3.52
Phthisis Pulmonalis ...	11	0.95	Diabetes ...	...	1	1	1	...	1	1	2	1	0.08	0.08
Scorfula ...	1	0.08	Dementia ...	...	1	1	2	...	1	1	2	4	0.17	0.35
Cancer ...	1	0.08	Sciatica ...	...	...	...	...	...	1	1	1	1	0.08	0.08
Acute Miliary Tuberculosis ...	1	0.08	Spinal Meningitis ...	...	...	1	1	...	...	1	1	1	0.08	0.08
Stroke ...	7	0.61	Neuralgia ...	1	...	4	5	...	1	1	6	6	0.44	0.52
Apoplexy ...	2	0.17	Paralysis ...	...	1	3	4	...	1	1	5	3	0.35	0.44
Do. Congestive ...	1	0.08	Mania ...	...	...	...	...	...	3	3	3	3	0.26	0.26
Do. Sanguineous ...	1	0.08	Paraplegia ...	...	...	1	1	...	...	1	1	1	0.08	0.08
Abscess of Brain ...	1	0.08	Hypochondriasis ...	...	...	3	3	...	1	1	1	3	0.26	0.26
Meningitis ...	1	0.08	Stroke ...	...	...	3	3	...	...	...	3	3	0.26	0.26
Aneurism of Aorta ...	9	0.73	Epilepsy ...	...	...	1	1	2	7	10	10	10	0.83	0.88
Do. of Thorax ...	2	0.17	Ch. Encephalitis ...	...	...	1	1	...	1	1	1	1	0.08	0.08
Do. Abdl. Aorta ...	5	0.43	Hemiplegia ...	...	...	1	1	...	1	1	2	2	0.08	0.17
Do. of Left Common ...	1	0.08	Impaired Vision ...	...	...	2	1	...	1	1	1	1	0.08	0.08
Do. of Arch Aorta ...	1	0.08	Anaesthesia ...	...	...	...	...	...	1	1	1	1	0.08	0.08
Cal. Deg. of Arch Aorta ...	1	0.08	Retinitis ...	1	...	1	1	...	...	...	1	1	0.08	0.08
Rupture of Coronary Aorta ...	1	0.08	Cataract ...	1	...	1	1	...	2	2	3	3	0.08	0.17
Atrophy of Heart ...	1	0.08	Deafness ...	...	...	1	1	...	...	...	1	1	0.08	0.08
Valve Disease of Heart ...	5	0.43	Pericarditis ...	1	...	24	27	...	2	2	29	2.38	0.17	2.55
Bronchitis ...	1	0.08	Pulmonary ...	1	1	7	9	1	3	5	14	0.79	0.44	1.23
Abscess of Lung ...	1	0.08	Hypertrophy of Heart ...	1	1	1	1	1	3	3	4	0.08	0.26	0.35
Pneumonia ...	3	0.26	Varicose Veins ...	1	1	8	10	2	3	6	11	21	0.88	0.97
Ch. Pneumonic Phthisis ...	1	0.08	Valve Disease of Heart ...	...	...	2	2	1	1	2	4	4	0.17	0.35
Dysentery ...	32	2.802	Aneurism of Abdl. Aorta ...	1	...	1	1	...	1	1	1	1	0.08	0.08
Diarrhoea ...	2	0.17	Fatty Degeneration of Heart ...	...	...	...	...	...	...	...	...	...	...	...
Abscess of Liver ...	50	4.38	Hypertrophy of Left Femur ...	...	...	1	1	...	1	1	1	1	0.08	0.08
Cirrhosis of do. ...	2	0.17	Hypertrophy of Glands ...	...	...	1	1	...	...	...	1	1	0.08	0.08
Jaundice ...	2	0.17	Pneumonia ...	1	1	3	5	...	...	...	1	1	0.08	0.08
Bright's Disease ...	1	0.08	Contraction of right elbow ...	...	...	...	...	1	1	1	1	1	0.08	0.08
Stricture of Urethra ...	1	0.08	Asthma ...	...	...	...	...	2	2	2	2	2	0.17	0.17
Delirium Tremens ...	2	0.17	Pleurisy ...	...	1	...	...	...	...	...	1	1	0.08	0.08
Alcoholic Poison ...	1	0.08	Dyspepsia ...	1	...	2	3	...	...	...	3	3	0.26	0.26
Poison Narcotic Chlorodyne ...	3	0.26	Hepatitis ...	20	12	59	91	1	1	2	4	95	8.02	0.35
Drowned ...	10	0.87	Diarrhoea ...	2	...	4	6	1	...	1	7	7	0.52	0.61
Asphyxia from Drowning ...	1	0.08	Dysentery ...	20	17	81	118	2	1	3	121	10.40	0.26	10.66
Do. from Drink ...	2	0.17	Hæmorrhoids ...	...	...	1	1	...	1	1	1	1	0.08	0.08
Fracture of Skull ...	4	0.35	Splenitis ...	...	...	1	1	...	...	...	1	1	0.08	0.08
Gun-shot Wound (Self Infl.) ...	1	0.08	Ascites ...	...	...	1	1	...	1	1	1	1	0.08	0.08
Rupture of Urethra ...	1	0.08	Inguinal Hernia ...	1	...	1	2	...	1	3	4	4	0.08	0.35
Not yet diagnosed ...	1	0.08	Fistula in Ano ...	...	...	...	...	1	...	1	1	1	0.08	0.08
			Abscess of Liver ...	2	...	3	5	...	...	...	5	5	0.44	0.44
			Urinary Fistula ...	1	...	1	2	...	...	...	2	2	0.17	0.17
			Stricture of Urethra ...	2	...	3	5	...	...	...	5	5	0.44	0.44
			Bright's Disease ...	2	...	2	...	...	...	...	2	2	0.17	0.17
			Orchitis ...	1	...	1	...	...	...	...	1	1	0.08	0.08
			Talipes Equino-valgus ...	...	...	...	1	...	1	1	1	1	0.08	0.08
			Displacement of Art. Cartilage of Knee ...	1	...	1	...	...	...	...	1	1	0.08	0.08
			Ostitis ...	1	...	1	...	...	...	...	1	1	0.08	0.08
			Synovitis ...	1	...	1	...	...	...	...	1	1	0.08	0.17
			Testicles Retained in Inguinal Canal ...	...	...	...	...	1	1	1	1	1	0.08	0.08
			Malformation of Spine ...	...	...	...	...	1	1	1	1	1	0.08	0.08
			Ankylosis ...	...	...	...	...	1	1	1	1	1	0.08	0.08
			Abscess of Cell. Tissue ...	...	...	1	1	...	...	...	1	1	0.08	0.08
			Inflammation of Cell. do. ...	1	...	1	...	...	...	...	1	1	0.08	0.08
			Locomotor Ataxy ...	...	...	...	...	1	1	1	1	1	0.08	0.08
			Tumour ...	1	...	1	...	...	...	...	1	1	0.08	0.08
			Ulcers ...	1	1	1	2	...	2	2	4	4	0.17	0.35
			Eczema ...	...	...	1	1	...	...	...	1	1	0.08	0.08
			General Debility ...	33	6	75	114	4	...	6	10	124	10.65	10.93
			Anæmia ...	...	8	5	13	...	...	...	13	13	1.14	1.14
			Confusion ...	...	...	...	3	...	3	3	3	3	0.26	0.26
			Fracture ...	2	1	3	2	...	1	3	6	6	0.52	0.52
			Wound ...	...	1	1	...	...	1	1	1	1	0.08	0.08
			Gunshot Wound ...	...	...	...	2	...	2	2	2	2	0.17	0.17
			Incised do. ...	...	...	...	1	...	1	1	1	1	0.08	0.08
			Amputation ...	...	...	...	1	...	1	1	1	1	0.08	0.08
Total ...	206	18.04	Total ...	124	69	374	567	43	14	93	150	717	49.39	63.31

* According to Stational Returns.

IV.

Table showing the Invaliding in Her Majesty's British Troops arranged according to Stations during the year 1873.

Diseases.	Madras.		Saint Thomas' Mount.		Trichinopoly.		Bangalore.		Cannanore.		Bellary.		Kamptee.		Secunderabad.		Rangoon.		Tongtoo.		Thayet-myo.	
	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.
Ague	2	11	1	1	2	1	2	1	1	1	1	1	2	1	4	3	1	1	1	1	1	1
Rheumatism	15	4	2	1	1	1	19	8	3	1	1	2	2	4	1	10	1	2	1	1	1	5
Scorfula	2	1	1	1	1	1	8	1	1	1	1	2	2	1	1	1	1	1	1	1	1	2
Phthisis Pulmonalis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Secondary Syphilis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diabetes	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dementia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sciatica	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Spinal Meningitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Neuralgia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Paralysis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mania	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Paraplegia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hypochondriasis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Stroke	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Epilepsy	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ch. Encephalitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hemiplegia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Impaired Vision	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Anaesthesia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Retinitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cataract	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Deafness	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pericarditis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Palpitation	2	4	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hypertrophy of Heart	2	2	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Varicose Veins	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Valve Disease of Heart	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Aneurism of Abdominal Aorta	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fatty Degeneration of Heart	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hypertrophy of Left Femur	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Do. of Glands	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pneumonia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Brachitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Contraction of Right Elbow	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Asthma	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Plenty	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dyspepsia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hepatitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Diarrhoea	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dysentery	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hæmorrhoids	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Splenitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ascites	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Inguinal Hernia	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fistula in Ano	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Abscess of Liver	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Urinary Fistula	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Stricture of Urethra	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bright's Disease	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Orchitis	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Talipes Equino-Valgus	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Displacement of Art. Carpal of Wrist	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1			

7

[illegible]

Table showing the Sickness and Mortality among the whole European Army stationed in the Madras Presidency during the year 1873, and the Prevalence of the Principal Diseases in each Quarter of the year.

Quarter.	Average Strength.	Total Admissions.	Total Deaths in Hos- pital.	Total Deaths out of Hospital.	Average Daily Sick.	Admissions into Hospital.														Deaths in Hospital.													
						Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Epileptic Fitings.	Scurvy.	Atrophy and Anæmia.	Dropsies	Stomach and Liver-dyspepsia.	Heart Diseases.	Respiratory Dis- eases.	Dysentery.	Diarrhea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Alcoholism.	Skin Diseases.	Delirium Tre- mens.	Violence and Accidents.	All other Causes.		
First Quarter.	11,231	3,348	41	5	63,134	...	115	...	26	327	320	20	...	89	...	24	...	...	...	...	46	122	198	190	18	200	11	205	775				
Second do.	11,713	3,699	43	6	62,064	4	9	...	13	319	386	12	17	88	...	25	...	2	17	...	14	85	134	209	237	52	324	8	277	864			
Third do.	11,580	3,846	45	5	73,115	...	131	...	10	198	435	12	6	114	28	...	18	...	...	1	83	103	334	238	26	243	4	231	840				
Fourth do.	11,147	3,446	48	13	69,806	2	36	...	2	239	255	39	...	103	46	...	21	...	3	...	86	141	297	184	25	197	10	301	755				
For the year.	11,418	14,339	177	29	676,51	6	311	...	51	1,083	1,806	63	23	394	123	...	64	...	5	21	302	502	1,038	855	121	964	33	1,074	3,234				
Ratio per 1,000 of strength for the year ...						0.52	27.23	...	4.46	94.85	122.26	7.27	2.01	34.50	10.77	0.17	5.60	0.44	1.84	26.45	43.03	90.90	74.88	10.59	84.42	2.89	94.10	283.27					
Quarter.	Ratio per 1,000 of Strength.																																
First Quarter...	298.103	3.65	0.14	56.46	...	...	...	...	4	...	...	1	...	...	...	3	...	...	...	2	7	...	7	...	...	...	...	2	3				
Second do. ...	315.603	3.67	0.51	132.93	1	...	...	...	2	...	...	...	8	...	2	...	...	...	5	4	2	5	...	...	...	...	1	1	...				
Third do. ...	332.00	3.88	0.43	63.13	...	...	...	...	4	1	...	3	4	...	5	...	...	...	...	...	3	1	6	2	...	...	...	...	2				
Fourth do. ...	309.14	4.30	1.17	62.49	...	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	7	3	14	...	...	...	...	1	3				
For the year ...	1255.82	15.50	2.54	58.72	1	...	...	...	10	3	...	4	12	...	11	...	...	...	...	7	21	6	82	2	...	...	1	4	8				
Ratio per 1,000 of Strength for the year ...						0.08	...	...	0.87	0.28	...	0.35	1.05	...	0.96	...	...	...	...	0.61	1.84	0.52	2.80	0.17	...	0.08	0.35	0.70					

VII.

Table showing Sickness and Mortality among the European Troops at each Station of the Madras Presidency during the year 1873.

Stations.	Average Strength.	Total Admissions.	Average Daily Sick.	Deaths		Ratio per 1,000 of Strength.			
				In Hospital.	Out of Hospital.	Admissions.	Average Daily Sick.	Deaths in Hospital.	Deaths out of Hospital.
Fort Saint George ...	704	785	45.89	8	2	1115.05	64.47	11.36	2.81
Saint Thomas' Mount ...	352	437	20.69	3	1	1241.48	58.72	8.52	2.84
Poonamallee ...	138	352	49.25	8	...	2550.72	356.88	57.97	...
Palaveram ...	95	59	2.15	...	...	621.05	22.63	...	...
Trichinopoly ...	291	424	24.02	5	2	1457.05	82.54	17.18	6.87
Wellington ...	454	673	41.38	10	...	1482.37	91.14	22.03	...
Bangalore ...	1,811	2,011	98.86	12	3	1110.43	54.59	6.62	1.66
Cannanore ...	643	1,123	43.01	16	...	1746.50	66.87	24.88	...
Calicut ...	82	125	6.01	...	...	1524.39	73.29	...	...
Maliapooram ...	80	114	5.19	1	...	1415.0	64.87	12.50	...
Bellary ...	941	933	59.83	12	2	991.49	63.58	12.75	2.12
Ramandroog ...	50	48	2.57	...	...	960.0	51.40	...	...
Secunderabad ...	2,436	3,114	124.62	49	5	1278.32	51.16	20.11	2.05
Kamptee ...	999	1,975	61.72	6	6	1876.98	61.78	6.006	6.006
Seetabuldeo ...	47	61	1.08	...	...	1297.87	22.98	...	...
Rangoon ...	957	1,039	37.36	16	2	1085.68	39.04	16.72	2.00
Thayetmyo ...	584	531	22.22	20	3	906.24	38.04	34.24	5.13
Tonghoo ...	466	409	20.86	6	1	877.68	44.76	12.82	2.14
Port Blair ...	102	40	0.93	1	1	392.15	9.11	9.80	9.80
<i>European Veterans.</i>									
Palaveram ...	120	47	1.66	2	1	391.67	13.83	16.68	8.33
Vizagapatam ...	66	39	1.71	2	...	590.91	25.91	30.30	...
Total ...	11,418	14,339	670.31	177	29	1255.82	58.72	15.50	2.54

VALL.

Table showing the Principal Diseases which have contributed to make up the Admissions into Hospital among the European Troops at each Station during 1873.

Stations.	Admissions from																	Total Admissions.										
	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anemia.	Dropsies.	Stroke and Heart- aplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.		Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Accidents.	All other Diseases.	
Fort Saint George	704				42	13			60	21				1	33	27	28	14	47	5	83	4	101	3	71	209	785	
Saint Thomas' Mount.	352				20	29			4	1				3	1	9	35	33	26	20	51	3	52	3	49	98	437	
Poonamallee	138				22	4			9	6				1	11	10	47	17	80	1	28		2	1	7	93	352	
Palaveram	95				5				2								1	2	5	5			9		6	11	59	
Trichinopoly	291				23	22			9					2	7	10	27	2	22	4	47	5	19	1	48	95	424	
Wellington	454				20	81			27						32	21	21	27	49	1	69	4	35		23	243	673	
Bangalore	1,811				231	89			57	31				1	41	72	137	87	98	7	297	18	148	6	202	430	2,011	
Cannanore	643				127	2			16	7					69	34	171	107	140	4	60	23	99	1	36	195	1,123	
Calicut	82				16					1				2	18	4	10	14	9		12	2	7		4	26	125	
Maliapooram	80				3				3	1						2	32	18	12		7	4	4		2	18	114	
Bellary	941				117	23			20	2	1				6	12	16	28	21		341	4	49		55	238	933	
Ramandroog	50				3	13										30	276	3	8	21	4	2	1		3	16	48	
Secunderabad	2,436				259	127			108	28				3		149	31	264	229	7	267	27	166	10	302	791	3,114	
Kamptee	999				46	933			24	3				2	21	56	31	66	25	2	197	10	73	1	109	305	1,975	
Seetabuldee	47				5	9								1			2				5		4		3	10	61	
Rangoon	957				83	7			30	4				5	13	52	64	104	49		118	9	120		76	187	1,039	
Thayetmyo	584				39	15			7	6					15	25	18	36	35		25		43	4	43	190	531	
Tonghoo	466				4	21			11	4					3	8	122	26	76	1	59	4	11	2	19	34	409	
Port Blair	102				5	1			1						1	2		1	10		3	1	5		5	5	40	
European Veterans.																												
Palaveram	120				2	5			1					1	1			1	3			1		3	2	24	47	
Vizagapatam	66				1				5									3			5		5		2	16	39	
Total	11,418	6	311		51	1,083	1,396	83	23	394	123	2	64	5	21	302	502	1,038	855	936	39	1,686	121	964	33	1,074	3,234	14,339

Table showing the Principal Diseases which have contributed to make up the Deaths in Hospital among the European Troops at each Station during 1873.

Stations.	Deaths from																											
	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Malignant Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	Gastroc 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.	Total Deaths.	
Fort Saint George	704									2					1		1										8	
St. Thomas' Mount	352													2													8	
Poonamallee	138									3																	3	
Palaveram	95																										1	
Trichinopoly	291													2													5	
Wellington	454									2																	10	
Bangalore	1,811																										12	
Cannanore	645																										1	
Calicut	82																										16	
Mallapooram	80																										1	
Bellary	941																										1	
Ramandroog	50																										1	
Secunderabad	2,436																										1	
Karnatke	999																										12	
Savabuldee	47																										6	
Rangoon	957																										49	
Thayetmyo	584																										6	
Tonghoo	465																										19	
Port Blair	102																										6	
European Veterans.																											1	
Palaveram	120																										2	
Vizagapatam	66																										2	
Total	11,418	1			10	3		4	12		11			7	21	6	32	2	54			1				4	8	177

[11]

X.

Table showing the Ratio per 1,000 of Strength of the Principal Diseases which have contributed to make up the Admissions into Hospital among the European Troops at each Station during 1873

Stations.	Admissions from																											
	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scoury.	Atrophy and Anæmia.	Dropsies.	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.	Total Admissions.	
Fort Saint George.	...	...	...	...	60-66	18-46	...	...	55-52	29-82	...	32-57	...	1-42	46-87	38-85	39-77	19-88	65-76	7-10	117-89	5-68	143-46	4-26	100-85	296-87	1115-05	
St. Thomas' Mount	42-61	...	...	...	56-82	22-39	14-29	...	11-35	2-84	...	14-49	7-24	8-52	2-84	25-57	99-45	93-75	73-86	7-24	144-49	8-52	147-78	8-52	139-50	278-40	1241-48	
Poonamallee	...	...	...	...	231-88	28-09	...	...	65-22	43-48	...	...	...	...	79-71	72-46	340-57	123-19	579-71	7-24	202-89	...	14-49	7-24	50-72	678-91	2580-72	
Palaveram	...	...	...	...	62-03	21-05	10-52	...	21-05	...	...	...	...	6-87	24-05	34-86	92-78	13-75	75-60	10-52	202-89	...	94-73	...	84-21	116-78	621-05	
Trichinopoly	8-42	278-38	...	...	79-04	75-65	...	...	39-93	...	...	...	...	...	70-48	46-25	48-25	59-47	107-92	11-01	151-98	8-81	65-29	3-43	164-95	326-46	1457-05	
Wellington	...	...	...	...	31-47	17-11	4-40	...	29-47	17-60	2-20	...	...	2-20	22-64	39-75	73-64	48-04	54-11	3-86	163-99	9-94	81-72	8-81	111-54	237-43	1110-43	
Bangalore	...	...	...	...	4-97	127-55	49-14	1-06	24-88	10-88	...	7-78	1-53	0-55	107-30	52-88	265-94	106-40	217-72	...	146-34	24-39	153-97	1-56	66-38	303-26	1743-60	
Cannanore	...	...	...	...	187-51	3-11	...	...	24-88	...	...	...	...	...	219-51	48-78	121-95	170-73	109-75	...	87-5	50	150	...	25-0	255	1425-0	
Calicut	...	...	...	...	135-12	...	...	...	37-50	12-50	1-06	...	...	...	6-37	12-75	17-00	29-75	22-31	...	362-38	4-25	52-07	...	58-44	552-98	991-49	
Mallapooram	...	...	...	...	124-33	24-44	...	...	21-25	2-12	...	...	...	...	...	60	...	60	...	...	80	40	20	...	63	350	980	
Bellary	...	...	...	...	60	260	...	...	44-38	11-49	...	2-46	0-41	1-23	12-31	61-17	113-30	108-37	94-00	2-87	109-60	11-03	68-14	4-10	123-97	824-71	1278-52	
Ramandroog	0-41	0-83	...	...	106-32	52-13	24-21	...	21-02	3-00	...	...	...	2-00	21-02	56-05	31-03	66-06	25-02	2-00	197-19	10-31	73-07	1-00	109-11	305-30	1976-93	
Secunderabad	4-00	57-05	...	...	46-04	933-33	9-00	...	21-02	3-00	...	...	...	21-28	...	56-05	31-03	66-06	25-02	2-00	197-19	10-31	73-07	1-00	109-11	305-30	1976-93	
Kamptee	...	...	...	...	106-38	131-19	...	...	21-02	3-00	...	...	...	21-28	...	56-05	31-03	66-06	25-02	2-00	197-19	10-31	73-07	1-00	109-11	305-30	1976-93	
Seelabuldee	...	...	...	...	106-38	131-19	...	...	21-02	3-00	...	...	...	21-28	...	56-05	31-03	66-06	25-02	2-00	197-19	10-31	73-07	1-00	109-11	305-30	1976-93	
Rangoon	...	...	...	...	96-73	7-31	...	...	61-34	4-18	...	7-31	...	5-23	13-58	64-33	66-87	108-67	51-20	...	123-30	9-40	125-39	...	79-41	166-40	1035-58	
Thayetmyo	...	...	...	...	66-78	25-63	5-13	34-24	14-38	10-27	...	1-71	...	5-23	25-68	42-80	30-32	61-64	59-53	...	42-80	9-40	125-39	...	82-10	325-34	909-24	
Tonghoo	...	...	...	...	6-63	45-08	...	6-43	25-60	8-58	...	...	...	...	6-43	17-16	261-80	55-79	103-09	2-14	126-61	8-58	23-60	4-29	40-77	72-96	877-63	
Fort Blair	...	...	...	...	43-02	9-80	...	...	4-80	...	...	...	...	...	9-80	19-60	...	9-80	98-04	...	29-41	9-80	49-02	...	49-02	49-02	392-15	
European Veterans	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palaveram	...	...	...	...	18-60	41-66	...	...	8-33	...	...	...	...	...	8-33	16-66	...	8-33	25-0	...	...	8-33	25-0	8-33	16-66	200-0	391-66	
Vizagapatam	...	...	...	...	15-15	...	...	...	75-75	...	...	...	...	...	...	30-30	...	45-45	...	...	...	...	75-75	...	30-30	242-42	590-91	
Total	0-52	27-23	...	4-45	94-85	122-20	7-27	2-01	34-50	10-77	0-17	5-60	0-44	1-84	26-45	43-09	90-90	71-88	81-97	2-62	147-82	10-69	84-42	2-89	94-10	265-27	1255-82	

[11]

Table showing the Ratio per 1,000 of Strength of the Principal Diseases which have contributed to make up the Deaths in Hospital among the European Troops at each Station during 1873.

Stations.	Deaths from															
	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsy.	Stroke and Heart-apoplexy.	Heart Diseases.	Respiratory Diseases.
	Deaths from															
	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsy.	Stroke and Heart-apoplexy.	Heart Diseases.	Respiratory Diseases.
Fort Saint George	...	...	...	...	...	...	...	...	...	284	...	...	...	...	142	...
Saint Thomas' Mount	...	...	...	...	...	...	...	...	...	2174	...	...	...	...	...	...
Poonamallee	...	...	...	...	...	...	...	...	...	440	...	...	...	...	...	...
Palaveram	...	...	...	...	...	...	...	...	...	156	...	...	...	...	...	...
Trichinopoly	...	...	...	...	...	...	...	...	...	106	...	...	...	...	...	...
Wellington	...	...	...	...	...	...	...	...	...	440	...	...	...	...	...	...
Bangalore	...	...	...	...	...	...	...	...	...	687	...	...	...	...	...	...
Cannanore	...	...	...	...	...	...	...	...	...	055	...	...	...	...	...	...
Calicut	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mallapooram	...	...	...	...	...	...	...	...	...	106	...	...	...	...	...	...
Bellary	...	...	...	...	...	...	...	...	...	041	...	...	...	...	...	...
Ramandroog	...	...	...	...	...	...	...	...	...	104	...	...	...	...	...	...
Secunderabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kamptee	...	...	...	...	...	...	...	...	...	2054	...	...	...	...	...	...
Seetabuldee	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rangoon	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thayetmyo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tonghoo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Port Blair	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
European Veterans.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palaveram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vizagapatam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	0.03	...	...	0.27	0.26	...	0.35	1.05	...	0.96	...	...	...	0.61	1.84	...
Total	1550	...	...	472	...	...	...	...	...	...	...	...	...	...	...	...
All other Diseases.	0.70	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Violence and Accidents.	0.35	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Delirium Tremens.	0.08	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Skin Diseases.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abcesses.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases.	0.08	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spleen Diseases.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Hepatic Diseases.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery.	2.80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea.	0.17	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total Deaths.	1550	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

XII.

Table showing the Number of Admissions and Deaths under Different Classes of Diseases among the European Troops at each Station during 1873.

Stations.	General Diseases.		Local Diseases.		Condi-tions.		Poisons.		Injuries.		Surgical Operations.		Not yet Diagnosed.		No Appro-riable Disease.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Fort Saint George	214	3	478	5	19	...	3	...	71	...	...	...	...	...	...	...
Saint Thomas' Mount	92	...	284	2	8	...	3	...	49	1	...	...	1	...	...	...
Poonamallee	80	3	236	5	27	...	2	...	7	...	...	...	...	...	...	...
Palaveram	13	...	37	...	1	...	...	...	8	...	...	...	...	...	...	...
Trichinopoly	147	...	219	4	6	...	1	1	43	...	1	...	1	...	1	...
Wellington	198	4	398	6	54	...	...	...	23	...	...	...	...	...	...	...
Bangalore	630	...	1,116	11	54	...	9	...	202	1	...	...	...	...	...	...
Cannanore	209	8	853	8	7	...	1	...	36	...	1	...	13	...	3	...
Calicut	27	...	90	...	3	...	...	...	4	...	...	...	...	...	1	...
Mallapooram	11	...	96	1	3	...	...	...	3	...	...	...	1	...	...	...
Bellary	420	3	454	9	4	...	...	...	55	...	...	...	...	...	...	...
Ramandroog	19	...	25	...	1	...	...	...	3	...	...	...	...	...	...	...
Secunderabad	747	3	1,928	45	121	...	14	1	302	...	1	...	...	...	1	...
Kamptee	1,227	3	606	3	22	...	8	...	109	...	1	...	...	...	2	...
Seetabuldee	38	...	19	...	1	...	...	...	3	...	...	...	...	...	...	...
Rangoon	348	2	598	12	15	...	2	...	76	2	...	...	...	...	...	...
Thayetmyo	120	14	335	6	21	...	4	...	48	...	2	...	1	...	...	...
Tonghoo	87	...	285	6	14	...	2	...	19	...	...	...	1	...	1	...
Port Blair	9	...	26	1	...	...	...	...	5	...	...	...	...	...	...	...
European Veterans.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Palaveram	9	...	25	2	2	...	9	...	2	...	...	...	...	...	...	...
Vizagapatam	18	1	18	1	1	...	5	...	2	...	...	...	...	...	...	...
Total	4,658	44	8,126	127	384	...	63	2	1,075	4	6	...	18	...	9	...

Table showing the Admissions and Deaths under Different Orders of Diseases among the European Troops at each Station during the year 1878.

Stations.	General Diseases.				Local Diseases.												Diseases of the Cutaneous System.														
	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.	Diseases of the Organs of Locomotion.	Diseases of the Cellular Tissue.																
Fort Saint George	58		156	3	12		5		30				33	1	26					27	162	4	40		16				101		
Saint Thomas' Mount	69		23		11		3		4				1	2	12					9	129	3	39		6				52		
Poonamallee	36		44	3	13		2						11	5	5					10	182	8	8		2				2		
Palaveram	8		5		3		4		1				7	10	2					10	16	1	7		8				9		
Trichinopoly	127		20	2	36		12		13				32	2	8					21	183	3	37		16				35		
Wellington	113		55		27		69		18				41	1	37					21	490	7	142		32				148		
Bangalore	353		270	2	12		4		8				69	1	5					34	528	8	52		7				7		
Cannanore	139		50		11								18		1					4	41	2	2		1				1		
Calicut	15		11		11								19							2	73	4	4		8				12		
Mallapooram	4		7		5		44		5				6	2	62					12	181	4	93		3				49		
Bellary	141		276	1	39		3						30	3	3					3	1,187	40	2	143		41				1	
Ramandroog	17		2		45		3		21				30	3	63					149	5	7	2	5		3			166		
Secunderabad	455		292	1	26		81		25				21	2	19					56	257	1	65		10				73		
Kamptee	1,056		171		1		2						13	2	2					52	6	4	4		5				4		
Seetabuldee	35		2		1		9		4				13	2	9					95	317	8	44		1				1		
Rangoon	229		119	1	13		11		1				15	4	3					25	191	1	13		10				120		
Thayetmyo	82		38		8		2						13	4	1					8	239	6	16		1				43		
Tonghoo	29		53				2						3	1						6	13		1						11		
Port Blair	6		3		2		2						1							2			1							5	
European Veterans																															
Palaveram	7		2		4		3		1				1	1						2	9	1	1						3	5	
Vizagapatam	2		11	1	2															2	8	1									
Total	3,013	30	1,645	14	225	8	249		131		6		302	21	275					502	4,301	89	740	3	166					210	961

XIII.—(Continued.)

Table showing the Admissions and Deaths under Different Orders of Diseases among the European Troops at each Station during the year 1878.

Stations.	Conditions.		Poisons.		Injuries.										Surgical Operations.		Not yet Diagnosed.		No Appreciable Disease.	
					Balls.		Accidents.		Homicidal.		Self-inflicted.		Judicial.							
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.		
Fort Saint George ...	19		3				71													
Saint Thomas' Mount..	8		3				49	1								1				
Poonamallee ...	27		2				7													
Palaveram ...	1						8													
Trichinopoly ...	6		1	1			43						1		1		1			
Wellington ...	54						23													
Bangalore ...	54		9				202	1												
Cannanore ...	7		1				36						1		13		3			
Calicut ...	3						4										1			
Mallapooram ...	3			1			2								1					
Bellary ...	4						55													
Ramandroog ...	1						3													
Secunderabad ...	121		14	1			302						1				1			
Kamptee ...	22		8				109						1				2			
Seetabuldee ...	1						2		1											
Rangoon ...	15		2				75	2			1									
Thayetmyo ...	21		4				48						2		1					
Tonghoo ...	14		2				19								1		1			
Port Blair ...							5													
European Veterans.																				
Palaveram ...	2		6				2													
Vizagapatam ...	1		6				2													
Total ...	334		63	2	1		1,072	4	1		1			6		18		9		

NATIVE
ARMY RETURNS.

Table showing the Increase and Decrease among the Native Army serving in the Madras Presidency during the year 1873.

	Sappers and Miners.	Artillery.	Cavalry.	Infantry.	Sappers and Miners.	Artillery.	Cavalry.	Infantry.	Total Madras Army.
Strength on 1st January 1873	...	...	...	...	1,806	424	1,240	23,263	31,233
<i>Increase.</i>									
By recruits	54	1	5	1,276	...	...	...	...	...
By transfers	...	7	...	1	...	...	...	...	...
Joined from desertion	2	...	1	8	...	...	...	...	...
By other causes	...	1	...	9	...	...	...	...	...
Total Increase	...	...	...	...	56	9	6	1,294	1,365
<i>Decrease.</i>									
By invaliding	27	...	59	877	...	...	...	...	...
By reduction of establishment	...	...	...	...	...	...	...	...	...
Discharged { by summary dismissal	6	4	3	160	...	...	...	...	...
{ by Court-Martial	4	...	1	49	...	...	...	...	...
By desertion	5	...	4	58	...	...	...	...	...
By deaths	12	3	12	231	...	...	...	...	...
By other causes	5	7	6	...	...	...	...	...	...
Total Decrease	...	...	...	...	59	14	85	1,425	1,583
Strength on 1st January 1874	...	...	...	...	1,303	419	1,161	23,132	31,015

II.
Table showing the Sickness and Mortality among the whole Native Army Stationed in the Madras Presidency during the year 1873, 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.	Total Deaths out of Hospital.	Average Daily Sick.	Small-pox.	Dengue Fever.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Remittent Fever.	Cholera.	Rheumatism.	Phthisis Pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsies.	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...	25,205	5,308	28	12	805.51	94	1,177	...	1	131	1,191	12	...	320	19	2	9	15	...	17	177	92	105	10	11	98	103	718	2	284	716				
2nd do. ...	25,206	5,808	58	13	771.54	198	1,414	...	...	270	1,172	22	...	293	16	...	23	11	...	...	131	150	187	10	8	105	114	620	...	280	795				
3rd do. ...	26,206	5,735	38	15	791.33	11	724	...	...	181	1,790	8	1	270	17	...	20	12	...	20	157	270	184	9	10	114	121	593	...	284	937				
4th do. ...	26,232	6,024	48	8	878.22	5	1,099	...	2	300	1,994	30	...	347	26	...	28	34	1	27	260	212	196	14	17	93	110	780	1	405	1,033				
For the year..	25,900	22,875	167	48	811.90	308	3,434	...	3	882	6,147	72	1	1,230	78	3	80	62	2	83	725	724	653	43	46	410	451	2,711	3	1,253	3,431				
Ratio per 1,000 of Strength for the year	...	11.89	132.20	...	...	...	...	...	0.11	34.05	237.33	2.77	0.03	47.49	3.01	0.11	3.03	2.39	0.07	3.20	27.99	27.95	25.21	1.66	1.77	15.83	17.41	104.67	0.11	48.37	134.40				
Ratio per 1,000 of Strength.																																			
1st Quarter...	...	210.59	1.11	0.47	31.99	1	1	...	1	...	3	...	...	1	4	...	1	3	...	...	...	1	2	2	1	...	...	...	...	...	1	6			
2nd do. ...	...	223.72	2.04	0.50	29.72	...	1	...	...	...	5	...	...	...	...	...	2	1	...	...	3	9	4	3	3	...	...	...	...	...	1	15			
3rd do. ...	...	218.84	1.45	0.57	30.19	...	...	...	...	...	3	...	...	...	6	...	2	1	...	...	4	2	1	1	2	...	...	...	...	...	1	11			
4th do. ...	...	229.64	1.82	0.50	33.47	...	...	...	...	...	3	...	...	...	6	...	2	3	...	...	2	4	4	5	1	...	...	...	...	...	...	12			
For the year	...	833.20	6.44	1.55	31.34	1	3	...	1	2	14	7	1	2	21	...	6	8	1	9	16	11	11	5	...	...	...	...	...	3	44				
Ratio per 1,000 of Strength for the year	...	...	...	...	...	0.03	0.11	...	0.03	0.07	0.54	0.27	0.03	0.07	0.81	...	0.23	0.30	0.03	0.34	0.61	0.42	0.42	0.22	0.19	...	...	...	...	0.11	1.69				

III.

Table showing Sickness and Mortality among the Native Troops at each Station of the Madras Presidency during the year 1873.

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.
Madras	2,036	1,704	57.51	9	5	836.93	28.24	4.42	2.40
Saint Thomas' Mount	135	33	0.71	2	...	244.44	5.25	14.81	...
Palaveram	429	422	24.96	7	3	983.68	56.78	16.81	6.99
Vellore	646	357	12.31	4	1	552.63	19.05	6.19	1.54
Vizagapatam	622	519	34.25	5	...	834.40	55.06	8.03	...
Vizianagaram	632	1,078	40.94	5	1	1,705.69	64.77	7.91	1.58
Berhampore	366	320	8.50	2	...	874.31	23.22	5.46	...
Cuttack	656	270	18.17	1	2	411.58	27.69	1.52	3.04
Sumbulpore	325	334	11.98	...	...	1,027.69	36.36	...	...
Bangalore	2,080	1,734	55.47	19	5	833.65	26.66	9.13	2.40
French Rocks	579	520	10.34	7	...	898.10	17.35	12.08	...
Mysore	63	79	1.30	...	...	1,253.96	20.63	...	...
Mercara	549	641	20.99	4	2	1,167.57	38.23	7.23	3.64
Bellary	1,548	739	31.27	5	4	477.39	20.20	3.22	2.58
Trichinopoly	1,833	2,052	48.41	7	3	1,089.75	25.70	3.71	1.59
Quilon	606	139	5.69	5	...	229.37	9.38	8.25	...
Trichoor	169	63	2.88	...	...	372.78	17.04	...	...
Trevandrum	85	45	1.19	...	...	529.41	14.0	...	...
Palancottah	563	773	17.58	3	...	1,373.00	31.22	5.32	...
Cananore	1,230	308	11.60	1	4	240.62	9.06	0.78	3.12
Mangalore	649	350	11.48	4	2	539.28	16.14	6.16	3.08
Secunderabad	3,239	3,520	122.02	20	6	1,036.75	37.67	6.17	1.85
Karnpote	1,203	1,394	43.14	13	3	1,158.76	35.86	10.20	2.49
Seetabuldee	426	1,277	56.57	1	2	2,997.65	132.79	2.34	4.60
Hooshungabad	374	301	8.83	3	1	804.81	23.60	8.02	2.67
Raepore	636	395	13.38	3	...	621.06	21.03	4.71	...
Chandah	76	144	3.23	...	...	1,894.73	42.5	...	...
Seroncha	144	230	5.19	2	...	1,597.22	26.04	13.38	...
Rangoon	1,733	656	36.97	18	2	373.53	21.33	10.38	1.15
Thayetmyo	588	277	11.70	7	1	471.08	19.89	11.90	1.69
Tonghoo	510	635	22.54	4	1	1,245.09	44.19	7.84	1.96
Moulmein	521	806	26.12	1	...	1,547.02	50.13	1.91	...
Shoayghen	118	163	4.88	1	...	1,381.35	41.35	8.47	...
Port Blair	267	270	8.09	3	...	1,011.23	30.29	11.23	...
Nicobars	37	268	5.08	...	...	7,243.24	137.29	...	...
Akyab	127	59	17.23	1	...	464.56	135.66	7.87	...
Total	25,900	22,875	811.90	167	48	883.20	31.34	6.44	1.85

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.
Madras	2,036	1,704	57.51	9	5	836.93	28.24	4.42	2.40
Saint Thomas' Mount	135	33	0.71	2	...	244.44	5.25	14.81	...
Palaveram	429	422	24.96	7	3	983.68	56.78	16.81	6.99
Vellore	646	357	12.31	4	1	552.63	19.05	6.19	1.54
Vizagapatam	622	519	34.25	5	...	834.40	55.06	8.03	...
Vizianagaram	632	1,078	40.94	5	1	1,705.69	64.77	7.91	1.58
Berhampore	366	320	8.50	2	...	874.31	23.22	5.46	...
Cuttack	656	270	18.17	1	2	411.58	27.69	1.52	3.04
Sumbulpore	325	334	11.98	...	...	1,027.69	36.36	...	...
Bangalore	2,080	1,734	55.47	19	5	833.65	26.66	9.13	2.40
French Rocks	579	520	10.34	7	...	898.10	17.35	12.08	...
Mysore	63	79	1.30	...	...	1,253.96	20.63	...	...
Mercara	549	641	20.99	4	2	1,167.57	38.23	7.23	3.64
Bellary	1,548	739	31.27	5	4	477.39	20.20	3.22	2.58
Trichinopoly	1,833	2,052	48.41	7	3	1,089.75	25.70	3.71	1.59
Quilon	606	139	5.69	5	...	229.37	9.38	8.25	...
Trichoor	169	63	2.88	...	...	372.78	17.04	...	...
Trevandrum	85	45	1.19	...	...	529.41	14.0	...	...
Palancottah	563	773	17.58	3	...	1,373.00	31.22	5.32	...
Cananore	1,230	308	11.60	1	4	240.62	9.06	0.78	3.12
Mangalore	649	350	11.48	4	2	539.28	16.14	6.16	3.08
Secunderabad	3,239	3,520	122.02	20	6	1,036.75	37.67	6.17	1.85
Karnpote	1,203	1,394	43.14	13	3	1,158.76	35.86	10.20	2.49
Seetabuldee	426	1,277	56.57	1	2	2,997.65	132.79	2.34	4.60
Hooshungabad	374	301	8.83	3	1	804.81	23.60	8.02	2.67
Raepore	636	395	13.38	3	...	621.06	21.03	4.71	...
Chandah	76	144	3.23	...	...	1,894.73	42.5	...	...
Seroncha	144	230	5.19	2	...	1,597.22	26.04	13.38	...
Rangoon	1,733	656	36.97	18	2	373.53	21.33	10.38	1.15
Thayetmyo	588	277	11.70	7	1	471.08	19.89	11.90	1.69
Tonghoo	510	635	22.54	4	1	1,245.09	44.19	7.84	1.96
Moulmein	521	806	26.12	1	...	1,547.02	50.13	1.91	...
Shoayghen	118	163	4.88	1	...	1,381.35	41.35	8.47	...
Port Blair	267	270	8.09	3	...	1,011.23	30.29	11.23	...
Nicobars	37	268	5.08	...	...	7,243.24	137.29	...	...
Akyab	127	59	17.23	1	...	464.56	135.66	7.87	...
Total	25,900	22,875	811.90	167	48	883.20	31.34	6.44	1.85

Table showing the Principal Diseases which have contributed to make up the Deaths in Hospital among the Native Troops at each Station during 1873.

Stations.	Small-pox.	Dengue.	Typhus Fever.	Typhoid Fever.	Continued Fe- ver.	Intermittent Fever.	Remittent Fe- ver.	Cholera.	Rheumatism.	Pneumonia.	Scurvy.	Atrophy and Anemia.	Dropsies.	Stroke and Apoplexies.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Dis- eases.	Spleen Dis- eases.	Veneral Dis- eases.	Abcesses.	Skin Diseases.	Delirium Tre- mens.	Violence and Accidents.	All other Dis- eases.	Total.
Madras ...	1	3	..	1	2	14	7	1	2	21	..	6	8	1	9	16	11	11	..	5	..	1	..	..	..	..	167
Saint Thomas' Mount	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palavaram	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vellore ...	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vizagapatam	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Vizianagrum	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Berampore	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cuttack	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sumbulpore	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bangalore	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
French Rocks	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mysore ...	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mercara	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bellary ...	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichinopoly	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Quilon ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trichoor	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Trevandrum	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Palamcottah	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cananore	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Mangalore	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Secunderabad	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Kanjicoe	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Secunderabad	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Hooshungabad	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Raepore	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chandan	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Serancia	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rangoon	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Thayetmyo	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tonghoo	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Moulmein	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shoaighcen	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Port Blair	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nicobars	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Akyab ...	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total ...	1	3	..	1	2	14	7	1	2	21	..	6	8	1	9	16	11	11	5	..	..	1	..	..	3	44	167

Table showing the Ratio per 1,000 of Strength of the Principal Diseases which have contributed to make up the Admissions into Hospital among the Native Troops at each Station during 1873.

Stations.	Small-pox.	Dengue.	Typhus Fever.	Typhoid Fever.	Continued Fe- ver.	Intermittent Fever.	Remittent Fe- ver.	Cholera.	Rheumatism.	Phthisis monalis.	Scurvy.	Atrophy and Anemia.	Dropsies.	Stroke and Apoplexies.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Dis- eases.	Spleen Dis- eases.	Veneral Dis- eases.	Abcesses.	Skin Diseases.	Delirium Tre- mens.	Violence and Accidents.	All other Dis- eases.	Total.	
Madras ...	1.47	93.32	...	0.49	43.22	138.99	...	...	63.31	0.98	...	5.69	0.98	0.49	2.94	29.45	28.48	39.78	1.47	1.47	26.52	23.57	187.13	...	32.41	114.44	836.93	
St. Thomas' Mount ...	...	...	...	...	...	66.66	...	...	23.22	1.81	...	11.65	...	...	4.06	14.81	7.40	7.40	7.40	...	22.22	22.22	87.08	...	29.62	29.62	244.44	
Palavaram ...	9.32	50.30	...	...	18.64	144.52	2.35	...	60.60	2.33	...	11.65	16.91	...	4.06	34.96	32.63	53.61	2.32	...	48.95	20.37	168.81	...	37.29	563.40	953.63	
Vellore ...	8.09	...	...	...	...	185.72	...	...	26.31	4.64	...	1.54	...	...	...	10.83	13.93	53.61	2.32	...	17.03	16.48	140.86	...	62.63	58.82	532.63	
Vizagapatam ...	...	12.86	...	...	...	138.65	...	...	65.91	6.43	...	10.29	...	...	...	33.76	32.15	8.03	...	1.60	14.47	54.66	234.72	...	28.94	184.98	834.40	
Vizianagrum ...	3.16	53.86	...	...	...	403.45	...	...	63.20	...	...	...	4.74	...	3.16	39.58	25.31	33.23	1.68	...	3.16	15.82	262.65	...	33.93	229.43	1705.69	
Berampore ...	...	60.10	...	...	...	275.95	2.73	...	73.77	...	...	...	...	...	...	39.76	8.19	8.19	...	...	19.12	32.78	109.29	...	57.87	150.27	1874.31	
Cuttack ...	...	...	...	...	16.77	51.83	1.62	...	89.63	7.62	...	...	...	...	3.05	60.97	19.91	33.25	2.73	...	20.91	24.61	48.78	1.52	...	64.61	96.08	411.38
Sumbulpore ...	...	...	...	...	...	449.23	3.84	...	61.63	3.07	0.48	2.40	1.44	...	2.88	29.56	15.38	12.98	2.88	0.48	17.30	24.04	108.17	...	49.53	147.49	533.65	
Bangalore ...	51.44	112.02	...	...	53.31	104.87	...	...	43.30	3.34	...	...	...	...	6.90	15.54	3.45	2.18	...	1.72	3.45	13.81	81.17	...	39.72	117.44	898.10	
French Rocks ...	12.69	153.71	...	1.72	134.71	253.88	...	...	31.09	1.72	...	...	15.87	...	...	15.54	3.45	2.18	...	1.72	3.45	13.81	81.17	...	39.72	117.44	898.10	
Mysore ...	...	63.42	...	...	31.71	396.82	...	...	...	...	...	...	...	...	1.65	29.58	11.80	5.91	...	...	23.07	47.34	29.59	...	16.87	63.40	1253.96	
Mercara ...	3.64	...	...	0.64	62.01	52.97	1.29	...	60.10	...	...	...	14.57	...	1.83	63.76	63.17	125.68	3.64	...	12.76	32.78	169.39	...	127.08	143.89	1167.57	
Bellary ...	5.16	13.55	...	...	...	...	...	...	39.40	3.26	...	3.13	1.59	...	2.88	14.85	14.85	14.21	1.29	...	10.98	14.85	97.71	0.53	43.28	117.57	477.37	
Trichinopoly ...	67.97	337.22	...	...	0.55	238.41	...	...	35.11	1.06	...	...	...	...	2.12	22.83	31.33	27.61	1.06	1.06	16.91	13.80	97.71	...	44.02	142.85	1089.75	
Quilon ...	...	...	...	...	31.31	...	...	...	13.20	4.95	...	...	...	...	1.65	16.50	3.30	4.95	1.65	...	23.07	47.34	29.59	...	8.25	61.05	229.37	
Trichoor ...	...	...	...	...	...	71.006	...	...	29.58	...	...	...	...	...	...	29.58	11.80	5.91	...	...	...	23.07	47.34	29.59	...	47.34	76.92	372.78
Trevandrum ...	...	...	...	...	...	129.80	...	...	35.29	...	...	...	...	...	...	11.80	25.53	...	...	...	...	35.29	86.23	...	86.23	118.0	529.41	
Palamcottah ...	...	36.01	...	...	17.76	55.65	3.55	...	25.88	5.22	...	3.55	...	...	1.77	44.40	28.41	28.41	3.55	...	12.43	14.20	56.83	...	37.30	71.04	1373.00	
Cananore ...	1.56	...	...	...	15.62	14.03	0.78	...	8.59	9.12	...	1.56	...	...	2.34	11.70	10.98	...	...	...	7.81	14.84	59.37	...	19.53	68.75	210.62	
Mangalore ...	8.08	...	...	...	...	126.34	7.70	...	23.11	3.08	...	...	...	...	1.54	26.19	35.44	26.19	3.08	...	7.70	20.63	115.56	...	18.46	118.64	559.28	
Secunderabad ...	3.03	...	...	...	77.16	497.37	3.70	...	60.82	6.17	...	0.92	0.61	...	2.16	43.53	15.74	19.13	2.16	6.86	13.27	26.93	93.54	0.30	87.06	128.12	1086.75	
Kanplsee ...	7.48	45.85	...	...	53.95	211.57	...	...	24.08	2.49	1.66	2.49	...	...	4.15	18.28	12.45	12.45	2.49	...	9.96	14.94	71.48	...	85.74	172.90	1158.76	
Secunderabad ...	23.80	1384.25	...	...	...	720.65	...	...	133.80	2.84	...	...	...	...	49.29	40.23	32.86	7.02	4.08	...	30.51	14.98	153.62	...	58.68	314.58	2357.65	
Uchungabad ...	8.02	...	...	...	203.20	270.40	50.80	...	34.75	...	...	...	...	...	2.67	20.75	6.34	...	...	...	2.67	5.94	58.82	...	40.10	90.90	804.81	
Raepore ...	2.14	...	...	...	...	281.44	7.86	...	29.30	...	...	6.28	...	...	...	3.14	33.01	9.42	...	...	11.00	9.42	87.61	...	25.15	135.22	621.06	
Chandah ...	...	...	...	...	...	1000.0	...	...	131.57	...	...	13.15	...	...	...	...	13.15	79.04	...	...	39.47	78.94	187.89	...	131.57	250.0	1894.73	
Seronchia ...	...	...	...	...	6.94	505.94	...	...	111.11	...	...	34.72	...	...	...	13.88	55.55	55.55	...	...	...	187.89	...	76.38	534.72	1697.22	...	
Rangoon ...	...	...	...	...	1.15	58.28	...	...	21.92	1.73	...	2.40	12.11	0.57	4.60	23.06	23.98	31.15	...	1.15	16.15	0.57	60.76	...	34.04	90.52	378.53	
Thayetmyo ...	...	...	...	...	...	124.15	...	...	45.91	...	...	...	...	...	3.40	23.80	37.41	17.00	3.40	...	3.18	13.60	1.70	160.34	...	34.01	59.52	471.08
Tonghoo ...	...	...	...	...	...	447.05	...	...	75.47	5.88	...	3.92	...	...	...	7.84	170.68	129.41	...	...	3.92	23.82	1.96	58.82	...	133.88	178.43	1245.69
Monlain ...	...	...	...	...	...	495.20	...	...	167.38	3.83	...	21.11	11.51	...	3.92	7.84	170.68	129.41	...	...	3.92	23.82	1.96	58.82	...	78.69	309.02	1547.02
Shonygheen ...	...	...	...	...	...	634.91	8.47	...	101.69	...	...	...	...	...	...	30.71	172.74	69.66	...	5.75	34.53	13.43	18.43	...	144.06	230.23	1351.35	
Port Blair ...	...	...	...	...	...	635.95	...	...	...	...	...	3.74	...	...	...	56.17	50.44	25.42	...	...	25.42	3.74	101.12	...	26.21	63.67	1011.23	
Nicobars ...	...	...	...	...	...	635.95	351.15	...	27.02	...	...	27.02	23.63	...	...	27.02	27.02	27.02	...	...	...	...	101.12	...	27.02	108.10	7243.24	
Akyab ...	...	...	...	...	...	273.54	...	...	70.86	...	...	...	...	...	...	...	7.87	7.87	...	...	...	...	15.74	...	...	62.96	464.56	
Total ...	1189	13220	...	0.11	3405	23733	27700	4749	301	0.11	3.98	239	0.09	3.20	2799	2795	2526	1.66	1.77	15.93	17.41	10167	0.11	4837	13440	58320		

Table showing the Ratio per 1,000 of Strength of the Principal Diseases which have contributed to make up the Deaths in Hospital among the Native Troops at each Station during 1873.

Stations.	Small-pox.	Dengue.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Malignant Fever.	Cholera.	Rheumatism.	Pleurisy-Pneumonia.	Scurvy.	Anthrax and Abscess.	Dropsies.	Stroke and Apoplexy.	Heart Diseases.	Respiratory Diseases.	Dysentery.	Diarrhoea.	Hepatic Diseases.	Spleen Diseases.	Veneral Diseases.	Abscesses.	Skin Diseases.	Delirium Tremens.	Violence and Acci- dents.	All other Diseases.	Total.
Madras ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.42
St. Thomas' Mount	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14.61
Palaveram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.96
Vellore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16.31
Vizianagram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	15.41
Berhampore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4.82
Cuttack ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7.91
Sumbulpore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	6.46
Bangalore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1.52
French Rocks	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9.13
Mysore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	12.08
Mercara ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7.35
Bellary ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3.64
Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Quilon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Trichoor ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Trevandrum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Palamcottah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Cannanore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Mangalore...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Secunderabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Kamptee...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Seetabaldee	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Hoosungabad	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Raepore ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Chandah ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Seroncha ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Rangoon ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Thayetmyo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Tonghoo ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Moulmein ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Shoayghcen	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Port Blair...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Nicobars ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Akyab ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0.64
Total ...	0.03	0.11	0.03	0.03	0.07	0.54	0.27	1.03	0.07	0.81	...	0.23	0.30	0.03	0.34	0.61	0.42	0.42	0.19	...	...	0.03	...	...	0.11	1.09	6.44

VIII.

Table showing the Number of Admissions and Deaths under Different Classes of Diseases among the Native Troops at each Station during the year 1873.

Stations.	General Diseases.		Local Diseases.		Condi- tions.		Poisons.		Injuries.		Surgical Opera- tions.		Not yet diagnosed.		No Ap- preciable Disease.	
	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
Madras ...	751	4	853	5	29	...	3	...	66	...	...	...	2	...	...	...
St. Thomas' Mount	15	1	14	...	4	...	...	...	...	...	...	...	...	...	...	...
Palaveram ...	147	2	196	3	59	2	...	...	16	...	...	...	4	...	...	...
Vellore ...	151	3	162	1	9	...	1	...	34	...	...	...	...	...	...	...
Vizagapatam	204	4	276	1	21	...	...	...	18	...	...	...	...	...	...	...
Vizianagram	681	3	343	1	32	1	1	...	21	...	...	...	...	...	...	...
Berhampore	156	1	123	1	20	...	...	...	21	...	...	...	...	...	...	...
Cuttack ...	91	...	152	1	10	...	1	...	16	...	...	...	...	...	...	...
Sumbulpore	173	...	157	...	2	...	1	...	21	...	...	...	...	...	...	...
Bangalore...	927	9	603	9	83	...	4	...	103	1	...	...	10	...	4	...
French Rocks	350	4	128	3	19	...	...	...	23	...	...	...	...	...	...	...
Mysore ...	68	...	10	...	...	...	...	...	1	...	...	...	...	...	...	...
Mercara ...	250	...	313	4	7	...	1	...	70	...	...	...	...	...	...	...
Bellary ...	302	3	316	2	52	...	...	...	67	...	...	...	2	...	...	...
Trichinopoly	1,332	2	523	3	97	2	2	...	83	...	...	...	9	...	1	...
Quilon ...	39	1	87	4	7	...	1	...	5	...	...	...	...	...	...	...
Trichoor ...	17	...	37	...	1	...	...	...	8	...	...	...	...	...	...	...
Trevandrum	14	...	23	...	1	...	...	...	7	...	...	...	...	...	...	...
Palamcottah	622	1	120	1	8	1	...	...	21	...	...	...	1	...	1	...
Cannanore	85	1	167	...	29	...	...	...	25	...	...	...	2	...	...	...
Mangalore...	118	1	205	3	12	...	3	...	12	...	...	...	...	...	...	...
Secunderabad	2,169	12	987	7	68	1	3	...	282	...	...	...	10	...	1	...
Kamptee...	967	6	342	6	31	1	1	...	43	...	...	...	10	...	...	...
Seetabaldee	989	1	244	...	4	...	3	...	25	...	...	...	12	...	...	...
Hoosungabad	215	1	63	1	6	...	...	...	15	1	...	...	2	...	...	...
Raepore ...	211	...	148	1	20	1	...	...	16	1	...	...	...	...	...	...
Chandah ...	91	...	42	...	1	...	...	...	10	...	...	...	...	...	...	...
Seroncha ...	110	1	100	1	4	...	5	...	11	...	...	...	...	...	...	...
Rangoon ...	191	8	362	6	34	4	1	...	59	...	1	...	6	...	2	...
Thayetmyo	105	1	136	4	11	2	...	...	20	...	...	...	4	...	1	...
Tonghoo ...	282	1	264	3	16	...	3	...	68	...	...	...	1	...	1	...
Moulmein ...	380	...	260	1	21	...	...	...	41	...	...	...	4	...	...	...
Shoayghcen	95	...	49	1	2	...	...	...	17	...	...	...	...	...	...	...
Port Blair...	187	1	74	2	1	...	...	...	7	...	...	...	1	...	...	...
Nicobars ...	259	...	7	...	1	...	...	...	1	...	...	...	...	...	...	...
Akyab ...	47	1	4	...	8	...	...	...	...	...	...	...	...	...	...	...
Total ...	12,791	73	7,975	75	730	16	34	...	1,253	3	1	...	80	...	11	...

Tables showing the Admissions and Deaths under Different Order of Diseases among the Native Troops at each Station during the year 1874.

Stations.	Injuries.																		Surgical Operations.	Not yet Diagnosed.	No Appreciable Disease.
	Conditions.		Poisons.		Battle.		Accidental.		Homicidal.		Self-inflicted.		Judicial.								
	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.							
Madras	29		3				66										2				
Saint Thomas' Mount	4	1																			
Palaveram	59	2					16										4				
Vellore	9		1				34														
Vizagapatam	21						18														
Vizianagaram	32	1	1				20					1									
Berhampore	20						21														
Cuttack	10		1				15					1									
Sumbulpore	2		1				21														
Bangalore	83		4				101	1				2				10	4				
French Rocks	19						23														
Mysore... ..							1														
Mercara... ..	7		1				70														
Bellary	52						67									2					
Trichinopoly	97	2	2				80					3				9	1				
Quilon	7		1				5														
Trichoor	1						8														
Trevandrum	1						7														
Palamcottah	8	1					21									1	1				
Cannanore	29						25									2					
Mangalore	12		3				12														
Secunderabad	68	1	3				282									10	1				
Kamptee... ..	31	1	1				43									10					
Seetabuldee... ..	4		3				25									12					
Hocrungabad	6						15	1								2					
Raeppore... ..	20	1					16	1													
Chanda	1						10														
Seroncha... ..	4		5				11														
Rangoon	34	4	1				59							1		6	2				
Thayetymo	11	2					20									4	1				
Tonghoo	16		3				66					2				1	1				
Moulmein	21						41									4					
Shoaygheen	2						17														
Port Blair	1						7									1					
Nicobars	1						1														
Akyab	8																				
Total ...	780	16	34				1,244	3				9	1			80	11				

JAIL RETURNS.

Table showing the Increase and Decrease among the Jail Population in the Presidency of Madras during the year 1873.

Jails.	Atained 31st December 1872.	Increase.		Decrease.							Remaining 31st December 1873.
		Incarcerated during 1873, and transferred from other Jails.	Other Causes of Increase.	Total Increase.	Liberated during 1873.	Transferred to other Jails.	Transferred beyond Sea.	Escaped.	Deaths.	Total Decrease.	
									In Hospital.	Out of Hospital.	
									Executed.		
PROVINCIAL PRISONS.											
Ootacamund ...	25	16	...	16	19	2	...	...	...	...	20
CENTRAL JAILS.											
Cannanore ...	568	215	...	215	146	1	...	...	11	...	623
Coinabatore ...	925	461	...	461	233	31	...	...	44	...	1227
Rajahmundry ...	839	321	...	321	301	16	...	...	16	...	927
Salem ...	526	906	...	906	705	120	...	...	15	...	966
Trichinopoly ...	940	445	...	445	329	30	...	...	56	...	973
Vellore ...	979	274	...	274	242	31	...	...	10	...	970
DISTRICT JAILS.											
Bellary ...	210	1,091	...	1,091	835	204	...	...	3	...	1,058
Berhampore ...	212	306	...	306	431	31	...	...	10	...	424
Calicut ...	109	651	...	651	462	130	...	...	2	...	608
Chingleput ...	126	490	...	490	331	129	...	...	1	...	461
Chittoor ...	216	838	...	838	725	117	...	...	1	...	849
Coinabatore ...	123	581	...	581	424	68	...	...	20	...	513
Cuddalore ...	321	898	...	898	742	148	...	...	5	...	895
Cuddapah ...	194	1,146	...	1,146	779	269	...	...	6	...	1,058
Guindy ...	65	46	...	46	...	...	...	...	...	...	47
Guuntoor ...	87	518	...	518	356	124	...	...	1	...	484
Kurnool ...	103	330	...	330	303	40	...	...	3	...	352
Madara ...	270	1,092	...	1,092	945	142	...	...	5	...	1,093
Mangalore ...	109	552	...	552	417	119	...	...	2	...	538
Masulipatam ...	30	129	...	129	132	...	...	...	...	...	138
Nellore ...	179	654	...	654	496	90	...	...	2	...	590
Native Jail, Ootacamund ...	114	247	...	247	188	55	...	1	1	...	195
Paunibet ...	89	13	...	13	24	78	...	...	...	...	102
Rajahmundry ...	94	660	...	660	541	117	...	...	1	...	663
Russellcondah ...	82	217	...	217	197	5	...	...	...	...	202
Tanjore ...	149	454	...	454	397	89	...	...	8	...	496
Tellicherry ...	55	392	...	392	335	68	...	...	1	...	405
Tinnevely or Palamcottah ...	278	855	...	855	676	223	...	...	6	...	915
Tranquebar ...	111	620	...	620	419	148	...	...	8	...	575
Trichinopoly ...	98	355	...	355	330	29	...	...	3	...	368
Vizagapatam ...	276	1,136	...	1,136	959	126	...	2	16	...	1,108
Penitentiary, Madras ...	575	2,587	...	2,587	2,373	154	10	...	3	1	2,547
Cochin ...	...	9	...	9	...	...	...	...	...	...	9
Total ...	9,281	19,589	...	19,589	15,859	2,954	10	3	263	174	19,164
											9,706

* Abolished 19th May 1873.

Table showing the Sickness and Mortality among the Jail Population of the Madras Presidency during the year 1873, and the Prevalence of the Principal Diseases in each month of the year.

Months.	Admissions into Hospital.										Deaths in Hospital.																									
	Average Strength.	Total Admissions.	Total Deaths.	Average Daily Sick.	Small-pox.	Chicken-pox.	Typhus Fever.	Typhoid Fever.	Continued Fever.	Intermittent Fever.	Hemorrhagic Fe-ver.	Cholera.	Rheumatism.	Phthisis Pul-monica.	Scurvy.	Atrophy and Anemia.	Dropsies.	Apoplexy.	Heart Diseases.	Respiratory Diseases.	Dyspepsia.	Diarrhoea.	Spleen Diseases.	General Dis-eases.	Drunculus.	Abcesses.	Skin Diseases.	Wounds and Accidents.	All other Causes.							
January	9,079	449	29	233.43	3	6	...	...	42	75	...	1	15	1	...	7	7	2	1	1	28	21	40	...	19	8	23	55	25	74						
February	9,114	430	20	233.89	3	13	...	...	44	55	...	...	8	1	...	...	...	...	...	22	24	39	...	13	14	21	56	25	87							
March	9,016	482	17	231.69	1	10	...	...	51	60	...	...	23	1	...	...	...	...	...	13	33	28	...	18	22	21	66	25	77							
April	9,005	480	17	232.58	2	5	...	...	40	41	...	...	19	1	...	...	...	...	...	15	31	26	...	14	27	20	79	24	73							
May	9,073	463	20	238.25	1	...	...	...	46	44	...	...	15	2	...	...	...	...	...	16	31	26	...	14	27	20	79	24	73							
June	9,243	412	19	235.55	...	...	...	...	40	44	...	...	15	1	...	...	...	...	...	16	31	26	...	14	27	20	79	24	73							
July	9,263	478	22	237.83	1	...	...	...	40	44	...	...	10	2	...	...	...	...	...	11	51	36	...	21	17	22	79	21	70							
August	9,271	519	27	258.28	1	3	...	...	40	56	...	...	14	...	...	...	...	...	...	15	48	65	...	18	12	20	84	27	96							
September	9,271	467	25	252.77	1	...	...	...	40	66	...	...	18	...	...	...	...	...	...	16	50	48	...	...	8	18	81	20	84							
October	9,337	421	25	242.75	...	...	...	...	21	64	...	...	14	...	...	...	...	...	...	13	45	30	...	...	8	14	70	20	88							
November	9,550	475	19	260.52	...	...	...	...	32	77	...	...	14	...	...	...	...	...	...	19	48	44	...	...	3	17	69	23	80							
December	9,552	503	28	268.66	2	...	...	...	34	74	...	...	14	3	...	...	...	...	...	22	41	32	...	...	7	22	110	31	63							
For the year.	9,250	5,549	262	241.80	16	43	...	...	470	700	...	...	176	14	6	79	74	7	20	214	463	447	...	...	241	182	252	901	301	917						
Ratio per 1,000 of strength for the year	...	...	...	1.62	...	4.64	...	...	50.81	75.67	1.49	0.43	19.02	1.51	0.64	8.54	8.40	0.75	2.16	23.13	50.05	48.32	1.18	26.05	19.67	27.24	97.40	32.54	99.14							
Deaths in Hospital.																																				
January	49.45	2,588	219	25.71	...	...	...	...	...	...	...	...	...	1	...	...	...	2	...	...	4	2	2	...	...	...	...	...	...	...						
February	47.15	2,119	219	25.66	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
March	53.45	1,888	213	21.32	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
April	51.03	2,200	220	25.15	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
May	41.57	2,040	204	25.40	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
June	51.05	2,340	234	27.85	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
July	55.98	2,991	299	27.85	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
August	50.37	2,680	268	27.26	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
September	41.80	2,655	265	25.53	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
October	50.00	1,499	149	27.36	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
November	51.33	2,900	290	27.82	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...						
For the year	50.81	2,588	258	25.08	1	...	...	...	...	...	...	...	...	11	...	...	4	24	7	5	18	55	56	...	...	...	...	7	1	63						
Ratio per 1,000 of strength for the year	...	...	...	1.62	...	4.64	...	...	50.81	75.67	1.49	0.43	19.02	1.51	0.64	8.54	8.40	0.75	2.16	23.13	50.05	48.32	1.18	26.05	19.67	27.24	97.40	32.54	99.14							

III.

Statement showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1873.

Diseases.	Central Jails.									
	European Prison, Coimbatore.		Vellore.		Trichinopoly.		Rajahmundry.		Cannanore.	
	Average Strength, 21	Average Strength, 21	Average Strength, 951	Average Strength, 951	Average Strength, 923	Average Strength, 923	Average Strength, 881	Average Strength, 881	Average Strength, 852	Average Strength, 852
Died.	Died per 1,000 of Strength.		Died per 1,000 of Strength.		Died per 1,000 of Strength.		Died per 1,000 of Strength.		Died per 1,000 of Strength.	
	Admitted.	Admitted per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.
Small Pox ...	...	...	...	...	...	...	...	...	...	...
Chicken Pox ...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever ...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	...	...	...	...	...	...	...	...	...	...
Intermittent Fever ...	...	...	...	...	...	...	...	...	...	...
Remittent Fever ...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Rheumatism ...	...	...	...	...	...	...	...	...	...	...
Phthisis Pulmonalis ...	...	...	...	...	...	...	...	...	...	...
Scurvy ...	...	...	...	...	...	...	...	...	...	...
Atrophy and Anemia ...	...	...	...	...	...	...	...	...	...	...
Dropsy ...	...	...	...	...	...	...	...	...	...	...
Apoplexy ...	...	...	...	...	...	...	...	...	...	...
Heart Diseases ...	...	...	...	...	...	...	...	...	...	...
Respiratory Diseases ...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	...	...	...	...	...	...	...	...	...	...
Spleen Diseases ...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases ...	...	...	...	...	...	...	...	...	...	...
Dracunculæ ...	...	...	...	...	...	...	...	...	...	...
Abscesses ...	...	...	...	...	...	...	...	...	...	...
Skin Diseases ...	...	...	...	...	...	...	...	...	...	...
Wounds and Accidents ...	...	...	...	...	...	...	...	...	...	...
All other Causes ...	...	...	...	...	...	...	...	...	...	...
Total ...	1	47.61	283	42.5877	42.86	655	9.6898	9.46	316	56.3836

III.—(Continued.)

Statement showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1873.

Diseases.	District Jails.									
	Madras Penitentiary.		Bellary.		Cuddalore.		Vizagapatam.		Cuddapah.	
	Average Strength, 537.	Average Strength, 537.	Average Strength, 363.	Average Strength, 363.	Average Strength, 310.	Average Strength, 310.	Average Strength, 207.	Average Strength, 207.	Average Strength, 260.	Average Strength, 260.
Died.	Died per 1,000 of Strength.		Died per 1,000 of Strength.		Died per 1,000 of Strength.		Died per 1,000 of Strength.		Died per 1,000 of Strength.	
	Admitted.	Admitted per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.	Admitted.	Admitted per 1,000 of Strength.
Small-pox ...	...	...	...	...	...	...	...	...	...	...
Chicken-pox ...	...	...	...	...	...	...	...	...	...	...
Typhus Fever ...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever ...	...	...	...	...	...	...	...	...	...	...
Continued Fever ...	...	...	...	...	...	...	...	...	...	...
Intermittent Fever ...	...	...	...	...	...	...	...	...	...	...
Remittent Fever ...	...	...	...	...	...	...	...	...	...	...
Cholera ...	...	...	...	...	...	...	...	...	...	...
Rheumatism ...	...	...	...	...	...	...	...	...	...	...
Phthisis Pulmonalis ...	...	...	...	...	...	...	...	...	...	...
Scurvy ...	...	...	...	...	...	...	...	...	...	...
Atrophy and Anæmia ...	...	...	...	...	...	...	...	...	...	...
Dropsies ...	...	...	...	...	...	...	...	...	...	...
Apoplexy ...	...	...	...	...	...	...	...	...	...	...
Heart Diseases ...	...	...	...	...	...	...	...	...	...	...
Respiratory Diseases ...	...	...	...	...	...	...	...	...	...	...
Dysentery ...	...	...	...	...	...	...	...	...	...	...
Diarrhoea ...	...	...	...	...	...	...	...	...	...	...
Spleen Diseases ...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases ...	...	...	...	...	...	...	...	...	...	...
Dracunculæ ...	...	...	...	...	...	...	...	...	...	...
Abscesses ...	...	...	...	...	...	...	...	...	...	...
Skin Diseases ...	...	...	...	...	...	...	...	...	...	...
Wounds and Accidents ...	...	...	...	...	...	...	...	...	...	...
All other Causes ...	...	...	...	...	...	...	...	...	...	...
Total ...	414	743.25	533	136	5	374.55	18.77	231	5	754.93

III.—(Continued.)

Statement showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1878.

District Jails.

Diseases.

	Chittoor.				Nellore.				Coimbatore.				Cotacamund (Nilgiris).				Tanjore.				Berhampore.			
	Admitted.	Died.	of Strength.	Average Strength ... Daily Sick per 1,000 Strength	Admitted.	Died.	of Strength.	Average Strength ... Daily Sick per 1,000 Strength	Admitted.	Died.	of Strength.	Average Strength ... Daily Sick per 1,000 Strength	Admitted.	Died.	of Strength.	Average Strength ... Daily Sick per 1,000 Strength	Admitted.	Died.	of Strength.	Average Strength ... Daily Sick per 1,000 Strength	Admitted.	Died.	of Strength.	Average Strength ... Daily Sick per 1,000 Strength
Small-pox	3	150	...	200	1	602	...	106	...	...	...	152	...	...	...	144	...	...	...	183	...	...	...	25-90
Chicken-pox	...	...	...	...	1	602	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	1	602	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	10	500	...	...	23	788-55	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	25	1200	...	...	3	18-07	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Intermittent Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Remittent Fever	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	3	150	...	...	5	30-12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas Pulmonalis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scurvy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy and Anæmia	...	...	...	...	4	24-09	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dropsy	...	...	...	...	2	12-04	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Heart Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Respiratory Diseases	11	550	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	18	900	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Beriberi	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Spleen Diseases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Venerereal Diseases	22	1100	...	...	17	102-40	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Zyrticulus	1	50	...	...	6	20-12	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Abcesses	16	800	...	...	4	21-09	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Skin Diseases	57	4300	...	...	10	11-45	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Wounds and Accidents	17	850	...	...	7	42-16	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes	53	1050	...	...	16	36-38	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	267	13350	50	...	108	6500	1204	151	20	93542	18167	52	1	20171	684	31	9	45964	5015	109	82575	7575	...	...

III.—(Continued.)

Statements showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1873.

[illegible]

III.—(Continued.)

Statement showing the Sickness and Mortality among the Jail Population of the Madras Presidency for the year 1873.

Diseases.	District Jails.											
	Rusulcondah.			Trichinopoly.			Guindy.			Tellicherry.		
	Average Strength. 91			Average Strength. 80			Average Strength. 62			Average Strength. 65		
	Daily Sick per 1,000 of Strength ... 22-30			Daily Sick per 1,000 of Strength ... 40-37			Daily Sick per 1,000 of Strength. 27-43			Daily Sick per 1,000 of Strength ... 22-18		
	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.
	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...
	...	...	...	...	...	...	...	...	...	...	...	...
Small-pox	...	...	...	...	...	...	...	...	...	...	...	...
Chicken-pox	...	...	...	...	...	...	...	...	...	...	...	...
Typhus Fever	...	...	...	...	...	...	...	...	...	...	...	...
Typhoid Fever	...	...	...	...	...	...	...	...	...	...	...	...
Continued Fever	...	...	...	...	...	...	...	...	...	...	...	...
Intermittent Fever	...	...	...	...	...	...	...	...	...	...	...	...
Remittent Fever	...	...	...	...	...	...	...	...	...	...	...	...
Cholera	...	...	...	...	...	...	...	...	...	...	...	...
Rheumatism	...	...	...	...	...	...	...	...	...	...	...	...
Phthisis Pulmonalis	...	...	...	...	...	...	...	...	...	...	...	...
Scorvy	...	...	...	...	...	...	...	...	...	...	...	...
Atrophy and Anæmia	...	...	...	...	...	...	...	...	...	...	...	...
Dropsies	...	...	...	...	...	...	...	...	...	...	...	...
Apoplexy	...	...	...	...	...	...	...	...	...	...	...	...
Heart Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Respiratory Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	...	...	...	...	...	...	...	...	...	...	...	...
Diarrhoea	...	...	...	...	...	...	...	...	...	...	...	...
Spleen Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Veneral Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Dracontias	...	...	...	...	...	...	...	...	...	...	...	...
Abscesses	...	...	...	...	...	...	...	...	...	...	...	...
Skin Diseases	...	...	...	...	...	...	...	...	...	...	...	...
Wounds and Accidents	...	...	...	...	...	...	...	...	...	...	...	...
All other Causes	...	...	...	...	...	...	...	...	...	...	...	...
Total	60	87412	...	53	3 6525	375	60	96774	...	37	1 67272	1818

IV.

Table showing the Prevalence of Cholera at each Jail of the Madras presidency in each month of the year 1873.

Jails.	Average Strength for the year.	Number of Admissions and Deaths in each Month.												Total Admissions.	Total Deaths.	Ratio per 1,000 of Strength.			
																Admis- sions.	Deaths.		
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.						
		A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.		
European Prison, Ootacamund	21																	...	...
Central Jails.																		...	...
Coimbatore	980	*1			*1	*1	*1											4	1
Vellore	951																		
Trichinopoly	933																		
Rajahmundry	831																		
Cannanore	582																		
Salem	568																		
District Jails.																			
Penitentiary Madras	557																		
Bellary	363																		
Cuddalore	310																		
Vizagapatam	267																		
Cuddapah	260																		
Madura	258																		
Palamcottah	249																		
Chittoor	200																		
Nellore	166																		
Coimbatore	152																		
Ootacamund Native	144																		
Tanjore	133																		
Berhampore	132																		
Calicut	129																		
Chingleput	129																		
Traquebar	124																		
Mangalore	119																		
Karnool	105																		
Guntoor	99																		
Rajahmundry	96																		
Russelcondah	91																		
Trichinopoly	60																		
Guindy	62																		
Tellicherry	55																		
Masulipatam	37																		
Paumbum	34																		
H. M.'s Jail Madras	33																		
		Closed.																	
Total	9,250	1			1	1	1	1										4	1
																		0.43	0.10

* Choleraic Diarrhoea.

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 1873.

Jails.	Average Strength for the year.	Daily sick per 1,000 of Strength in each month.												Daily Sick per 1,000 of Average Strength for the year.	Admitted into Hospital per 1,000 of Average Strength.	Died per 1,000 of Average Strength.	
		January.	Feb.	March.	April.	May.	June.	July.	August.	Sep.	October.	Nov.	Dec.			Cholera.	All Causes.
European Prison Ootacamund	21	...	...	...	9.52	9.04	...	...	...	...	...	...	...	1.42	47.61	...	...
Central Jails.																	
Bellary ...	930	19.06	19.41	13.31	25.80	23.86	22.00	21.47	21.79	19.84	16.19	17.17	12.37	19.5	238.77	1.02	42.85
Berhampore ...	651	26.95	28.28	21.53	22.01	12.01	10.86	12.38	18.14	14.10	7.97	13.67	21.34	17.59	689.80	...	9.46
Chingleput ...	933	17.95	20.73	20.42	22.71	19.94	19.07	22.27	24.42	23.72	26.06	25.27	27.65	22.58	338.69	...	60.02
Coimbatore ...	831	27.10	29.38	30.00	33.52	36.33	41.47	43.81	35.55	49.30	42.29	45.51	60.85	38.71	802.64	...	19.25
Cuddalore ...	582	22.28	18.67	19.38	19.75	16.40	21.16	23.83	28.00	23.62	20.15	20.39	19.77	21.42	225.08	...	18.90
Cuddapah ...	588	16.30	6.26	20.27	10.53	14.45	15.81	14.02	18.13	10.21	11.43	12.34	13.46	13.57	222.18	...	26.40
District Jails.																	
Penitentiary Madras ...	537	24.57	29.08	29.54	28.67	37.00	22.80	32.75	56.73	45.16	47.05	47.26	41.48	37.82	743.26	...	5.88
Bellary ...	353	21.39	17.00	15.53	15.41	11.16	12.24	11.16	6.14	18.35	14.81	11.70	27.08	15.34	374.65	...	13.77
Cuddalore ...	310	23.10	29.61	18.47	17.01	28.67	32.25	33.97	34.81	20.73	28.79	38.56	28.07	28.54	754.83	...	16.12
Vizagapatam ...	267	40.83	31.56	36.65	24.01	14.34	17.40	13.55	13.74	8.62	19.11	18.45	15.69	21.27	292.17	...	59.92
Cuddapah ...	280	44.22	33.11	47.10	49.05	36.03	17.14	26.86	23.68	21.16	11.31	27.57	33.20	29.53	1019.23	...	23.07
Madras ...	258	12.86	9.96	10.60	6.83	12.23	13.93	10.45	11.27	8.36	12.19	17.30	18.26	12.17	323.45	...	19.87
Palamcottah ...	249	23.66	19.23	18.51	13.78	11.82	13.46	14.52	7.04	8.33	9.51	3.96	5.34	12.08	265.06	...	24.09
Chittoor ...	200	31.72	45.33	62.15	44.27	58.89	43.05	41.41	64.35	66.25	59.89	53.48	58.76	52.5	1335.0	...	5.0
Nellore ...	165	35.28	28.63	16.71	20.52	17.46	21.28	21.79	40.13	37.08	37.44	38.45	35.89	29.75	650.60	...	12.04
Coimbatore ...	152	31.44	68.68	54.04	90.47	82.08	70.94	57.72	40.55	52.72	43.98	38.31	65.72	63.48	993.42	...	12.04
Ootacamund Native ...	141	19.26	3.24	5.83	5.36	10.03	18.32	24.03	16.78	8.84	20.67	7.40	37.96	12.22	501.11	...	131.57
Tanjore ...	133	83.46	22.66	22.22	18.34	26.11	36.61	32.46	54.98	39.72	42.70	44.76	37.96	34.51	458.64	...	6.94
Berhampore ...	132	29.68	41.92	40.13	48.55	43.12	23.58	26.62	30.00	56.00	30.93	27.11	33.15	35.00	825.75	...	60.15
Chingleput ...	129	27.55	20.38	17.7	22.19	17.79	17.64	23.01	27.38	31.40	22.69	24.78	19.36	23.56	873.56	...	75.75
Tranquebar ...	123	25.84	28.46	28.88	15.88	13.72	26.79	14.15	27.07	31.40	22.69	24.78	19.36	23.56	873.56	...	15.60
Mangalore ...	119	53.78	47.47	27.71	45.09	63.86	54.19	28.41	22.14	20.22	44.79	22.91	29.20	23.25	906.97	...	64.51
Kurnool ...	105	35.61	32.42	37.32	41.11	22.59	52.52	53.32	53.59	53.92	47.04	42.24	27.43	41.95	1697.14	...	16.80
Chittoor ...	99	21.87	34.09	41.63	23.33	16.52	37.97	7.14	10.56	37.87	32.00	44.57	40.94	29.59	585.58	...	47.61
Rajahmundry ...	96	41.38	51.56	32.78	25.65	16.73	41.03	60.78	61.68	65.00	61.51	61.53	64.00	48.33	823.91	...	30.30
Russellcote ...	91	40.42	66.84	35.50	20.95	18.00	2.92	15.13	27.64	2.82	16.59	28.82	13.91	22.30	879.12	...	10.41
Trichinopoly ...	80	34.11	20.13	33.69	46.35	40.42	45.23	36.33	42.07	47.21	37.83	58.72	44.43	40.37	632.5	...	87.5
Gundry ...	62	11.90	12.5	24.89	24.19	19.23	15.63	12.71	21.18	11.90	36.49	30.17	38.46	21.45	987.71	...	...
Tellicherry ...	55	13.72	52.00	27.91	11.77	15.60	14.53	28.09	39.23	23.30	11.29	10.69	8.75	22.15	673.72	...	16.18
Masulipatam ...	37	17.85	15.15	89.74	50.00	85.10	41.65	71.42	85.85	83.33	107.14	118.25	111.11	69.72	2000.0	...	...
Paumben ...	34	43.33	42.40	45.97	47.61	36.00	...	...	...	...	...	...	...	104.41	1982.84	...	...
Her M's. Jail Madras	33	9.6	2.70	17.00	28.21	37.10	9.23	9.71	5.94	7.02	23.23	79.5	10.00	17.57	1121.21	...	...
Total ...	9,260	25.23	25.23	23.90	25.14	24.67	24.25	25.71	27.62	27.32	26.24	23.16	20.04	26.08	549.89	0.10	28.32

VI.

Table showing the Admissions, Deaths and Daily Sick among each class of Prisoners in the Madras Presidency, during the year 1873.

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.
Bellary ...	336	133	4	5.48	13	2	1	0.07	14	1	...	0.02
Berhampore ...	126	107	10	4.71	5	2	...	0.03	1	...	...	...
Caunanore, Central ...	582	131	11	12.47	...	...	...	...	...	...	...	...
Calicut ...	109	111	2	2.85	9	2	...	0.19	11	...	...	...
Chingleput ...	123	115	...	2.96	3	1	...	0.02	3	1	...	0.02
Chittoor ...	184	259	1	10.07	8	5	...	0.31	8	3	...	0.12
Coimbatore Central ...	974	233	42	19.11	...	...	...	...	6	...	...	...
Do. District ...	145	151	20	9.65	7	...	...	...	...	...	...	...
Cuddalore ...	280	230	5	8.80	23	4	...	0.05	7	...	...	...
Cuddapah ...	221	253	4	7.43	18	5	...	0.11	21	7	2	0.14
Gundry ...	62	60	...	1.33	...	...	...	...	...	...	...	...
Guntoor ...	95	81	3	2.77	4	4	...	0.16	...	...	...	...
Her Majesty's Jail, Madras ...	...	...	...	...	...	...	...	...	33	37	...	0.58
Kurnool ...	99	163	4	4.28	1	8	1	0.40	5	3	...	0.04
Madras ...	213	79	5	3.02	7	1	...	0.02	38	5	...	0.10
Mangalore ...	106	181	2	4.17	4	6	...	0.91	9	3	...	0.05
Masulipatam ...	37	74	...	2.58	...	...	...	...	...	...	...	...
Nellore ...	160	107	2	4.92	2	...	...	...	4	1	...	0.02
Ootacamund, European ...	21	1	...	0.03	...	...	...	...	...	...	...	...
Do. Native ...	143	52	1	1.76	...	...	...	...	1	...	...	...
Palamcottah ...	225	64	6	2.96	11	2	...	0.04	13	...	...	...
Paumben ...	34	63	...	3.55	...	...	...	...	...	...	...	...
Penitentiary, Madras ...	550	411	3	20.91	7	3	...	0.16	...	...	...	...
Rajahmundry, Central ...	829	662	16	31.60	1	1	...	0.33	1	4	...	0.19
Do. District ...	82	69	1	3.69	13	10	...	0.95	1	...	...	...
Russellcote ...	89	80	...	2.03	...	...	...	...	2	...	...	...
Salem, Central ...	556	179	14	7.42	8	3	...	0.20	4	1	1	...
Tanjore ...	115	60	8	4.59	3	...	...	...	15	1	...	...
Tellicherry ...	45	26	1	0.80	3	8	...	0.26	7	3	...	0.16
Tranquebar ...	100	123	6	4.54	9	2	...	0.04	15	7	2	0.25
Trichinopoly, Central ...	933	316	56	21.07	...	...	...	...	...	...	...	...
Do. District ...	71	52	3	3.20	3	1	...	0.03	6	...	...	...
Vellore, Central ...	951	656	9	16.73	...	...	...	...	...	...	...	...
Vizagapatam ...	259	69	15	5.66	6	1	1	0.02	2	...	...	...
Total ...	8,855	5,401	254	237.14	168	71	3	4.44	227	77	5	1.69

VII.

Table showing the Ratio of Admissions, Deaths and Daily Sick among each class of Prisoners in the Madras Presidency during the year 1873.

Jails.	Convicts.			Prisoners awaiting or under Trial.			Civil Debtors.		
	Admissions.	Deaths.	Average Daily Sick.	Admissions.	Deaths.	Average Daily Sick.	Admissions.	Deaths.	Average Daily Sick.
Bellary	335 83	11-90	16-30	153-84	76-92	5-38	71-42	...	1-42
Berhampore	849-20	79-36	37-38	400-0	...	6-0	...	...	...
Canranore, Central	225-06	18-90	21-42	...	...	...	...	...	...
Calicut	1018-34	18-34	26-14	222-22	...	21-11	...	...	...
Chingleput	934-95	...	21-05	333-33	...	6-66	333-33	...	6-66
Chittoor	1407-60	5-43	54-72	625-00	...	38-75	375-0	...	15-0
Coimbatore, Central	290-55	43-12	19-62	...	...	...	...	...	...
Do. District	1041-37	137-32	63-55	...	...	...	...	...	...
Cuddalore	821-42	17-85	31-42	173-91	...	2-17	...	...	...
Cuddapah	1141-79	18-09	33-61	277-77	...	6-11	333-33	95-23	6-66
Guindy	967-74	...	21-45	...	...	...	...	...	...
Guntur	832-63	31-57	29-15	1000-0	...	45-0	...	...	...
Her Majesty's Jail, Madras.	...	...	...	...	...	...	1121-21	...	17-57
Kurmoor	1646-46	40-40	43-23	8000-0	1000-0	400-0	600-0	...	8-0
Madura	370-89	23-47	14-17	142-85	...	2-85	131-57	...	2-69
Mangalore	1707-54	18-85	39-33	1500-0	...	227-5	333-3	...	5-65
Masulipatam	2000-0	...	69-72	...	...	...	...	...	...
Nellore	668-75	12-5	30-75	...	...	...	250-0	...	5-0
Ootacamund, European	47-61	...	1-42	...	...	...	...	...	...
Do. Native	363-63	6-99	12-30	...	...	...	...	...	...
Palamcottah	234-44	26-66	13-19	181-81	...	3-63	...	...	...
Paumben	1832-94	...	104-41	...	...	...	...	...	...
Penitentiary, Madras	747-27	5-45	38-01	428-57	...	22-85	...	...	...
Rajahmundry, Central	798-55	19-30	38-11	1000-0	...	380-0	4000-0	...	190-0
Do. District	841-46	12-19	45-00	769-23	...	73-07	...	...	...
Russelcondah	398-87	...	22-80	...	...	...	...	...	...
Salern Central	321-94	25-17	13-34	375-0	...	38-25	250-0	250-0	...
Tanjore	521-73	69-56	39-91	...	...	...	66-93	...	...
Tellicherry	577-77	22-22	17-77	3666-60	...	60-60	429-57	...	22-85
Tanquebar	1230-0	60-0	45-4	222-22	...	4-44	166-66	132-33	16-66
Trichinopoly, Central	338-69	60-02	22-58	...	...	...	...	...	...
Do. District	732-39	42-25	45-07	333-33	...	10-0	...	...	...
Vellore, Central	639-80	9-46	17-59	...	...	...	...	...	...
Vizagapatam	266-40	57-91	21-85	166-66	166-66	3-30	...	...	...
Total	609-93	28-68	26-78	422-61	17-85	26-42	339-20	22-03	7-44

VIII.

Table showing the Admissions and Deaths among the Jail Population of the Madras Presidency during the year 1873, according to Age and Length of Confinement.

	Length of Confinement.									
	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.
Strength	74	887	1,767	1,837	1,405	1,257	702	566	335	240
Admissions	44	364	977	1,314	975	730	380	271	177	168
Deaths	1	6	24	38	35	33	23	22	23	22
Total	119	958	2,768	3,151	2,413	2,020	1,105	837	535	430
Ratio per 1,000 of Strength.	119	958	2,768	3,151	2,413	2,020	1,105	837	535	430
Admissions	594-59	410-37	556-06	696-34	693-95	580-74	541-31	478-79	535-35	700-0
Deaths	13-51	6-76	13-65	20-13	24-91	26-41	32-76	38-86	63-65	91-66
Ratio per 1,000 of Strength.	13-51	6-76	13-65	20-13	24-91	26-41	32-76	38-86	63-65	91-66
Admissions	925-79	628-74	447-04	353-66	424-77	343-68	338-53	471-49	216-39	635-95
Deaths	43-68	32-05	28-03	12-11	10-61	17-47	18-00	27-28	...	20-28
Ratio per 1,000 of Strength.	43-68	32-05	28-03	12-11	10-61	17-47	18-00	27-28	...	20-28

VITAL STATISTICS
OF THE
GENERAL POPULATION.

I.
Deaths registered in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	Population according to the Census of 1871.	Names of Districts.	Population for which Returns were received.		Area in Square Miles.	Average Population per Square Mile.	Number of Deaths registered.			Ratio of Deaths per 1,000 of Population.		Mean Ratio of Deaths per 1,000 during previous 15 years.	
			Males.	Females.			Males.	Females.	Total.	Males.	Females.	Males.	Females.
1	1,388,976	Ganjum District	631,023	671,180	8,213	167.1	7,619	6,813	14,432	12.0	11.5	11.8	11.8
2	633,813	Taluk (R. C.)	265,608	268,335			3,509	2,821	6,330	12.4	10.5	11.4	11.4
3	87,237	Municipal Towns.	18,074	19,183			367	348	705	19.7	18.1	18.9	18.9
4	817,876	Zemindaries	347,431	283,652			3,953	3,444	7,397	11.3	12.0	11.7	11.7
5	1,844,711	Vizagapatam District	780,149	749,918	19,344	100.5	10,072	8,359	18,431	12.9	11.1	12.05	12.05
6	337,015	Taluk (R. C.)	391,554	377,457			5,087	4,026	9,113	12.9	10.6	11.7	11.7
7	69,916	Municipal Towns.	34,370	35,545			1,005	822	1,825	29.1	28.1	28.1	28.1
8	837,750	Zemindaries	351,135	335,805			3,982	3,511	7,493	11.3	10.4	10.9	10.9
9	1,322,339	Godavery District	803,603	789,336	6,224	255.9	15,253	14,954	31,222	20.2	18.9	19.6	19.6
10	1,325,037	Taluk (R. C.)	667,891	658,136			13,610	12,410	26,050	20.3	18.8	19.6	19.6
11	63,064	Municipal Towns.	33,333	29,726			917	823	1,670	25.4	26.6	26.4	26.4
12	203,828	Zemindaries	102,374	101,454			1,811	1,691	3,502	17.6	16.6	17.1	17.1
13	1,452,374	Kistna District	737,495	714,879	8,036	150.7	14,551	11,652	26,203	19.7	16.5	18.1	18.1
14	1,325,036	Taluk (R. C.)	628,046	606,980			12,216	9,989	22,006	19.4	16.2	17.8	17.8
15	51,221	Municipal Towns.	26,342	27,879			592	506	1,098	22.4	18.1	20.2	20.2
16	103,127	Zemindaries	83,107	80,020			1,743	1,453	3,209	20.9	18.3	19.6	19.6
17	1,376,811	Kallow District	707,392	689,419	9,462	162.7	10,318	9,033	19,351	14.5	13.4	14.05	14.05
18	1,107,637	Taluk (R. C.)	568,392	539,305			6,516	6,737	12,413	11.6	10.7	11.2	11.2
19	23,922	Municipal Towns.	14,879	15,043			29,922	193	451	17.3	12.8	15.07	15.07
20	239,192	Zemindaries	124,121	115,071			239,192	3,043	5,487	27.7	26.4	27.1	27.1
21	307,552	Madras Town (R. C.)	194,676	202,876	27	14,724.1	7,503	7,401	14,609	37.02	36.4	36.7	36.7
22	938,184	Chingleput District	475,968	462,216	2,753	310.7	9,340	9,154	18,494	19.6	19.8	19.7	19.7
23	900,557	Taluk (R. C.)	457,710	443,141			8,922	8,737	17,659	19.4	19.7	19.3	19.3
24	37,327	Municipal Towns.	18,252	19,075			418	417	836	22.9	21.8	22.3	22.3
25	1,755,517	South Arcot District	885,922	869,595	4,873	360.3	12,778	11,552	24,330	14.4	13.2	13.8	13.8
26	1,715,527	Taluk (R. C.)	866,417	849,110			12,424	11,232	23,656	14.3	13.2	13.7	13.7
27	40,230	Municipal Towns.	19,505	20,725			354	330	674	18.1	15.3	16.7	16.7
28	1,200,499	Tachinopoly District	688,184	612,274	3,515	341.5	11,081	10,885	21,966	18.8	17.7	18.2	18.2
29	1,112,607	Taluk (R. C.)	587,801	524,801			10,115	9,908	20,024	...	...	17.9	17.9
30	87,801	Municipal Towns.	47,801	39,999			965	977	1,942	...	...	22.1	22.1
31	1,973,731	Tanjore District	953,988	1,019,763	3,054	540.1	22,480	21,787	44,247	23.5	21.3	22.4	22.4
32	1,789,719	Taluk (R. C.)	863,492	926,227			19,574	19,208	38,042	22.8	20.8	21.8	21.8
33	194,012	Municipal Towns.	87,476	96,536			2,626	2,579	5,205	29.01	27.4	28.2	28.2
34	2,268,615	Madras District	1,112,090	1,156,549	9,502	238.5	10,959	10,378	21,337	9.3	8.9	9.4	9.4
35	1,233,379	Taluk (R. C.)	623,731	609,648			6,922	6,613	13,535	11.09	10.3	10.7	10.7
36	64,552	Municipal Towns.	32,764	32,088			749	715	1,464	22.8	22.3	22.5	22.5
37	935,351	Zemindaries	455,871	482,813			3,288	3,080	6,338	7.2	6.8	6.7	6.7

not available.

Information

No.	Population according to the Census of 1871.	Names of Districts.	Population for which Returns were received.		Area in Square Miles.	Average Population per Square Mile.	Number of Deaths registered.			Ratio of Deaths per 1,000 of Population.		Mean Ratio of Deaths per 1,000 during previous 15 years.	
			Males.	Females.			Males.	Females.	Total.	Males.	Females.	Males.	Females.
38	1,699,959	Tinnevely District	830,515	867,444	5,176	327.3	12,551	11,963	24,514	15.4	13.9	14.7	14.7
39	1,644,405	Taluk (R. C.)	811,836	832,569			12,162	11,203	23,371	14.9	13.4	14.2	14.2
40	49,554	Municipal Towns.	24,679	24,875			789	764	1,543	31.9	30.3	31.1	31.1
41	959,640	Kurmoor District	467,640	446,792	7,358	130.4	8,484	7,548	16,032	17.2	16.1	16.7	16.7
42	881,558	Taluk (R. C.)	451,488	430,070			7,920	6,940	14,860	17.5	16.1	16.8	16.8
43	82,874	Municipal Towns.	16,152	16,732			504	608	1,112	34.9	36.3	35.6	35.6
44	46,208	Zemindaries	...	...			...	...	...	...	...	...	...
45	1,351,194	Cuddalore District	693,400	657,794	8,367	161.5	10,452	9,459	19,911	15.07	14.3	14.7	14.7
46	1,301,147	Taluk (R. C.)	685,071	649,848			10,119	9,191	19,310	14.7	14.1	14.4	14.4
47	16,276	Municipal Towns.	8,929	7,946			333	268	601	39.9	37.7	38.9	38.9
48	1,668,006	Bellary District	860,173	807,833	11,007	151.5	15,084	14,715	29,799	17.5	16.2	17.8	17.8
49	1,563,873	Taluk (R. C.)	807,871	759,002			14,109	13,608	27,717	17.4	16.2	17.6	17.6
50	86,137	Municipal Towns.	44,768	41,369			818	944	1,762	18.2	22.8	20.4	20.4
51	11,936	Zemindaries	7,534	7,462			167	163	320	20.8	21.8	21.2	21.2
52	2,015,278	North Arcot District	1,020,678	994,600	7,139	282.3	22,761	22,355	45,116	22.2	22.4	22.3	22.3
53	1,301,147	Taluk (R. C.)	688,401	642,746			15,622	15,330	30,952	23.7	20.8	23.7	23.7
54	50,123	Municipal Towns.	23,970	26,155			621	531	1,152	25.9	20.2	22.9	22.9
55	664,006	Zemindaries	336,307	325,689			6,518	6,494	13,012	19.2	19.9	19.5	19.5
56	1,968,395	Salem District	975,502	991,493	7,483	262.9	25,346	23,683	49,029	25.9	23.6	24.9	24.9
57	1,916,983	Taluk (R. C.)	960,580	966,423			24,713	23,112	47,825	25.9	23.9	24.9	24.9
58	60,012	Municipal Towns.	24,942	25,070			633	571	1,204	25.3	22.7	24.07	24.07
59	1,763,274	Coimbatore District	874,975	888,299	7,482	237.3	12,810	11,053	23,863	14.6	12.4	13.5	13.5
60	1,717,753	Taluk (R. C.)	874,975	888,299			12,531	10,745	23,256	...	...	13.5	13.5
61	45,511	Municipal Towns.	23,917	21,594			219	368	587	...	...	13.3	13.3
62	49,501	Neelgherry District	27,192	22,309	749	66.0	463	417	880	17.0	18.6	17.7	17.7
63	36,461	Taluk (R. C.)	20,239	16,192			285	206	491	14.96	12.7	13.4	13.4
64	73,040	Municipal Towns.	6,923	6,117			178	211	389	25.7	34.4	29.8	29.8
65	918,352	South Canara District	459,729	458,633	9,902	235.4	6,957	6,286	13,243	15.1	13.7	14.4	14.4
66	888,650	Taluk (R. C.)	444,841	443,792			6,610	6,998	13,608	14.9	13.5	14.2	14.2
67	29,712	Municipal Towns.	15,188	14,524			317	283	600	20.8	19.8	20.3	20.3
68	2,201,250	Malabar District	1,134,889	1,066,361	6,002	370.7	19,794	16,029	35,823	17.4	14.1	15.8	15.8
69	1,134,889	Taluk (R. C.)	1,066,361	1,066,361			17,710	14,256	31,966	16.4	13.3	14.9	14.9
70	122,317	Municipal Towns.	61,176	61,141			2,084	1,773	3,857	34.06	28.9	31.5	31.5

Summary of Deaths in the Madras Presidency during the year 1873.

Total Number of	Population according to Census of 1871.	Population for which Returns were received.			Total Deaths.			Ratio of Deaths per 1,000 of Population in 1873.			Mean Ratio per 1,000 in previous 15 years.		
		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Rural Circles (Taluk)	161	12,551,310	12,551,310	25,102,620	220,847	201,267	422,114	17.4	16.02	16.7			
Municipal Towns	47	759,832	759,832	1,519,664	22,013	21,357	43,370	28.9	27.3	27.7			
Zemindaries	9	1,909,570	1,781,986	3,691,556	24,886	22,892	47,778	13.7	13.1	13.4			
Total	220	15,221,672	15,093,128	30,314,800	267,756	245,476	513,232	17.5	16.2	16.9			

Deaths registered in the Rural Circles and Towns of the Madras Presidency during each Month of the Year 1873.

No.	Population according to the Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.		January.		February.		March.		April.	
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	F.
1	1,388,976	Ganjam District	631,013	571,180	1,202,193	1,002	918	1,920	777	641	1,418	604
2	533,843	Talangs (R. C.)	265,508	248,583	514,091	385	337	722	331	283	614	284
3	37,257	Municipal Towns	19,074	19,183	38,257	24	27	51	29	25	54	24
4	817,870	Zemindaries	346,481	283,602	630,083	524	511	1,035	447	335	782	236
5	1,844,711	Vizapatnam District	780,149	748,818	1,528,967	1,590	1,070	2,660	881	694	1,575	629
6	337,045	Talangs (R. C.)	164,061	157,057	321,118	120	84	204	424	311	735	326
7	69,916	Municipal Towns	34,370	35,546	69,916	91	84	175	62	65	127	55
8	837,750	Zemindaries	351,125	333,805	684,930	605	460	1,065	399	293	692	248
9	1,502,939	Godavery District	802,003	789,337	1,591,340	1,580	1,342	2,922	1,040	909	1,949	982
10	1,336,047	Talangs (R. C.)	607,891	608,136	1,216,027	1,281	1,105	2,386	837	731	1,568	801
11	63,051	Municipal Towns	33,338	29,726	63,064	79	76	155	29	27	56	25
12	203,828	Zemindaries	102,374	101,454	203,828	220	151	371	121	89	210	65
13	1,452,371	Kistna District	737,405	714,870	1,452,275	1,399	1,135	2,534	900	719	1,619	800
14	1,335,035	Talangs (R. C.)	673,016	649,089	1,322,105	1,217	966	2,183	733	599	1,332	736
15	54,221	Municipal Towns	28,342	25,879	54,221	44	31	75	45	31	76	38
16	1,031,127	Zemindaries	53,107	53,920	107,027	138	131	269	102	86	188	91
17	1,376,811	Nellore District	707,392	693,419	1,400,811	1,190	1,010	2,200	732	585	1,317	646
18	1,107,697	Talangs (R. C.)	568,932	539,305	1,108,237	786	630	1,416	481	387	868	429
19	29,922	Municipal Towns	14,879	15,043	29,922	13	13	26	17	12	29	14
20	239,192	Zemindaries	124,121	115,071	239,192	391	367	758	231	186	417	203
21	397,552	Madras Town	194,076	203,476	397,552	629	682	1,311	535	618	1,153	617
22	938,184	Chingleput District	475,068	462,216	937,284	797	753	1,550	706	691	1,397	781
23	900,827	Talangs (R. C.)	457,716	443,141	900,857	789	746	1,535	696	685	1,381	684
24	37,327	Municipal Towns	18,252	19,075	37,327	8	12	20	10	6	16	22
25	1,755,517	South Arcot District	885,922	869,595	1,755,517	927	809	1,736	909	836	1,745	995
26	1,715,527	Talangs (R. C.)	866,417	849,110	1,715,527	904	776	1,680	881	807	1,688	964
27	40,299	Municipal Towns	19,505	20,793	40,299	23	33	56	28	29	57	31
28	1,200,409	Tellicherry District	688,134	612,274	1,300,409	987	983	1,970	717	697	1,414	790
29	1,112,607	Talangs (R. C.)	553,965	509,703	1,063,668	922	907	1,829	642	615	1,257	721
30	87,801	Municipal Towns	43,400	44,401	87,801	65	76	141	75	72	147	69
31	1,973,721	Tanjore District	953,965	1,019,756	1,973,721	1,888	1,809	3,697	1,573	1,447	3,020	1,588
32	1,789,719	Talangs (R. C.)	866,492	823,227	1,689,719	1,701	1,624	3,325	1,415	1,291	2,706	1,399
33	184,012	Municipal Towns	87,476	96,536	184,012	181	186	367	158	166	332	189

34	2,266,615	Madras District	1,112,066	1,154,549	2,266,615	1,262	1,106	2,368	965	928	1,893	872
35	1,263,379	Talangs (R. C.)	623,731	639,648	1,263,379	729	624	1,353	523	520	1,043	518
36	61,852	Municipal Towns	32,761	32,088	61,852	47	41	88	34	33	67	37
37	983,384	Zemindaries	456,571	482,813	938,384	486	441	927	408	375	783	317
38	1,633,959	Tinnevely District	836,515	827,444	1,663,959	1,639	1,507	3,146	1,141	1,011	2,152	1,034
39	1,644,405	Talangs (R. C.)	811,836	822,569	1,634,405	1,515	1,416	2,931	1,077	960	2,037	955
40	49,554	Municipal Towns	24,679	24,875	49,554	81	91	172	61	51	112	79
41	929,640	Kannad District	467,540	446,792	914,332	851	804	1,655	580	496	1,076	734
42	881,558	Talangs (R. C.)	451,488	430,070	881,558	784	715	1,499	516	444	960	689
43	32,874	Municipal Towns	16,152	16,722	32,874	6	89	156	61	52	116	45
44	45,208	Zemindaries	...	...	...	...	...	...	...	...	...	...
45	1,351,194	Cuddapah District	693,420	657,794	1,351,214	809	773	1,582	683	611	1,294	790
46	1,334,919	Talangs (R. C.)	685,071	649,848	1,334,919	801	743	1,544	661	581	1,242	751
47	16,275	Municipal Towns	8,329	7,946	16,275	19	23	42	22	30	52	39
48	1,668,003	Bellary District	860,173	807,833	1,668,006	1,245	1,133	2,458	991	939	1,930	1,152
49	1,566,873	Talangs (R. C.)	807,871	759,002	1,566,873	1,112	1,115	2,227	925	867	1,792	1,058
50	86,127	Municipal Towns	44,768	41,359	86,127	16	61	137	51	56	107	81
51	11,998	Zemindaries	7,534	7,462	14,996	17	17	34	15	7	22	13
52	2,015,278	North Arcot District	1,020,678	994,600	2,015,278	2,032	2,117	4,149	1,868	1,758	3,626	2,014
53	1,301,147	Talangs (R. C.)	658,401	612,746	1,271,147	1,317	1,308	2,625	1,348	1,260	2,608	1,450
54	50,125	Municipal Towns	23,970	26,155	50,125	30	44	74	39	39	78	54
55	684,006	Zemindaries	338,507	325,699	664,206	166	155	321	161	149	370	200
56	1,966,995	Salem District	975,502	991,493	1,966,995	2,397	2,409	4,806	2,267	2,103	4,370	2,352
57	1,516,983	Talangs (R. C.)	950,560	966,423	1,916,983	2,311	2,331	4,642	2,204	2,045	4,249	2,273
58	50,012	Municipal Towns	24,942	25,070	50,012	86	78	164	63	68	131	79
59	1,768,271	Coimbatore District	874,975	868,299	1,743,274	1,127	992	2,119	1,122	921	2,043	1,072
60	1,717,763	Talangs (R. C.)	874,975	868,299	1,743,274	1,127	992	2,119	1,122	921	2,043	1,072
61	45,511	Municipal Towns	...	...	...	...	...	...	...	...	...	...
62	49,501	Nelgherry District	27,122	22,379	49,501	28	25	53	26	26	52	28
63	56,161	Talangs (R. C.)	29,289	18,192	47,481	17	13	30	14	6	20	15
64	13,040	Zemindaries	6,923	6,117	13,040	11	12	23	12	20	32	13
65	918,392	South Canara District	459,723	458,669	918,392	389	391	780	361	378	739	330
66	888,659	Talangs (R. C.)	444,541	444,109	888,650	362	362	724	361	361	722	361
67	29,712	Municipal Towns	15,188	14,524	29,712	27	29	56	16	20	36	20
68	2,261,260	Malabar District	1,126,361	1,134,899	2,261,260	1,132	1,171	2,303	1,160	1,148	2,308	1,171
69	2,138,993	Talangs (R. C.)	1,073,713	1,065,280	2,138,993	1,116	1,302	2,418	1,162	1,236	2,400	1,171
70	122,317	Municipal Towns	61,176	61,141	122,317	136	179	315	218	183	401	181
Total Madras Presidency			15,221,079	15,666,763	30,887,842	23,697	23,697	47,394	20,887	18,661	39,548	21,696
Ratio per 1,000 of Population			...	...	...	17	15	16	13	12	13	12

II.—(Continued.)

Deaths registered in the Rural Circles and Towns of the Madras Presidency during each Month of the Year 1872.

No.	Population according to the Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.			May.			June.			July.			August.		
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	1,388,976	Gajipur District.	631,013	571,190	1,202,203	686	468	1,054	535	461	996	469	447	916	675	557	1,132
2	532,813	Taluk (R. C.)	275,208	238,335	513,543	338	290	628	236	153	389	271	178	449	267	271	538
3	87,576	Total. { Municipal Towns	18,071	19,158	37,229	23	23	46	27	26	53	18	16	34	34	38	72
4	817,576	Zemindaries	546,734	292,855	839,589	290	215	505	272	212	484	230	231	461	271	248	522
5	1,841,711	Vizagapatnam District.	739,143	549,848	1,288,991	743	690	1,433	714	628	1,342	742	629	1,371	811	673	1,484
6	937,045	Taluk (R. C.)	391,654	377,432	769,086	367	253	620	368	309	677	413	392	805	407	357	764
7	83,916	Total. { Municipal Towns	22,370	25,676	48,046	89	61	150	82	65	147	62	61	123	96	74	170
8	837,750	Zemindaries	351,125	335,805	686,930	317	284	601	274	251	525	267	266	533	306	272	580
9	1,502,939	Godavari District.	693,593	789,336	1,482,929	1,012	958	1,970	912	863	1,775	1,138	1,200	2,338	1,309	1,354	2,663
10	1,236,047	Taluk (R. C.)	629,307	658,150	1,287,457	843	782	1,625	755	701	1,456	966	1,065	2,031	1,092	1,169	2,261
11	63,064	Total. { Municipal Towns	33,558	39,745	73,303	51	56	107	64	53	117	112	66	178	67	68	135
12	203,325	Zemindaries	102,974	131,454	234,428	116	130	246	103	104	207	118	129	247	150	157	297
13	1,452,371	Kistna District.	725,495	714,579	1,440,074	690	708	1,398	806	745	1,551	900	831	1,731	1,006	885	1,891
14	1,235,095	Taluk (R. C.)	626,045	606,930	1,232,975	783	688	1,471	672	610	1,282	729	694	1,423	851	761	1,612
15	51,221	Total. { Municipal Towns	22,612	27,879	50,491	50	48	98	45	48	93	50	53	103	51	45	96
16	163,127	Zemindaries	81,077	90,020	171,107	72	72	144	89	87	176	112	82	194	104	79	183
17	1,276,311	Nellore District.	707,342	682,419	1,389,761	629	589	1,218	617	585	1,202	631	618	1,249	747	617	1,364
18	1,107,697	Taluk (R. C.)	568,392	539,392	1,107,784	400	385	785	413	410	823	434	397	831	475	381	856
19	29,322	Total. { Municipal Towns	14,579	15,043	29,622	22	10	32	16	8	24	15	18	33	26	22	48
20	229,192	Zemindaries	121,121	115,071	236,192	307	194	501	218	167	385	232	203	435	246	214	460
21	397,552	Madras Town.	194,076	202,876	396,952	591	623	1,214	587	570	1,157	534	630	1,164	565	614	1,179
22	938,184	Chingleput District.	475,938	462,246	938,184	678	661	1,339	654	611	1,265	752	737	1,489	729	727	1,456
23	900,837	Taluk (R. C.)	457,716	443,131	900,847	614	612	1,226	610	561	1,171	704	706	1,410	676	676	1,352
24	37,327	Total. { Municipal Towns	19,252	19,075	38,327	51	49	100	44	47	91	48	41	89	44	51	95
25	1,735,617	South Arcot District.	865,922	909,895	1,775,817	1,041	929	1,970	960	862	1,822	1,036	938	1,974	945	929	1,875
26	1,715,527	Taluk (R. C.)	860,347	849,110	1,709,457	1,013	896	1,909	929	833	1,762	1,012	916	1,928	920	911	1,831
27	40,290	Total. { Municipal Towns	19,945	20,585	40,530	33	33	66	31	29	60	24	22	46	26	16	42
28	1,200,408	Tiruchirappalli District.	535,134	612,274	1,147,408	533	825	1,358	845	753	1,598	901	833	1,734	911	859	1,770
29	1,112,007	Taluk (R. C.)	431,433	430,070	861,503	702	762	1,464	769	681	1,450	821	817	1,638	818	771	1,589
30	87,801	Total. { Municipal Towns	24,679	24,875	49,554	76	64	140	76	72	148	80	76	156	93	88	181
31	1,973,731	Tanjore District.	953,408	1,019,723	1,973,131	1,721	1,686	3,407	1,728	1,672	3,400	1,681	1,631	3,312	2,040	1,933	3,973
32	1,789,719	Taluk (R. C.)	865,492	928,527	1,794,019	1,498	1,499	2,997	1,511	1,446	2,957	1,754	1,659	3,413	1,819	1,722	3,541
33	184,012	Total. { Municipal Towns	97,474	96,608	194,082	243	187	430	217	226	443	227	242	469	221	237	458

34	2,266,615	Madras District.	1,112,063	1,154,549	2,266,612	794	770	1,564	783	739	1,521	961	883	1,744	945	879	1,818
35	1,203,379	Taluk (R. C.)	632,731	639,048	1,271,779	514	481	995	473	462	935	535	520	1,055	631	489	1,124
36	64,852	Total. { Municipal Towns	32,761	32,088	64,849	45	45	90	56	50	106	72	69	141	71	307	653
37	938,384	Zemindaries	465,571	482,813	948,384	235	244	479	253	227	480	256	239	495	346	307	653
38	1,639,959	Tinnevely District.	836,515	857,444	1,693,959	844	776	1,620	838	733	1,571	930	856	1,786	949	883	1,832
39	1,614,405	Taluk (R. C.)	811,836	832,669	1,644,505	832	712	1,544	780	689	1,478	858	802	1,660	885	821	1,706
40	49,554	Total. { Municipal Towns	24,679	24,875	49,554	42	64	106	49	44	93	72	53	125	61	62	126
41	859,640	Kurnool District.	467,640	446,792	914,432	679	547	1,226	584	532	1,116	711	634	1,345	691	622	1,316
42	881,558	Taluk (R. C.)	431,433	430,070	861,503	630	504	1,134	540	483	1,022	676	576	1,251	651	582	1,233
43	32,874	Total. { Municipal Towns	16,152	16,722	32,874	49	43	92	41	50	91	33	33	66	43	40	83
44	45,208	Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	1,351,191	Cuddapah District.	633,400	657,791	1,291,191	789	718	1,507	709	664	1,373	863	817	1,680	917	858	1,775
46	1,334,919	Taluk (R. C.)	635,071	649,848	1,284,919	751	696	1,447	688	646	1,334	881	804	1,685	890	831	1,721
47	16,275	Total. { Municipal Towns	8,329	7,946	16,275	35	22	57	21	18	39	32	13	45	27	27	54
48	1,638,036	Bellary District.	869,173	897,833	1,767,006	1,104	1,093	2,197	1,097	1,115	2,212	1,303	1,239	2,542	1,430	1,440	2,840
49	1,566,873	Taluk (R. C.)	807,871	789,002	1,596,873	1,035	1,003	2,038	1,038	1,035	2,073	1,313	1,239	2,552	1,346	1,337	2,683
50	86,137	Total. { Municipal Towns	44,768	41,369	86,137	51	77	128	47	64	111	70	85	155	71	114	185
51	14,996	Zemindaries	7,534	7,462	14,996	15	8	23	12	16	29	10	14	24	13	9	22
52	2,015,278	North Arcot District.	1,020,678	994,600	2,015,278	1,936	1,981	3,917	1,792	1,870	3,662	1,780	1,753	3,533	1,664	1,695	3,349
53	1,301,147	Taluk (R. C.)	638,401	642,745	1,281,146	1,335	1,400	2,735	1,227	1,360	2,587	1,290	1,230	2,520	1,137	1,097	2,234
54	50,125	Total. { Municipal Towns	23,970	26,155	50,125	43	45	88	52	47	99	59	56	105	49	49	98
55	664,006	Zemindaries	338,307	325,639	663,946	522	536	1,058	513	563	1,076	530	479	1,009	468	539	997
56	1,969,995	Salem District.	975,502	991,493	1,966,995	1,991	1,936	3,927	1,602	1,595	3,197	1,846	1,704	3,550	1,863	1,789	3,646
57	1,916,983	Taluk (R. C.)	950,560	966,423	1,916,983	1,917	1,905	3,822	1,661	1,560	3,221	1,795	1,654	3,449	1,803	1,728	3,533
58	50,012	Total. { Municipal Towns	24,942	25,070	50,012	44	31	75	41	35	76	51	35	106	58	55	113
59	1,769,274	Coimbatore District.	874,975	889,299	1,764,274	896	803	1,699	911	897	1,718	900	902	1,801	1,021	940	1,961
60	1,717,763	Taluk (R. C.)	874,975	889,299	1,764,274	874	788	1,662	893	787	1,680	976	895	1,871	1,007	901	1,911
61	45,511	Total. { Municipal Towns	...	...	...	22	15	37	18	20	38	23	17	40	17	26	43
62	49,501	Neelgherry District.	27,192	22,309	49,501	42	48	90	55	53	108	40	41	81	48	25	73
63	36,461	Taluk (R. C.)	20,263	16,192	36,455	25	18	43	39	30	69	30	20	50	35	15	59
64	13,040	Total. { Municipal Towns	6,923	6,117	13,040	17	30	47	16	23	39	19	12	37	13	10	23
65	918,362	South Canara District.	459,759	458,633	918,392	453	383	835	526	518	1,044	728	640	1,368	616	503	1,119
66	883,650	Taluk (R. C.)	444,541	441,109	885,650	435	363	801	505	498	1,003	638	617	1,251	583	521	1,104
67	29,712	Total. { Municipal Towns	15,188	14,524	29,712	17	17	34	21	20	41	35	23	58	31	42	73
68	2,261,250	Malabar District.	1,164,889	1,166,361	2,331,250	1,474	1,200	2,674	1,608	1,312	2,920	1,746	1,542	3,288	1,653	1,414	3,067
69	2,138,933	Taluk (R. C.)	1,073,713	1,063,220	2,136,933	1,334	1,074	2,408	1,343	1,162	2,505	1,573	1,362	2,935	1,527	1,293	2,818
70	122,317	Total. { Municipal Towns	61,176	61,141	122,317	140	126	266	160	150	310	178	160	338	126	153	

II.—(Continued)

Deaths registered in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to the Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.			September.			October.			November.			December.			Total.	
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	Males.	Females.
1	1,358,976	Ganjapur District	631,018	571,180	1,202,198	600	559	1,159	477	428	905	492	375	867	617	492	1,109	7,619	6,613
2	532,842	Taluk (R. C.)	256,508	238,335	494,843	274	257	531	206	208	414	179	137	316	251	226	477	3,803	2,851
3	37,257	Total. { Municipal Towns	18,074	19,183	37,257	33	34	67	31	39	70	34	27	61	22	26	48	357	348
4	817,876	Zemindaries	347,431	233,632	581,063	267	225	492	270	186	456	279	211	490	324	240	564	3,853	3,444
5	1,844,711	Viragapam District	780,119	748,818	1,528,937	870	791	1,661	891	711	1,602	842	656	1,498	957	754	1,711	10,072	8,359
6	387,045	Taluk (R. C.)	204,054	207,167	411,221	205	205	410	417	328	745	407	339	746	463	373	836	5,957	4,033
7	69,916	Total. { Municipal Towns	33,370	35,346	68,716	49	73	122	57	71	128	94	76	170	93	71	164	1,003	822
8	837,760	Zemindaries	351,125	335,896	687,021	267	225	492	270	186	456	279	211	490	324	240	564	3,853	3,444
9	1,692,939	Gadarey District	802,603	789,336	1,591,939	1,378	1,333	2,711	1,382	1,181	2,563	1,416	1,055	2,471	1,551	1,092	2,643	16,208	14,984
10	1,325,017	Taluk (R. C.)	607,891	608,135	1,216,026	607	607	1,214	607	570	1,177	607	570	1,177	607	570	1,177	13,610	12,410
11	63,064	Total. { Municipal Towns	33,370	35,346	68,716	49	73	122	57	71	128	94	76	170	93	71	164	1,003	822
12	203,828	Zemindaries	102,274	101,454	203,728	67	72	139	73	67	140	73	59	132	62	51	113	847	750
13	1,452,374	Kistna District	737,435	714,870	1,452,305	999	892	1,891	973	832	1,805	1,055	842	1,897	1,155	922	2,077	13,610	12,410
14	1,235,036	Taluk (R. C.)	628,046	606,980	1,235,026	849	750	1,599	873	713	1,586	1,055	842	1,897	1,155	922	2,077	13,610	12,410
15	54,221	Total. { Municipal Towns	26,342	27,879	54,221	41	42	83	47	53	100	57	41	98	54	41	95	592	508
16	163,127	Zemindaries	88,107	80,020	168,127	109	83	192	97	66	157	109	83	192	109	83	192	1,173	1,066
17	1,376,811	Nellore District	707,392	669,119	1,376,511	788	687	1,475	832	610	1,442	1,055	842	1,897	1,155	922	2,077	13,610	12,410
18	1,107,697	Taluk (R. C.)	568,292	539,805	1,108,097	499	459	958	540	434	974	607	570	1,177	607	570	1,177	13,610	12,410
19	29,922	Total. { Municipal Towns	14,879	15,043	29,922	27	23	50	23	17	40	26	21	47	27	21	48	238	193
20	239,192	Zemindaries	121,121	115,071	236,192	262	235	497	261	232	493	261	232	493	261	232	493	3,044	2,651
21	397,552	Madras Town	194,676	202,876	397,552	523	500	1,023	529	577	1,106	605	605	1,210	602	674	1,276	7,208	7,401
22	938,184	Chingleput District	475,963	462,216	938,179	702	702	1,404	819	843	1,662	944	966	1,910	1,113	1,055	2,168	9,840	9,154
23	900,837	Taluk (R. C.)	457,716	443,141	900,857	605	576	1,181	790	804	1,594	966	966	1,932	1,055	1,021	2,076	8,922	8,737
24	37,327	Total. { Municipal Towns	18,252	19,075	37,327	36	43	79	29	30	59	46	57	103	63	31	94	418	417
25	1,755,817	South Arcot District	885,922	869,119	1,755,041	1,011	940	1,951	1,064	973	2,037	1,205	1,005	2,210	1,329	1,152	2,481	12,778	11,552
26	1,715,627	Taluk (R. C.)	866,410	849,110	1,715,520	982	905	1,887	1,084	973	2,057	1,205	1,005	2,210	1,329	1,152	2,481	12,778	11,552
27	40,260	Total. { Municipal Towns	19,605	20,655	40,260	23	23	46	23	23	46	23	23	46	23	23	46	238	238
28	1,200,408	Tirunelveli District	612,274	612,274	1,224,548	533	533	1,066	539	577	1,116	605	605	1,210	602	674	1,276	7,208	7,401
29	1,112,607	Taluk (R. C.)	568,292	539,805	1,108,097	499	459	958	540	434	974	607	570	1,177	607	570	1,177	13,610	12,410
30	87,801	Total. { Municipal Towns	43,901	43,900	87,801	23	23	46	23	23	46	23	23	46	23	23	46	238	238
31	1,973,731	Tanjore District	1,013,783	1,013,783	2,027,566	1,013	1,013	2,026	1,013	1,013	2,026	1,013	1,013	2,026	1,013	1,013	2,026	12,778	11,552
32	1,753,719	Taluk (R. C.)	866,410	849,110	1,715,520	982	905	1,887	1,084	973	2,057	1,205	1,005	2,210	1,329	1,152	2,481	12,778	11,552
33	184,012	Total. { Municipal Towns	92,506	91,506	184,012	210	210	420	210	210	420	210	210	420	210	210	420	2,679	2,679

34	2,266,615	Madras District	1,112,066	1,154,549	2,266,615	985	872	1,857	1,016	1,001	2,017	741	795	1,536	916	901	1,817	10,959	10,378
35	1,265,370	Taluk (R. C.)	623,731	630,618	1,254,349	641	489	1,130	619	563	1,182	664	693	1,357	793	788	1,581	9,922	9,613
36	61,952	Total. { Municipal Towns	32,764	32,088	64,852	76	53	129	66	81	147	77	102	179	123	113	236	749	715
37	938,384	Zemindaries	455,571	458,913	914,484	371	336	707	331	337	668	337	337	674	337	337	674	3,258	3,050
38	1,638,959	Tinnevely District	836,615	875,444	1,712,059	848	841	1,689	1,032	962	1,991	1,241	1,097	2,338	1,412	1,307	2,809	12,951	11,963
39	1,644,405	Taluk (R. C.)	811,886	832,569	1,644,455	880	787	1,667	978	894	1,872	1,177	1,047	2,224	1,384	1,260	2,628	12,951	11,963
40	49,554	Total. { Municipal Towns	24,673	24,876	49,549	68	54	122	54	63	122	64	50	114	88	93	181	789	764
41	593,640	Kannool District	297,640	296,000	593,640	297	297	594	297	297	594	297	297	594	297	297	594	3,484	3,484
42	831,558	Taluk (R. C.)	451,438	430,070	881,508	616	587	1,203	625	537	1,222	782	667	1,449	751	685	1,436	7,920	6,940
43	32,874	Total. { Municipal Towns	16,152	16,722	32,874	39	55	94	47	39	86	38	44	82	37	41	78	564	564
44	45,208	Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	1,351,191	Cuddapah District	683,400	657,794	1,341,194	919	853	1,772	1,009	932	1,941	1,030	976	2,006	1,098	914	2,007	10,452	9,457
46	1,354,919	Taluk (R. C.)	685,071	649,848	1,334,919	848	831	1,679	984	912	1,896	1,021	955	1,976	1,016	897	1,972	10,119	9,181
47	16,275	Total. { Municipal Towns	8,429	7,946	16,375	23	22	45	23	20	43	23	21	44	18	17	35	333	296
48	1,638,006	Bellary District	860,173	807,833	1,668,006	1,462	1,563	3,025	1,457	1,532	2,989	1,306	1,269	2,575	1,321	1,237	2,558	15,084	14,715
49	1,568,873	Taluk (R. C.)	807,871	759,092	1,566,963	1,380	1,462	2,842	1,372	1,400	2,772	1,224	1,167	2,391	1,236	1,166	2,401	14,169	13,905
50	86,137	Total. { Municipal Towns	44,708	41,369	86,077	70	88	158	72	115	187	69	90	159	72	81	153	143	143
51	14,006	Zemindaries	7,534	7,462	14,996	6	13	19	13	17	30	13	12	25	14	20	34	157	163
52	2,015,278	North Arcot District	1,020,678	994,600	2,015,278	1,673	1,614	3,287	1,856	1,697	3,553	1,977	1,850	3,827	2,160	1,988	4,148	22,761	22,355
53	1,360,117	Taluk (R. C.)	658,401	642,746	1,301,147	1,036	1,044	2,080	1,213	1,104	2,317	1,277	1,166	2,443	1,430	1,299	2,729	15,622	15,340
54	50,125	Total. { Municipal Towns	23,070	26,155	49,225	54	42	96	47	27	74	43	44	87	68	58	126	821	751
55	1,654,066	Zemindaries	838,397	825,699	1,664,096	483	468	951	586	506	1,087	667	640	1,297	684	621	1,305	6,515	6,404
56	1,906,935	Salem District	976,503	991,493	1,968,006	1,086	1,098	2,184	1,072	1,044	2,116	1,072	1,044	2,116	1,072	1,044	2,116	11,033	10,823
57	1,516,953	Taluk (R. C.)	750,660	746,428	1,497,088	1,035	1,062	2,097	1,035	1,035	2,070	1,035	1,035	2,070	1,035	1,035	2,070	11,033	10,823
58	50,012	Total. { Municipal Towns	24,942	25,070	50,012	51	51	102	51	51	102	51	51	102	51	51	102	309	309
59	1,763,274	Coimbatore District	874,975	888,299	1,763,274	1,151	1,034	2,185	1,168	977	2,145	1,023	807	1,830	1,244	1,044	2,288	12,810	11,033
60	1,717,763	Taluk (R. C.)	874,975	888,299	1,763,274	1,151	1,034	2,185	1,168	977	2,145	1,023	807	1,830	1,244	1,044	2,288	12,810	11,0

[illegible]

33	106,432	Nandiguma	54,184	52,263	106,452	...	...	...	965	693	660	565	1,255	24	11	35	2	9	12	1	...	1	39	23	61		
34	83,081	Bewada	42,134	40,947	83,081	...	...	...	38	41	83	377	908	24	20	41	4	4	8	1	...	2	31	17	48		
35	87,138	Undiwada	43,473	43,047	87,138	...	...	...	58	59	117	207	372	31	18	62	2	2	4	1	...	1	17	10	27		
36	128,837	Vasulipatam	65,479	62,858	128,837	...	...	...	157	136	205	202	465	31	42	73	15	13	28	1	...	1	30	30	60		
37	169,912	Repalli	86,268	83,614	169,912	...	...	...	93	88	187	350	200	640	37	25	63	13	24	3	...	3	58	38	96		
38	143,629	Bapatla	73,717	69,882	143,629	...	...	...	78	75	153	562	411	973	19	20	88	6	6	5	1	...	6	29	11	40	
39	120,619	Rajapet	61,630	58,939	120,619	...	...	...	62	74	136	782	607	1,859	14	11	25	3	9	2	...	2	15	13	28		
40	144,508	Venukondah	32,965	31,543	64,503	...	...	...	23	29	52	558	384	912	9	6	16	3	6	...	1	1	7	3	16		
41	120,658	Palnad	60,658	60,000	120,658	...	...	...	164	88	122	1,080	911	1,931	18	12	30	6	11	...	1	1	15	22	37		
42	101,728	Crisur	52,384	49,314	101,728	...	...	...	28	29	57	691	489	1,150	13	11	24	4	6	10	...	1	16	18	34		
43	103,904	Guntoor	55,074	53,890	103,904	...	...	...	79	60	139	512	385	897	19	25	44	19	18	2	...	1	21	10	31		
44	18,093	M. T. Guntoor	9,074	8,959	18,093	...	...	...	37	39	76	34	23	57	12	9	2	4	6	...	1	3	2	2	8		
45	35,188	M. T. Masulipatam	17,263	18,920	35,188	...	...	...	20	11	31	53	50	103	7	6	13	3	1	1	...	...	1	1	8		
46	163,127	Zemindaries	83,107	80,920	163,127	...	...	...	113	93	205	1,188	1,011	2,199	34	22	55	3	13	2	...	2	51	35	86		
Total	1,452,374		737,195	714,879	1,452,374	...	46	49	95	915	1,913	7,501	5,870	13,371	294	238	532	86	93	179	19	6	25	336	210	576	
47	195,068	Ongole	98,388	96,784	195,068	...	...	...	109	80	189	669	574	1,243	35	29	64	7	12	19	1	...	1	32	37	69	
48	138,275	Kandukur	70,391	67,784	138,275	...	...	...	20	26	46	428	344	772	27	21	48	7	12	17	2	...	2	37	18	45	
49	81,336	Kavalli	42,011	39,325	81,336	...	...	...	15	15	25	239	236	535	9	19	19	4	4	8	...	...	...	8	7	15	
50	149,317	Nellore	74,518	74,518	149,317	...	...	...	16	34	42	486	377	863	44	52	96	2	4	1	...	1	...	2	25	47	
51	147,141	Gudur	70,637	70,504	147,141	...	...	...	47	34	81	410	397	807	33	21	54	4	7	11	...	...	...	12	10	22	
52	63,585	Raopore	33,131	30,754	63,585	...	...	...	8	15	23	253	227	480	16	16	32	3	3	3	...	...	...	13	18	26	
53	103,802	Alankur	53,541	50,261	103,802	...	...	...	21	17	38	314	302	616	20	25	42	5	8	13	...	...	...	20	22	42	
54	100,365	Udayagiri	52,519	48,165	100,365	...	...	...	5	2	2	168	142	310	10	6	16	2	2	4	...	...	...	9	12	23	
55	127,258	Kanigiri	65,253	61,805	127,258	...	...	...	13	17	397	330	727	3	11	14	1	1	2	...	...	...	1	12	13	25	
56	29,922	M. T. Nellore	14,879	15,043	29,922	...	...	...	2	4	4	34	16	50	7	2	9	...	...	...	...	...	...	9	9	19	
57	233,192	Zemindaries	121,121	115,071	233,192	...	...	...	129	143	272	2,058	1,818	3,876	160	114	274	18	18	36	9	4	...	68	85	153	
Total	1,376,811		707,392	699,419	1,376,811	...	227	497	371	373	744	5,516	4,763	10,278	368	307	675	50	67	117	14	7	21	227	247	474	
58	397,552	Madras Town	191,676	202,876	397,552	...	6	...	519	513	1,062	1,200	1,369	2,569	1,104	1,066	2,170	5	1	6	1	...	1	100	57	157	
59	101,210	Ponneri	53,204	51,068	104,210	...	...	...	87	68	155	307	335	642	124	113	237	7	3	10	3	1	4	37	28	65	
60	140,838	Trichlore	70,953	72,915	119,808	...	...	...	154	256	440	399	400	739	125	129	254	3	5	8	3	...	3	32	28	60	
61	186,464	Sydepet	93,837	92,517	186,404	...	...	...	173	185	358	520	523	1,013	188	185	373	21	12	33	7	4	11	68	66	134	
62	132,328	Chingelput	67,673	61,673	132,328	...	...	...	122	139	261	452	406	861	131	103	234	5	3	11	3	7	4	10	63	45	103
63	197,203	Madamalakam	100,432	96,555	197,203	...	...	...	108	155	333	619	616	1,235	97	78	173	6	5	8	7	...	15	30	52	162	
64	130,709	Conjeveram	65,356	63,143	130,709	...	...	...	215	203	419	421	366	787	114	93	206	3	3	6	1	...	39	50	89	80	
65	37,327	M. T. Conjeveram	18,252	19,075	37,327	...	...	...	68	72	140	84	97	131	123	92	214	...	...	...	...	...	1	4	6	10	10
Total	936,184		475,968	462,216	936,184	...	...	...	1,319	1,108	2,126	2,895	2,743	5,548	901	792	1,693	45	31	76	23	15	44	293	275	568	
66	239,754	Tindivanam	122,412	117,312	239,754	...	...	...	177	180	357	549	493	1,019	102	88	190	2	2	4	1	2	3	37	42	79	
67	161,657	Trinamalay	83,571	81,086	161,657	...	...	...	143	102	245	1,013	855	1,868	18	12	30	2	2	4	3	3	6	22	21	43	
68	236,108	Villapooram	120,178	115,930	236,108	...	...	...	127	122	249	721	619	1,310	113	77	190	12	10	22	2	4	7	51	41	73	
69	241,559	Cuddalore	124,661	121,280	241,559	...	...	...	96	95	191	840	793	1,688	151	90	241	2	5	7	3	4	4	31	31	62	
70	293,183	Chelameram	118,520	120,613	293,183	...	...	...	157	134	291	506	502	1,098	78	71	119	5	3	8	3	2	5	25	20	45	
71	178,504	Vindachellum	89,495	89,009	178,504	...	...	...	150	213	403	775	672	1,417	60	31	91	7	7	14	4	2	6	14	11	25	

III.—(Continued.) Deaths registered from different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	Names of Rural Circles and Towns.	Population in 1871		Population for which Returns were received.		Cholera.		Small-pox.		Fever.		Bowel-complaints.		Suicide.		Wounding.		Accidents.	
		Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
72	Kallakudi ...	193,545	87,193	136,352	2	...	2	112	116	228	730	639	1,369	4	8	12	1	7	24
73	Velur ...	216,219	100,217	216,216	3	...	3	237	253	490	865	769	1,634	10	9	19	4	5	73
74	M. T. Chidambaram ...	40,299	20,753	40,290	...	...	...	8	12	20	64	64	128	...	...	1	...	14	19
	Total ...	1,755,531	802,392	1,755,517	32	18	50	1,247	1,227	2,474	6,054	5,340	11,394	741	45	91	22	41	485
75	Woolwardham ...	297,893	117,395	297,890	...	...	...	113	125	238	863	841	1,704	...	...	...	...	...	18
76	Woolwardham ...	218,600	100,217	218,600	...	...	...	145	155	300	719	776	1,495	...	...	...	...	...	75
77	Woolwardham ...	228,313	115,080	228,313	...	...	...	79	92	171	468	442	910	...	...	...	...	...	72
78	Woolwardham ...	237,174	123,290	237,174	...	...	...	172	152	324	873	840	1,713	...	...	...	...	...	52
79	Woolwardham ...	250,557	125,278	250,557	...	...	...	179	167	346	904	857	1,761	...	...	...	...	...	31
80	Woolwardham ...	267,236	133,617	267,236	...	...	...	60	51	111	129	137	266	...	...	...	...	...	19
81	Woolwardham ...	276,236	133,617	276,236	...	...	...	15	12	27	24	25	49	...	...	...	...	...	6
	Total ...	1,200,403	612,214	1,200,403	...	...	...	826	805	1,631	4,529	4,460	8,988	843	723	1,566	37	52	266
82	Shenoi ...	167,889	84,220	167,889	...	...	...	103	85	188	121	124	245	...	...	...	...	...	46
83	Shenoi ...	198,193	102,053	198,193	...	...	...	200	202	402	247	255	502	...	...	...	...	...	48
84	Shenoi ...	207,407	108,523	207,407	...	...	...	201	155	356	148	161	309	...	...	...	...	...	100
85	Shenoi ...	152,264	78,520	152,264	...	...	...	131	146	277	213	233	446	...	...	...	...	...	72
86	Shenoi ...	154,714	78,337	154,714	...	...	...	66	55	121	134	209	343	...	...	...	...	...	63
87	Shenoi ...	237,423	121,016	237,423	...	...	...	125	134	259	212	184	396	...	...	...	...	...	60
88	Shenoi ...	292,164	152,170	292,164	...	...	...	445	424	869	683	610	1,293	...	...	...	...	...	123
89	Shenoi ...	296,300	152,170	296,300	...	...	...	401	328	729	555	609	1,164	...	...	...	...	...	134
90	Shenoi ...	143,561	74,247	143,561	...	...	...	114	129	243	151	141	292	...	...	...	...	...	35
91	Shenoi ...	52,176	26,346	52,176	...	...	...	34	41	75	157	130	287	...	...	...	...	...	3
92	Shenoi ...	44,444	22,876	44,444	...	...	...	59	45	104	92	62	154	...	...	...	...	...	8
93	Shenoi ...	21,163	10,788	21,163	...	...	...	22	16	38	38	31	69	...	...	...	...	...	2
94	Shenoi ...	48,326	24,276	48,326	...	...	...	38	26	64	83	85	168	...	...	...	...	...	6
95	Shenoi ...	17,705	9,119	17,705	...	...	...	15	20	35	16	20	36	...	...	...	...	...	4
	Total ...	1,577,731	802,392	1,577,731	31	23	54	1,981	1,806	3,787	2,883	2,884	5,767	1,173	903	2,076	37	57	704
96	Shenoi ...	311,621	158,302	311,621	...	...	...	210	248	458	306	356	662	...	...	...	...	...	32
97	Shenoi ...	129,983	66,521	129,983	...	...	...	30	31	61	148	136	284	...	...	...	...	...	6
98	Shenoi ...	179,431	91,105	179,431	...	...	...	76	83	159	450	410	860	...	...	...	...	...	2
99	Shenoi ...	241,215	120,291	241,215	...	...	...	151	156	307	614	606	1,220	...	...	...	...	...	16
100	Shenoi ...	217,418	110,315	217,418	...	...	...	73	65	138	692	721	1,413	...	...	...	...	...	14

101	194,831	91,077	93,754	184,551	...	...	...	...	...	55	58	113	447	305	812	114	95	209	6	7	13	1	...	15	18	23
102	51,987	25,783	51,987	12,865	...	...	...	...	...	12	8	20	119	145	267	40	31	71	2	1	3	2	...	7	2	3
103	12,865	6,325	12,865	50,131	...	...	...	...	...	3	1	3	61	72	133	31	22	53	...	...	2	...	...	...	3	3
104	50,131	25,783	50,131	43,253	...	...	...	...	...	185	190	365	913	844	1,757	406	330	736	16	21	37	6	...	24	31	
105	43,253	22,256	43,253	2,265,615	...	...	...	...	...	73	73	146	360	405	765	221	166	390	9	11	20	7	...	16	9	
	2,265,615	1,112,066	1,154,519	2,266,615	11	14	25	867	963	1,770	4,709	4,588	9,297	1,444	1,200	2,644	81	89	170	50	32	82	98	112	210	
106	178,951	88,491	178,951	163,864	...	...	...	...	...	61	121	240	179	419	144	122	265	3	3	14	4	...	4	21	26	
107	163,864	78,395	163,864	142,892	...	...	...	...	...	99	110	209	417	455	873	262	237	519	5	9	14	4	...	4	24	
108	235,811	121,612	235,811	112,703	...	...	...	...	...	410	423	833	582	588	1,170	538	486	1,044	9	10	19	5	...	6	17	
109	112,703	59,105	112,703	87,025	...	...	...	...	...	273	256	499	405	376	781	322	281	603	14	9	23	6	...	10	31	
110	133,213	66,575	133,213	122,001	...	...	...	...	...	111	93	204	287	204	462	210	462	2	3	6	5	...	7	18	9	
111	122,001	60,991	122,001	101,803	...	...	...	...	...	68	64	132	246	220	466	231	205	435	2	3	5	5	...	8	18	
112	101,803	49,527	101,803	80,214	...	...	...	...	...	97	73	170	239	242	501	280	231	511	4	4	10	14	...	11	18	
113	122,001	60,991	122,001	148,136	...	...	...	...	...	131	127	258	345	331	679	301	254	555	4	10	14	3	...	22	42	
114	148,136	71,464	148,136	10,547	...	...	...	...	...	148	136	284	255	293	548	298	273	574	7	7	14	3	...	8	18	
115	10,547	5,282	10,547	836,515	...	...	...	...	...	8	6	14	41	31	72	64	69	123	...	...	1	...	...	2	2	
116	8,347	5,282	8,347	836,515	...	...	...	...	...	2	6	8	45	39	84	37	35	72	...	...	1	...	...	2	2	
117	17,945	8,347	17,945	836,515	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
118	10,565	5,282	10,565	836,515	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	1,633,803	836,515	837,444	1,633,803	...	...	...	...	...	1,417	1,334	2,751	3,159	2,992	6,151	2,967	2,633	5,600	49	63	112	35	17	52	113	
119	101,803	49,527	101,803	101,803	...	...	...	...	...	9	10	23	882	709	1,591	19	9	28	...	...	5	2	...	4	15	
120	49,527	45,432	49,527	92,693	...	...	...	...	...	15	12	27	700	450	1,260	22	13	35	...	...	8	2	...	11	14	
121	58,765	26,982	58,765	115,747	...	...	...	...	...	23	30	59	819	694	1,513	9	10	20	...	...	8	2	...	7	13	
122	71,055	31,817	71,055	71,055	...	...	...	...	...	19	14	33	460	401	870	9	11	20	...	...	2	2	...	4	13	
123	98,544	48,860	98,544	98,544	...	...	...	...	...	35	41	76	701	617	1,318	26	16	42	...	...	2	2	...	4	13	
124	174,014	83,568	174,014	173,431	...	...	...	...	...	118	105	223	1,010	953	1,963	30	18	48	...	...	15	5	...	7	21	
125	120,615	58,028	120,615	193,616	...	...	...	...	...	116	100	216	813	757	1,575	30	19	49	...	...	4	2	...	23	35	
126	107,380	52,768	107,380	167,320	...	...	...	...	...	44	42	86	842	690	1,532	21	17	38	...	...	15	5	...	2	18	
127	25,579	13,082	25,579	25,579	...	...	...	...	...	5	5	10	173	229	408	82	78	160	...	...	7	1	...	2	6	
128	7,205	3,639	7,205	7,205	...	...	...	...	...	2	1	3	59	69	128	30	33	63	...	...	10	...	...	2	4	
129	45,204	...	45,204	914,832	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	529,510	467,640	467,792	914,832	...	...	...	...	...	392	363	758	6,506	5,682	12,188	279	224	593	36	31	70	22	12	84	123	
130	162,741	52,324	162,741	102,714	...	...	...	...	...	25	25	50	488	423	911	10	12	22	...	...	4	8	...	3	15	
131	53,071	44,934	53,071	93,051	...	...	...	...	...	11	10	21	495	373	868	24	14	38	...	...	5	2	...	3	14	
132	76,667	37,417	76,667	76,667	...	...	...	...	...	9	9	18	410	312	722	18	10	28	...	...	5	2	...	3	16	
133	145,180	70,615	145,180	145,180	...	...	...	...	...	31	31	62	880	789	1,669	47	31	78	...	...	16	3	...	3	18	
134	115,591	70,951	115,591	145,191	...	...	...	...	...	60	60	120	842	793	1,635	56	39	95	...	...	11	2	...	3	19	
135	138,102	61,856	138,102	123,162	...	...	...	...	...	31	30	61	621	488	1,109	37	45	82	...	...	17	2	...	3	27	
136	135,194	66,386	135,194	135,194	...	...	...	...	...	108	96	204	774	730	1,504	78	62	140	...	...	4	4	...	7	27	
137	130,514	68,257	130,514	140,918	...	...	...	...	...	133	111	244	839	795	1,634	78	45	123	...	...	10	4	...	6	26	
138	110,405	53,121	110,405	110,405	...	...	...	...	...	127	124	251	620	544	1,204	20	18	38	...	...	13	7	...	4	33	
139	103,963	53,521	103,963	169,855	...	...	...	...	...	46	42	88	578	499	1,077	17	17	34	...	...	6	3	...	5	29	
140	163,733	72,292	163,733	116,738	...	...	...	...	...	27	33	60	595	532	1,127	38	19	57	...	...	4	1	...	2	30	
141	16,275	7,946	16,275	16,275	...	...	...	...	...	2	3	5	193	161	354	3	3	18	...	...	1	2	...	3	7	
	1,551,101	657,794	1,351,194	1,351,194	...	...	...	...	...	600	571	1,171	7,384	6,149	13,883	426	314	740	42	66	108	28	15	45	239	
142	1,551,101	657,794	1,351,194	1,351,194	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

Deaths registered from different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	Population according to Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.										Injuries.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
			Cholera.		Small-pox.		Fever.		Bowel-complaints.		Suicide.		Wounding.		Accidents.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
			M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
141	130,478	Bellary District.	...	...	...	...	130,478	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

173	170,233	Kistnagerry ...	85,032	85,201	170,233	...	...	...	227	225	452	983	504	1,592	93	78	170	4	3	7	4	4	3	7	15	14	32
174	190,800	Triputore ...	93,812	96,984	190,800	...	...	...	161	173	340	2,052	2,021	4,063	66	62	129	3	4	6	4	4	3	6	23	24	51
175	153,801	Uingherry ...	75,986	77,815	153,801	...	...	...	173	154	367	1,142	1,095	2,237	102	96	193	...	...	12	7	7	5	12	23	22	
176	161,006	Athoor ...	80,266	83,760	161,006	...	...	...	433	472	907	1,017	1,003	2,020	60	52	112	6	4	6	5	6	10	16	12	28	
177	261,009	Namucal ...	127,850	133,199	261,009	...	...	...	533	531	1,064	1,834	1,859	3,693	218	165	384	16	16	7	3	4	3	30	45	84	
178	343,793	Salem ...	170,018	173,775	343,793	...	...	...	1,012	994	1,994	1,694	1,799	3,723	281	204	485	18	20	38	6	2	10	43	50	93	
179	249,618	Triebungudo ...	125,229	124,468	249,618	...	...	...	787	764	1,551	1,524	1,465	2,983	221	174	395	10	17	27	2	2	5	7	28	56	
180	190,625	Diaramputty ...	95,050	93,516	190,625	...	...	...	284	243	527	1,323	1,051	2,389	60	59	109	6	4	16	6	6	8	19	23	41	
181	193,687	Oosoor ...	97,276	95,271	193,687	...	...	...	189	132	321	1,023	998	1,991	79	64	143	4	4	27	2	2	7	27	28	41	
182	50,012	M. T. Salem ...	24,942	25,070	50,012	...	...	...	192	166	357	115	128	243	54	43	97	1	...	...	...	...	...	68	63	122	
Total ...			975,602	991,492	1,966,995	1	5	6	4,011	3,569	7,880	13,027	12,247	25,254	1,223	998	2,251	67	74	141	46	34	18	264	273	539	
183	109,916	Sathemangalam ...	84,321	85,595	109,916	...	...	...	325	289	614	777	683	1,440	186	131	317	2	2	4	6	2	8	25	6	31	
184	90,830	Collegal ...	43,157	42,678	90,830	...	...	...	12	16	28	435	380	815	123	82	210	2	3	5	6	1	5	11	2	13	
185	102,813	Bhowany ...	51,235	51,879	102,813	...	...	...	170	142	312	494	429	923	88	65	153	3	...	...	...	...	...	6	8	17	
186	223,663	Perindorai ...	107,881	109,612	223,663	...	...	...	366	355	735	735	569	1,304	294	237	351	10	13	23	3	1	2	25	24	49	
187	175,459	Caroor ...	86,200	89,489	175,459	...	...	...	76	53	135	459	416	875	101	88	189	6	5	11	9	1	4	14	14	28	
188	217,493	Dharamputty ...	107,881	109,612	217,493	...	...	...	119	133	253	305	347	742	221	170	391	3	...	...	...	...	...	17	22	29	
189	123,660	Odamalagutah ...	63,462	63,188	123,660	...	...	...	94	94	188	309	298	595	70	99	178	4	7	11	3	3	11	23	21	44	
190	167,548	Pollachy ...	82,604	84,942	167,548	...	...	...	224	229	453	731	618	1,346	151	140	231	7	4	16	3	15	27	17	13	34	
191	208,153	Combarora ...	102,544	104,111	208,153	...	...	...	282	241	523	577	413	990	83	46	128	4	5	9	14	3	8	22	17	34	
192	237,898	Pullabom ...	117,194	120,614	237,898	...	...	...	224	246	470	651	533	1,234	201	148	347	13	18	26	...	...	2	1	4	63	
193	55,310	M. T. Combarora ...	17,096	18,214	55,310	...	...	...	64	50	104	31	43	74	16	15	31	...	4	...	...	...	...	2	34	31	
194	10,201	M. T. Erode ...	...	...	10,201	...	...	...	33	26	59	22	21	43	17	14	31	...	...	...	1	1	...	...	2	2	
Total ...			874,975	883,203	1,763,274	...	...	...	1,979	1,564	3,843	5,637	4,637	10,294	1,665	1,252	2,817	60	62	122	48	32	80	200	162	368	
195	56,161	Nellocherries ...	20,259	16,192	56,161	...	...	...	12	7	19	491	126	320	26	18	44	...	...	2	...	...	2	4	9	7	
196	9,482	A. T. Ootacamund ...	5,295	4,717	9,482	...	...	...	3	6	9	35	37	72	13	14	27	...	1	...	...	...	...	1	1	3	
197	8,058	M. T. Ootacamund ...	1,658	1,400	8,058	...	...	...	2	3	5	5	8	14	12	21	33	...	...	...	2	...	...	...	...	...	
Total ...			27,192	22,309	49,501	...	...	...	17	16	33	235	171	405	51	53	104	...	1	1	4	...	...	4	7	12	
198	113,713	Kandam ...	55,878	57,835	113,713	...	...	...	26	24	53	295	275	567	164	133	237	4	...	7	1	3	4	23	22	45	
199	231,570	Udipi ...	114,320	117,211	231,570	...	...	...	60	53	143	226	167	387	294	253	539	13	12	25	6	...	4	6	32	55	
200	213,007	Mangalore ...	107,032	108,046	213,007	...	...	...	89	80	169	457	443	936	285	218	503	12	6	18	6	3	9	49	20	60	
201	107,722	Uppanagudi ...	55,635	52,047	107,722	...	...	...	59	41	100	443	397	164	128	280	40	...	...	8	5	8	21	11	30	50	
202	222,578	Kuarcupode ...	111,637	110,891	222,578	...	...	...	84	71	155	502	494	999	399	313	712	9	5	14	...	...	7	24	21	42	
203	20,712	M. T. Mangalore ...	15,198	14,524	20,712	...	...	...	1	1	2	45	43	88	61	48	109	...	...	...	1	...	2	13	8	21	
Total ...			459,729	458,633	918,362	...	...	...	321	300	621	1,892	1,892	3,924	1,327	1,093	2,420	44	28	72	21	12	30	137	115	302	

III.—(Continued.)

Deaths registered from different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	1	2	3	4	5	6	7	8	9	10
	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.	Cholera.	Small-pox.	Fever.	Bowel complaints.	Snake-bite.	Injuries.
				Males. Females. Total.	M. F. Total.	M. F. Total.	M. F. Total.	M. F. Total.	M. F. Total.	M. F. Total.
204	248,118		Chertikal	122,190 125,928 248,118	...	74 51 125	569 520 1,089	155 111 266	6 4 10	1 2 3
205	123,057		Keliam	60,749 62,308 123,057	...	81 52 133	403 350 753	31 19 50	1 1 2	2 2 4
206	125,435		Wynad	76,228 49,207 125,435	...	51 16 67	545 319 864	23 27 50	4 4 8	1 1 2
207	243,731		Karunabrud	121,560 122,171 243,731	...	152 99 251	651 536 1,187	115 101 216	1 1 2	3 3 6
208	141,808		Calicut	70,126 71,682 141,808	...	250 121 371	524 420 944	107 98 205	4 4 8	1 1 2
209	287,935		Ernad	145,463 142,471 287,934	...	313 196 509	1,106 833 1,939	238 238 476	5 5 10	1 1 2
210	292,452		Valayarad	144,796 147,656 292,452	...	425 142 567	1,032 303 1,335	242 130 372	10 5 15	3 3 6
211	5,985		Cochin	3,142 2,843 5,985	...	...	...	...	...	...
212	295,103		Palghat	144,151 150,952 295,103	...	428 277 705	932 766 1,698	227 174 401	11 11 22	1 1 2
213	374,756		Ponnani	185,306 189,450 374,756	...	1,508 1,099 2,607	483 406 889	478 338 816	10 10 20	1 1 2
214	...		Alajungo	...	...	...	...	...	...	...
215	...		Tangacherry	...	...	...	...	...	...	...
216	20,504		M. T. Tellicherry	9,847 10,657 20,504	...	39 1 40	42 1 53	7 3 10	...	...
217	47,982		M. T. Calicut	24,064 23,918 47,982	...	169 132 301	56 16 72	6 3 9	...	...
218	30,752		M. T. Palghat	15,074 15,678 30,752	...	48 33 81	81 95 176	22 24 46	...	...
219	13,840		M. T. Cochin	6,983 6,857 13,840	...	250 203 453	26 14 40	8 2 10	...	...
220	9,259		M. T. Cannanore	5,203 4,056 9,259	...	45 48 93	55 52 107	29 35 64	...	...
	2,261,250		Total	1,134,889 1,126,361 2,261,250	...	2,357 2,507 4,864	5,323 5,323 10,646	1,763 1,540 3,303	59 37 96	74 10 84
	30,835,577		Total Madras Presidency	15,210,791 15,624,786 30,835,577	...	140 26,732 26,872	51,782 117,887 169,669	30,322 30,322 60,644	465 1089 2,077	531 327 918

III.—(Continued.)

Deaths registered from different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

No.	Population according to the Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.				Injuries.				10—(Continued.)		11		12		Ratio of Deaths per 1,000 of Population.									
			Males.		Females.		Total.		Snake-bite.		Killed by Wild Beasts.		All other Causes.		Total Deaths from all Causes.		From all Causes.		Small-pox.	Cholera.	Fever.	Bowel-complaints.	Injuries.	M.	F.	Total.
			M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.									
1	158,061	Gonsoor	76,500	78,761	155,261	4	4	8	1	1	2	3	138	116	254	1,060	867	1,927	0.1	0.3	9.0	0.7	0.2	133	11.0	121
2	222,276	Berampore	109,124	113,151	222,275	4	3	7	1	1	4	5	187	159	346	1,187	998	2,185	0.02	0.05	7.6	0.3	0.2	103	8.8	99
3	153,507	Chivacole	77,034	76,423	153,507	4	5	9	...	...	...	...	198	149	347	1,062	956	2,018	0.0006	0.9	9.6	0.1	0.1	13.7	12.5	131
4	15,387	M. T. Chivacole	7,341	8,046	15,387	...	...	...	1	1	...	...	138	145	283	230	211	441	...	1.1	7.9	0.5	0.4	31.3	25.5	...
5	21,670	M. T. Berampore	10,733	10,937	21,670	...	...	...	...	...	...	...	24	36	60	127	137	264	...	0.6	8.4	0.1	0.1	11.8	12.5	121
6	817,576	Zemindaries	347,431	283,662	631,093	11	9	20	12	19	31	31	419	393	812	3,953	3,444	7,397	0.08	0.4	9.2	0.3	0.2	11.3	12.1	11.7
	1,388,976	Total	631,013	571,180	1,202,193	23	21	44	15	25	40	40	1,104	998	2,102	7,619	6,613	14,232	0.06	0.4	8.0	0.3	0.2	12.0	11.5	11.8
7	155,699	Palondah	73,573	71,480	145,053	2	2	4	2	1	3	3	102	87	189	1,205	945	2,150	...	1.3	11.1	0.1	0.1	16.3	13.2	14.8
8	125,606	Perattipore	64,619	63,104	127,723	7	1	8	11	4	15	16	43	29	72	366	604	1,370	...	0.4	9.8	0.2	0.4	13.4	9.5	11.6
9	139,289	Perattipore	49,754	47,164	96,918	1	1	2	5	5	...	...	91	44	135	626	455	1,081	...	1.4	7.9	0.1	0.2	13.5	9.6	11.1
10	177,364	Satur	33,270	34,751	68,021	1	1	2	...	...	...	...	17	5	22	362	264	626	...	0.4	7.5	0.2	0.2	10.2	7.5	8.9
11	117,276	Vizianagaram	42,192	39,432	81,624	2	2	4	1	1	...	...	62	53	115	507	436	943	...	0.9	8.5	0.2	0.4	12.0	11.5	12.0
12	97,675	Vizianagaram	41,284	39,040	80,324	1	1	2	1	1	...	...	41	39	80	524	441	965	...	0.9	9.5	0.2	0.4	12.6	11.2	12.0
13	48,637	Vizianagaram	23,356	22,469	45,825	3	1	4	...	...	...	...	34	24	58	279	231	510	...	1.2	7.2	0.5	0.7	11.9	10.2	11.1
14	155,459	Antapully	61,808	60,057	121,865	5	2	7	...	...	...	...	80	65	145	718	650	1,368	...	1.7	7.2	0.2	0.2	31.2	28.1	23.8
15	32,191	M. T. Vizianagaram	15,703	16,488	32,191	...	...	...	2	2	...	...	292	215	507	491	381	872	...	2.2	7.0	1.0	0.9	31.2	28.1	23.8
16	8,744	M. T. Bimalipatam	4,818	4,426	9,244	...	...	...	1	1	...	...	51	60	111	103	107	210	...	0.4	5.1	5.4	0.2	23.8	24.1	27.1
17	20,130	M. T. Vizianagaram	9,906	10,233	20,139	...	...	...	...	...	...	...	72	62	134	317	230	547	...	0.9	17.8	1.3	0.3	31.9	22.4	27.1
18	8,312	M. T. Palondah	4,413	4,389	8,802	...	...	...	...	...	...	...	23	21	44	92	104	196	...	4.08	12.8	0.2	0.1	20.8	23.6	22.2
19	87,750	Zemindaries	351,125	336,805	687,930	23	15	38	7	1	3	3	393	347	740	3,952	3,511	7,493	...	1.2	7.9	0.1	0.4	11.3	10.4	10.9
	1,844,711	Total	780,149	748,818	1,528,967	43	23	76	26	6	32	32	1,301	1,051	2,352	10,072	8,359	18,431	...	1.2	8.5	0.2	0.4	12.9	11.1	12.05
20	169,163	Rejmanndy	55,800	53,363	109,163	4	1	5	1	...	...	...	333	372	705	1,154	1,129	2,283	...	1.8	11.6	0.5	0.3	20.6	21.1	20.9
21	111,489	Rejmanndy	55,353	56,101	111,454	7	3	10	2	...	...	...	202	197	399	1,373	1,225	2,598	...	3.3	15.6	0.4	0.3	24.7	21.8	28.3
22	203,553	Ramachandrapore	102,186	101,447	203,633	12	3	15	...	...	...	...	590	703	1,292	2,052	1,868	3,900	...	1.1	10.2	0.5	0.3	19.8	18.4	19.1
23	208,885	Annapore	105,045	101,840	206,885	12	9	21	...	...	...	...	496	595	1,091	1,671	1,590	3,261	...	1.7	7.9	0.6	0.4	15.9	15.6	15.7
24	177,876	Narasapore	89,768	88,108	177,876	8	9	17	1	1	...	...	761	663	1,424	1,335	1,210	2,548	...	1.1	4.2	0.5	0.4	14.9	13.4	14.3
25	111,988	Undi	54,599	54,599	109,198	11	5	16	3	...	...	...	232	215	447	1,480	1,365	2,845	...	3.2	17.3	0.5	0.4	26.2	25.0	25.6
26	92,457	Yercaud	46,115	46,342	92,457	6	1	7	...	...	...	...	448	533	1,082	983	950	1,938	...	2.1	5.8	0.9	0.2	21.2	20.6	20.9
27	167,191	Yercaud	72,866	72,849	145,715	5	4	9	5	2	7	7	308	328	636	2,016	1,711	3,727	...	4.6	15.2	0.7	0.5	27.6	23.4	25.5
28	145,715	M. T. Cochin	6,983	6,857	13,840	...	...	...	...	...	...	...	178	183	361	282	256	518	...	1.5	2.1	4.4	0.6	29.8	29.4	29.8
29	17,839	M. T. Rajahmundry	10,455	9,233	19,688	...	...	...	1	1	...	...	131	132	263	191	161	352	...	0.05	3.7	10.2	0.4	18.2	17.4	17.8
30	19,728	M. T. Ellore	13,788	11,693	25,481	...	...	...	...	...	...	...	275	272	547	394	406	800	...	6.4	3.69	0.1	0.1	28.5	34.7	31.3
31	25,437	Zemindaries	102,574	101,454	203,528	4	7	11	1	2	3	3	396	407	803	1,811	1,691	3,502	...	2.4	10.0	0.3	0.3	17.6	16.6	17.1
32	203,328	Total	803,603	789,336	1,592,939	74	44	118	14	11	25	25	4,999	4,935	9,934	16,268	14,554	31,222	...	2.2	10.1	0.5	0.4	20.2	18.9	19.6

III.—(Continued.)

Deaths registered from Different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1873.—(Continued.)

No.	District.	Name of Rural Circle and Town.	Population for which Returns were received.		Injuries.		All other Causes.		Total Deaths from all Causes.		Ratio of Deaths per 1,000 of Population.	
			Males.		Females.		Total.		Total.		Total.	
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
32	Chingleput	Nundigava ...	51,181	62,208	100,459	...	...	...	...	...	...	...
33		Brundava ...	42,134	40,917	83,051	...	...	...	...	...	...	...
34		Gudwada ...	43,473	43,665	87,138	...	...	...	...	...	...	...
35		Masulipatam ...	65,479	62,858	128,337	...	...	...	...	...	...	...
36		Rupali ...	80,268	83,614	163,882	...	...	...	...	...	...	...
37		Banarba ...	73,717	69,882	143,600	...	...	...	...	...	...	...
38		Rajahpet ...	61,680	68,669	130,349	...	...	...	...	...	...	...
39		Vannakondah ...	32,865	31,513	64,378	...	...	...	...	...	...	...
40		Pahad ...	60,658	60,658	121,316	...	...	...	...	...	...	...
41		Cesner ...	52,384	49,344	101,728	...	...	...	...	...	...	...
42	Madrass Town	Guntur ...	55,074	63,890	118,964	...	...	...	...	...	...	...
43		M. T. Guntur ...	9,071	8,959	18,030	...	...	...	...	...	...	...
44		M. T. Masulipatam ...	17,268	18,220	35,488	...	...	...	...	...	...	...
45		Zemindaries ...	93,105	90,020	183,125	...	...	...	...	...	...	...
46		Total ...	737,495	714,879	1,452,374	...	...	...	...	...	...	...
47		Chingle ...	98,680	96,888	195,568	...	...	...	...	...	...	...
48		Kuvalakur ...	70,591	67,784	138,375	...	...	...	...	...	...	...
49		Kuvali ...	42,011	39,325	81,336	...	...	...	...	...	...	...
50		Nelore ...	75,829	74,518	149,347	...	...	...	...	...	...	...
51		Gudav ...	76,687	70,501	147,188	...	...	...	...	...	...	...
52	Madrass Town	Raopore ...	33,181	30,759	63,940	...	...	...	...	...	...	...
53		Athmakur ...	53,641	50,261	103,902	...	...	...	...	...	...	...
54		Edappur ...	52,519	48,466	100,985	...	...	...	...	...	...	...
55		Kannur ...	65,953	61,305	127,258	...	...	...	...	...	...	...
56		M. T. Nellore ...	14,679	13,643	28,322	...	...	...	...	...	...	...
57		Zemindaries ...	121,121	115,071	236,192	...	...	...	...	...	...	...
58		Total ...	707,392	689,410	1,396,802	...	...	...	...	...	...	...
59		Chingle ...	100,453	96,855	197,308	...	...	...	...	...	...	...
60		Chingle ...	68,566	63,113	131,679	...	...	...	...	...	...	...
61		Total ...	18,232	19,075	37,307	...	...	...	...	...	...	...

62	Chingleput	...	132,328	64,675	197,003	...	...	...	...	...	...	...
63	Chingleput	...	197,308	96,855	394,163	...	...	...	...	...	...	...
64	Chingleput	...	130,709	63,113	193,822	...	...	...	...	...	...	...
65	Chingleput	...	37,327	19,075	56,402	...	...	...	...	...	...	...
66	Chingleput	...	33,181	45,216	78,397	...	...	...	...	...	...	...
67	Chingleput	...	239,754	117,312	357,066	...	...	...	...	...	...	...
68	Chingleput	...	104,637	81,086	185,723	...	...	...	...	...	...	...
69	Chingleput	...	236,103	115,930	352,033	...	...	...	...	...	...	...
70	Chingleput	...	214,829	121,290	336,119	...	...	...	...	...	...	...
71	Chingleput	...	178,504	120,613	299,117	...	...	...	...	...	...	...
72	Chingleput	...	196,566	89,495	286,061	...	...	...	...	...	...	...
73	Chingleput	...	216,246	97,193	313,439	...	...	...	...	...	...	...
74	Chingleput	...	40,290	20,785	61,075	...	...	...	...	...	...	...
75	Chingleput	...	1,755,817	859,922	2,615,739	...	...	...	...	...	...	...
76	Chingleput	...	237,893	117,895	355,788	...	...	...	...	...	...	...
77	Chingleput	...	238,813	115,080	353,893	...	...	...	...	...	...	...
78	Chingleput	...	237,813	113,233	351,046	...	...	...	...	...	...	...
79	Chingleput	...	174,567	83,875	258,442	...	...	...	...	...	...	...
80	Chingleput	...	76,330	39,597	115,927	...	...	...	...	...	...	...
81	Chingleput	...	11,271	...	...	...	...	...	...	...	...	...
82	Chingleput	...	1,699,408	612,274	2,311,682	...	...	...	...	...	...	...
83	Chingleput	...	107,429	54,739	162,168	...	...	...	...	...	...	...
84	Chingleput	...	193,193	102,083	295,276	...	...	...	...	...	...	...
85	Chingleput	...	297,467	108,836	406,303	...	...	...	...	...	...	...
86	Chingleput	...	162,908	79,829	242,737	...	...	...	...	...	...	...
87	Chingleput	...	134,713	75,177	210,890	...	...	...	...	...	...	...
88	Chingleput	...	237,423	121,646	359,069	...	...	...	...	...	...	...
89	Chingleput	...	292,164	130,729	422,893	...	...	...	...	...	...	...
90	Chingleput	...	141,444	120,720	262,164	...	...	...	...	...	...	...
91	Chingleput	...	69,814	74,247	144,061	...	...	...	...	...	...	...
92	Chingleput	...	25,726	26,449	52,175	...	...	...	...	...	...	...
93	Chingleput	...	21,369	22,875	44,244	...	...	...	...	...	...	...
94	Chingleput	...	10,407	10,758	21,165	...	...	...	...	...	...	...
95	Chingleput	...	21,250	27,275	48,525	...	...	...	...	...	...	...
96	Chingleput	...	1,973,731	953,958	2,927,689	...	...	...	...	...	...	...
97	Chingleput	...	311,501	158,302	469,803	...	...	...	...	...	...	...
98	Chingleput	...	128,993	63,322	192,315	...	...	...	...	...	...	...
99	Chingleput	...	88,326	91,105	179,431	...	...	...	...	...	...	...
100	Chingleput	...	241,215	120,191	361,406	...	...	...	...	...	...	...
101	Chingleput	...	217,418	107,073	324,491	...	...	...	...	...	...	...

III.—(Continued.)

Deaths registered from Different Causes in the Rural Circles and Towns of the Madras Presidency during the year 1923.—(Continued.)

No.	Census 1921	District	Name of Rural Circle and Town.	Population for which Returns were received.		Injuries.		All other Causes.		Total Deaths from all Causes.		Ratio of Deaths per 1,000 of Population.			
				Males.	Females.	Total.		M.	F.	Total.	Total.	Cholera.	Small-pox.	Typhoid.	From all Causes.
						M.	F.								
173	170,293	Salem.	Krishnaghar	85,032	86,201	170,293	...	635	584	1,223	1,314	...	26	11.4	219
174	140,600		Triplicar	69,852	69,852	139,704	...	700	716	1,416	1,416	...	17	11.4	219
175	153,801		Uthangudi	77,985	77,815	155,800	...	608	641	1,249	1,249	...	19	11.4	219
176	161,000		Adich	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
177	161,000		Nannal	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
178	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
179	161,000		Thiruvannamalai	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
180	161,000		Thiruvannamalai	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
181	161,000		Thiruvannamalai	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
182	161,000		Thiruvannamalai	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
183	161,000	Salem.	Total	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
184	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
185	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
186	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
187	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
188	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
189	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
190	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
191	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
192	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
193	161,000	Salem.	Total	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
194	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
195	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
196	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
197	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
198	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
199	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
200	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
201	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
202	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
203	161,000	Salem.	Total	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
204	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
205	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
206	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
207	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
208	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
209	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
210	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
211	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
212	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
213	161,000	Salem.	Total	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
214	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
215	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
216	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
217	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
218	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
219	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
220	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
221	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219
222	161,000		Salem	80,255	80,745	161,000	...	608	641	1,249	1,249	...	19	11.4	219

198	113,713	North Canals.	Kundapore	55,875	57,535	113,713	...	257	240	497	779	701	1,480	...	0.4	49	26	0.5	139	121	130	
199	231,570		Udipi	114,329	117,241	231,570	...	1,009	1,037	2,046	1,640	1,559	3,199	...	0.6	16	22	0.5	143	132	138	
200	213,067		Mangalore	107,022	106,045	213,067	...	7	625	596	1,221	1,669	1,383	2,952	...	0.7	43	23	0.5	146	130	138
201	167,772		Uppanangudi	85,625	82,147	167,772	...	2	418	407	825	1,115	1,091	2,206	...	0.9	87	25	0.5	200	209	204
202	223,578		Kannur	111,687	110,891	222,578	...	2	499	435	934	1,537	1,264	2,801	...	0.6	40	31	0.4	187	113	125
203	29,712		M. T. Mangalore	15,183	14,524	29,712	...	...	196	187	383	317	288	605	...	0.06	29	36	0.7	208	198	203
	918,362		Total	459,729	458,633	918,362	...	18	3,004	2,872	5,876	6,957	6,286	13,243	...	0.6	41	26	0.5	151	137	144
204	238,118	North Canals.	Chorlath	123,190	125,928	248,118	...	680	573	1,253	1,520	1,290	2,810	...	0.5	43	10	0.3	124	102	113	
205	23,057		Korayam	60,740	62,308	123,057	...	1	296	244	540	824	671	1,495	...	1.0	61	0.4	0.1	135	107	121
206	153,538		Wyanad	76,228	77,310	153,538	...	2	42	29	71	689	480	1,119	...	0.5	71	0.4	0.2	90	86	98
207	242,751		Kannur	121,590	121,161	242,751	...	...	420	331	751	1,387	1,083	2,470	...	1.0	48	0.8	0.2	114	88	101
208	161,906		Chaluk	70,126	71,780	141,906	...	...	399	311	740	1,311	938	2,249	...	2.6	66	1.4	0.3	182	138	162
209	257,933		Ernad	143,463	142,471	287,936	...	...	1,085	961	2,046	2,926	2,304	5,130	...	1.7	68	1.8	0.3	194	161	178
210	232,062		Vannad	144,796	147,266	292,062	...	1	1,937	969	2,006	2,702	2,269	4,971	...	1.2	67	1.4	0.5	186	153	169
211	203,103		Chaluk	111,151	110,952	222,103	...	2	913	872	1,815	2,612	2,142	4,784	...	0.4	23	2.3	0.3	201	141	162
212	374,756		Pulicat	165,806	189,450	355,256	...	...	1,199	939	2,198	3,736	3,004	6,740	...	0.002	69	2.3	0.3	201	158	179
213	...		Arango	...	...	...	...	...	11	11	22	24	28	52	...	...	...	...	...	...	...	
214	...		Kannur	...	...	...	...	...	24	18	42	32	27	59	...	...	...	...	...	...	...	
215	30,504	North Canals.	M. T. Tellicherry	9,847	10,657	20,504	...	139	139	288	232	206	458	...	...	37	38	0.4	255	193	223	
216	47,932		M. T. Pulicat	24,064	23,868	47,932	...	403	517	920	657	485	1,142	...	...	6.2	10	1.1	0.3	273	203	258
217	50,732		M. T. Pulicat	15,071	15,675	30,742	...	1	236	235	471	392	404	796	...	0.06	26	67	1.8	0.3	260	257
218	13,840		M. T. Cochin	6,885	6,955	13,840	...	...	105	97	202	394	318	712	...	32.7	28	0.7	0.4	564	432	614
219	9,259		M. T. Cochin	5,206	4,053	9,259	...	8	...	250	471	389	960	749	...	10.6	11.5	6.9	1.5	747	588	608
220	...		Total	1,134,889	1,126,361	2,261,250	...	16	7,305	6,859	13,664	19,791	16,020	35,823	...	0.003	22	53	1.4	0.3	174	141
221	30,835,577	Total Madras Provi- dency	16,066,768	16,066,768	32,133,536	...	331	35,502	31,322	157,124	267,756	245,476	513,232	...	0.02	170	7.35	1.20	0.4	175	162	169

IV.

Deaths registered according to Age in the several Circles of the Madras Presidency during the year 1873.

1	2	3
Name of the District.	Born Dead.	Not ex-posed, under 1 year.
Ganjam District	413	1,000
Talags (R. C.)	284	505
Total. { Municipal Towns...	12	77
Zemindaries	111	1,111
Vizagapatam District	204	3,027
Talags (R. C.)	79	1,053
Total. { Municipal Towns...	47	872
Zemindaries	78	705
Godavery District	492	3,314
Talags (R. C.)	413	2,787
Total. { Municipal Towns...	45	208
Zemindaries	38	319
Krishna District	271	4,019
Talags (R. C.)	230	3,085
Total. { Municipal Towns...	24	135
Zemindaries	17	211
Nellore District	257	2,143
Talags (R. C.)	104	1,008
Total. { Municipal Towns...	8	54
Zemindaries	82	481
Madras Town (R. C.)	264	4,070
Chingleput District	686	4,363
Talags (R. C.)	539	4,030
Total. { Municipal Towns...	27	285
South Arcot District	455	4,229
Talags (R. C.)	413	4,106
Total. { Municipal Towns...	22	129
Tiruchinopoly District	303	3,955
Talags (R. C.)	337	3,610
Total. { Municipal Towns...	45	447
Tanjore District	1,753	10,359
Talags (R. C.)	1,753	5,438
Total. { Municipal Towns...	150	1,456

Madras District	360	2,131	3,662	974	940	1,549	2,044	2,237	2,692	4,359	21,937
Taluk (R. C.)	215	1,323	2,380	642	558	1,195	1,300	1,459	1,741	2,688	13,535
Municipal Towns	73	207	266	59	81	140	101	104	97	286	1,461
Zemindaries	19	461	1,016	273	361	623	643	674	844	1,484	6,838
Tinnevely District	648	4,047	5,239	1,107	1,005	1,767	1,808	2,102	2,343	4,812	24,914
Taluk (R. C.)	573	3,644	4,926	1,040	959	1,677	1,715	1,991	2,253	4,593	23,871
Municipal Towns	75	403	313	67	47	90	93	111	95	249	1,545
Kannool District	228	1,691	2,360	310	952	1,667	1,505	1,761	2,109	2,810	13,032
Taluk (R. C.)	209	1,550	2,215	875	874	1,519	1,385	1,634	2,072	2,669	14,860
Municipal Towns	19	141	154	35	78	143	120	109	127	241	1,172
Zemindaries	...	...	...	...	...	...	...	...	...	...	...
Cuddapah District	314	2,544	2,050	1,045	1,373	2,386	2,054	2,179	2,665	3,290	19,911
Taluk (R. C.)	314	2,438	2,017	1,022	1,314	2,256	1,997	3,102	2,580	3,270	19,810
Municipal Towns	...	105	43	23	59	130	57	77	86	20	601
Belary District	600	4,401	5,347	1,566	1,832	3,343	2,621	2,627	2,923	4,099	29,799
Taluk (R. C.)	513	3,950	4,943	1,485	1,530	2,947	2,450	2,487	2,795	4,403	27,717
Municipal Towns	82	870	942	69	90	175	124	103	135	272	1,762
Zemindaries	...	51	62	12	12	32	37	27	33	24	820
North Arcot District	690	9,121	7,749	1,991	2,369	3,982	3,784	3,136	3,567	5,317	45,116
Taluk (R. C.)	547	6,373	5,490	1,360	1,543	2,706	2,625	1,967	2,484	5,846	50,952
Municipal Towns	23	212	161	51	72	128	80	72	94	264	1,162
Zemindaries	235	2,536	2,098	610	684	1,153	1,025	1,077	1,369	2,217	13,012
Salem District	816	5,837	9,152	3,664	2,926	4,972	4,265	4,201	4,314	7,081	49,039
Taluk	796	8,068	8,814	3,612	2,554	4,196	4,208	4,127	4,513	6,907	47,825
Municipal Towns	...	269	333	52	72	76	68	74	71	174	1,254
Coimbatore District	293	3,355	4,416	1,677	1,226	2,100	2,255	2,385	2,433	3,742	23,963
Taluk (R. C.)	283	3,220	4,338	1,639	1,198	2,035	2,215	2,367	2,381	3,640	23,456
Municipal Towns	10	165	108	38	28	65	41	33	52	102	507
Neigherry District	8	187	115	59	66	115	115	50	59	55	880
Taluk (R. C.)	...	75	68	36	40	75	81	39	25	52	491
Municipal Towns	...	112	57	23	26	40	34	31	21	34	359
South Canara District	535	2,248	1,594	572	826	1,483	1,874	1,329	1,305	1,962	19,343
Taluk (R. C.)	534	2,104	1,499	549	792	1,432	1,815	1,275	1,253	1,894	18,538
Municipal Towns	21	144	95	23	34	61	59	41	52	72	805
Malabar District	695	3,530	5,867	1,934	2,512	4,550	4,568	3,510	2,962	6,094	35,323
Taluk (R. C.)	608	2,910	5,080	1,705	1,920	4,108	4,175	3,277	2,614	5,655	31,903
Municipal Towns	150	620	781	229	292	472	393	233	219	439	3,357
Total Madras Presidency	10,760	82,259	82,985	28,532	28,317	46,800	44,183	43,496	59,481	95,357	610,232

Deaths registered according to Classes in the Rural Circles and Towns of the Madras Presidency during the year 1873.

1		2		3		4				5				6						
No.		Population registered in 1872		Name of the District.		Population for which Returns were received.				Number of Deaths registered.				Ratio of Deaths per 1,000 of Population.						
						Ching.	Madras.	Bin.	Other.	Total.	Ching.	Madras.	Bin.	Other.	Total.	Ching.	Madras.	Bin.	Other.	Total.
1	1,383,076	Ganjum District ...	766	4,022	1,190,988	413	1,202,193	15	55	14,162	...	14,232	19.5	13.6	11.8	...	19.5	13.6	11.8	...
2	533,833	{ Taluqs (R. C.) ...	191	785	532,992	824	531,232	9	27	6,094	...	6,130	47.1	84.3	11.4	...	47.1	84.3	11.4	...
3	37,277	Total { Municipal Towns ...	566	2,488	34,209	8	37,257	5	21	679	...	706	8.8	19.8	11.4	...	8.8	19.8	11.4	...
4	817,876	{ Zemindaries ...	9	753	629,736	86	630,944	1	7	7,389	...	7,397	111.1	9.2	11.7	...	111.1	9.2	11.7	...
5	1,844,711	Vinayakam District ...	1,975	20,798	1,505,638	553	1,528,967	72	242	18,117	...	18,431	36.4	11.6	12.67	...	36.4	11.6	12.67	...
6	957,045	{ Taluqs (R. C.) ...	417	8,413	762,622	299	772,121	9	51	9,053	...	9,113	20.1	6.06	11.8	...	20.1	6.06	11.8	...
7	69,916	Total { Municipal Towns ...	1,291	4,030	63,823	197	63,916	63	162	1,600	...	1,825	48.7	35.2	25.06	...	48.7	35.2	25.06	...
8	837,750	{ Zemindaries ...	237	7,785	629,818	60	636,930	...	29	7,464	...	7,482	...	3.7	10.9	...	...	3.7	10.9	...
9	1,592,939	Golachery District ...	1,421	35,173	1,556,020	325	1,592,939	26	511	30,655	...	31,222	18.2	15.3	19.7	...	18.2	15.3	19.7	...
10	1,326,647	{ Taluqs (R. C.) ...	536	16,276	921,807	196	938,015	15	305	25,780	...	26,050	27.9	18.7	27.9	...	27.9	18.7	27.9	...
11	63,064	Total { Municipal Towns ...	775	7,270	61,973	46	63,044	10	191	1,469	...	1,670	13.9	26.2	26.7	...	13.9	26.2	26.7	...
12	203,828	{ Zemindaries ...	110	11,227	580,010	83	591,860	1	45	3,456	...	3,502	9.08	3.8	5.9	...	...	3.8	5.9	...
13	1,452,574	Kistna District ...	7,655	78,941	1,365,709	59	1,432,574	176	1,087	25,140	...	26,403	22.9	13.7	18.4	...	22.9	13.7	18.4	...
14	1,236,626	{ Taluqs (R. C.) ...	6,895	60,531	1,031,581	34	1,099,044	162	889	21,045	...	22,056	23.4	14.6	20.4	...	23.4	14.6	20.4	...
15	61,221	Total { Municipal Towns ...	473	7,811	45,916	21	54,221	8	139	951	...	1,008	16.9	17.7	20.7	...	16.9	17.7	20.7	...
16	163,127	{ Zemindaries ...	297	10,253	288,212	4	299,112	6	59	3,144	...	3,209	20.2	5.5	10.9	...	...	5.5	10.9	...
17	1,376,811	Nellore District ...	2,991	65,670	1,308,014	136	1,376,811	40	617	18,694	...	19,351	18.4	9.3	14.4	...	18.4	9.3	14.4	...
18	1,107,697	{ Taluqs (R. C.) ...	986	40,460	825,358	118	865,822	12	384	12,017	...	12,413	12.1	9.4	14.4	...	12.1	9.4	14.4	...
19	99,922	Total { Municipal Towns ...	627	4,740	24,545	10	29,322	7	74	870	...	951	11.1	15.6	13.07	...	11.1	15.6	13.07	...
20	239,182	{ Zemindaries ...	1,378	20,470	458,111	8	479,967	21	159	6,307	...	6,487	15.2	7.7	13.7	...	15.2	7.7	13.7	...
21	597,552	Madras Town (R. C.) ...	57,057	50,961	508,611	910	597,552	827	1,839	11,943	...	14,609	22.8	36.06	38.7	...	22.8	36.06	38.7	...
22	938,181	Chingleput District ...	15,141	23,192	899,833	18	938,181	121	271	18,102	...	18,494	7.9	11.6	20.1	...	7.9	11.6	20.1	...
23	900,567	{ Taluqs (R. C.) ...	15,126	22,077	863,612	18	900,567	120	256	17,283	...	17,639	7.9	11.5	20.01	...	7.9	11.5	20.01	...
24	87,327	Total { Municipal Towns ...	21	1,115	36,191	...	37,327	1	15	819	...	835	47.6	13.4	22.3	...	...	13.4	22.3	...
25	1,755,817	South Arcot District ...	30,712	44,337	1,680,323	215	1,755,817	258	437	22,015	...	24,390	8.4	10.2	14.05	...	8.4	10.2	14.05	...
26	1,715,327	{ Taluqs (R. C.) ...	29,407	42,611	1,643,254	215	1,715,327	239	428	22,989	...	23,856	8.1	10.3	13.9	...	8.1	10.3	13.9	...
27	40,240	Total { Municipal Towns ...	1,395	1,226	37,659	...	40,240	19	29	626	...	674	14.5	13.05	16.8	...	...	13.05	16.8	...
28	1,200,408	Trichinopoly District ...	52,075	32,024	1,115,919	390	1,200,408	833	386	20,747	...	21,965	15.9	12.05	18.5	...	15.9	12.05	18.5	...
29	1,112,607	{ Taluqs (R. C.) ...	...	...	...	...	1,112,607	631	205	19,188	...	20,024	...	...	...	...	...	...	...	...
30	87,801	Total { Municipal Towns ...	...	...	...	...	87,801	202	181	1,559	...	1,942	...	...	...	...	...	...	...	...
31	1,789,719	Madras District ...	1,149	1,789,719	1,789,719	640	1,789,719	1,149	1,826	36,067	...	39,042	19.9	21.3	21.9	...	19.9	21.3	21.9	...
32	184,012	Total { Municipal Towns ...	224	184,012	184,012	289	184,012	224	542	4,439	...	5,205	25.7	31.9	28.0	...	25.7	31.9	28.0	...
33	2,266,615	Madras District ...	2,266,615	2,266,615	2,266,615	191	2,266,615	409	1,011	19,917	...	21,337	6.7	7.6	9.6	...	6.7	7.6	9.6	...
34	1,203,379	{ Taluqs (R. C.) ...	94,179	94,179	94,179	191	94,179	211	365	12,959	...	13,535	12.6	10.6	14.4	...	12.6	10.6	14.4	...
35	64,852	Total { Municipal Towns ...	6,471	64,852	64,852	...	64,852	39	165	1,260	...	1,404	11.1	25.4	22.9	...	11.1	25.4	22.9	...
36	938,384	{ Zemindaries ...	94,183	1,111,297	1,111,297	24	1,254,013	169	481	5,698	...	6,338	3.1	5.2	6.1	...	...	5.2	6.1	...
37	1,693,959	Tinnevely District ...	1,693,959	1,693,959	1,693,959	9	1,693,959	1,220	1,086	22,608	...	24,914	11.8	12.8	15.0	...	11.8	12.8	15.0	...
38	1,644,405	{ Taluqs (R. C.) ...	81,709	1,465,740	1,465,740	3	1,644,405	1,082	1,086	23,371	...	23,371	10.7	12.3	14.5	...	10.7	12.3	14.5	...
39	49,554	Total { Municipal Towns ...	6,712	2,355	39,581	6	49,554	188	78	1,277	...	1,543	28.0	26.3	32.0	...	...	26.3	32.0	...
40	859,640	Kuruel District ...	107,320	847,807	847,807	63	959,840	62	1,809	14,161	...	16,032	16.1	16.7	16.7	...	16.1	16.7	16.7	...
41	881,558	{ Taluqs (R. C.) ...	85,103	792,735	792,735	38	881,558	52	1,251	13,557	...	14,860	14.1	14.6	17.1	...	14.1	14.6	17.1	...
42	32,374	Total { Municipal Towns ...	169	16,849	17															

Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871	Districts	Names of Rural Circles and Towns	Population for which Returns were received.		January.		February.		March.		April.		May.		June.	
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.
1	158,061	Tanjore.	Gonsoor ...	70,300	78,761	159,061	...	...	...	...	...	...	...	...	...	...	...
2	222,275		Barhamore ...	109,124	113,151	222,275	...	...	...	...	...	...	...	...	...	...	...
3	155,507		Chitode ...	77,633	76,433	154,066	...	...	...	...	...	...	...	...	...	...	...
4	17,587		M. T. Chinnole ...	7,341	8,346	15,687	...	...	...	...	...	...	...	...	...	...	...
5	21,670		M. T. Berampore ...	10,733	10,937	21,670	...	...	...	...	...	...	...	...	...	...	...
6	817,876		Zemindaries ...	347,431	283,662	631,093	...	...	...	...	...	...	...	...	...	...	...
	1,398,976		Total ...	631,013	571,180	1,202,193	...	...	...	...	...	...	...	...	...	...	...
7	155,429	Vizagapatnam.	Palcondah ...	73,573	71,190	144,763	...	...	...	...	...	...	...	...	...	...	...
8	135,606		Parvathipore ...	64,619	63,104	127,723	...	...	...	...	...	...	...	...	...	...	...
9	132,289		Dobbili ...	49,754	47,131	96,885	...	...	...	...	...	...	...	...	...	...	...
10	77,361		Satur ...	35,270	34,761	70,031	...	...	...	...	...	...	...	...	...	...	...
11	117,276		Vizagapatnam ...	42,192	39,132	81,324	...	...	...	...	...	...	...	...	...	...	...
12	97,675		Bimlipatnam ...	41,284	39,040	80,324	...	...	...	...	...	...	...	...	...	...	...
13	48,677	Godavery.	Vizagapatnam ...	23,556	22,469	46,025	...	...	...	...	...	...	...	...	...	...	...
14	165,489		Ankappilly ...	64,806	60,657	125,463	...	...	...	...	...	...	...	...	...	...	...
15	32,191		M. T. Vizagapatnam ...	15,703	16,485	32,188	...	...	...	...	...	...	...	...	...	...	...
16	8,744		M. T. Bimlipatnam ...	4,318	4,426	8,744	...	...	...	...	...	...	...	...	...	...	...
17	20,169		M. T. Vizagapatnam ...	9,936	10,233	20,169	...	...	...	...	...	...	...	...	...	...	...
18	8,812		M. T. Palcondah ...	4,413	4,399	8,812	...	...	...	...	...	...	...	...	...	...	...
19	837,750		Zemindaries ...	351,125	335,805	686,930	...	...	...	...	...	...	...	...	...	...	...
	1,844,711		Total ...	780,149	748,819	1,528,967	...	...	...	...	...	...	...	...	...	...	...
20	169,163	Godavery.	Rajahmundry ...	55,800	53,363	109,163	...	...	...	...	...	...	...	...	...	...	...
21	111,489		Peddapore ...	55,388	56,101	111,489	...	...	...	...	...	...	...	...	...	...	...
22	268,533		Ramachandrapore ...	102,136	101,447	203,583	...	...	...	...	...	...	...	...	...	...	...
23	295,855		Amalapur ...	105,045	101,819	206,864	...	...	...	...	...	...	...	...	...	...	...
24	177,876		Narasapur ...	40,768	38,108	78,876	...	...	...	...	...	...	...	...	...	...	...
25	111,333		Elloora ...	55,769	54,569	110,338	...	...	...	...	...	...	...	...	...	...	...
26	92,437	Godavery.	Undi ...	45,342	46,115	91,457	...	...	...	...	...	...	...	...	...	...	...
27	167,491		Tanuku ...	83,757	83,734	167,491	...	...	...	...	...	...	...	...	...	...	...
28	143,715		Yernagudem ...	72,866	72,849	145,715	...	...	...	...	...	...	...	...	...	...	...
29	17,839		M. T. Cocanada ...	9,055	8,744	17,839	...	...	...	...	...	...	...	...	...	...	...
30	19,733		M. T. Rajahmundry ...	10,455	9,283	19,738	...	...	...	...	...	...	...	...	...	...	...
31	25,487		M. T. Elloora ...	13,788	11,699	25,487	...	...	...	...	...	...	...	...	...	...	...
32	293,828		Zemindaries ...	102,374	101,451	203,825	...	...	...	...	...	...	...	...	...	...	...
	1,592,939		Total ...	803,603	789,335	1,592,938	...	...	...	...	...	...	...	...	...	...	...

33	106,452	Nellore.	Nandigama ...	54,184	52,268	106,452	...	...	...	...	...	...	...	...	...	...	...
34	83,051		Beavada ...	42,134	40,947	83,081	...	...	...	...	...	...	...	...	...	...	...
35	87,138		Gulivada ...	43,473	43,665	87,138	...	...	...	...	...	...	...	...	...	...	...
36	128,837		Masulipatnam ...	65,479	62,558	128,037	...	...	...	...	...	...	...	...	...	...	...
37	169,012		Repalli ...	86,248	83,644	169,892	...	...	...	...	...	...	...	...	...	...	...
38	143,029		Rajabett ...	73,747	69,882	143,629	...	...	...	...	...	...	...	...	...	...	...
39	120,519	Nellore.	Rajahmundry ...	61,680	58,939	120,619	...	...	...	...	...	...	...	...	...	...	...
40	64,508		Vonnakondah ...	32,965	31,543	64,508	...	...	...	...	...	...	...	...	...	...	...
41	120,558		Palnad ...	60,668	60,000	120,668	...	...	...	...	...	...	...	...	...	...	...
42	101,728		Crosur ...	52,384	49,344	101,728	...	...	...	...	...	...	...	...	...	...	...
43	108,054		Guntur ...	55,074	53,890	108,964	...	...	...	...	...	...	...	...	...	...	...
44	18,033		M. T. Guntur ...	9,074	8,959	18,033	...	...	...	...	...	...	...	...	...	...	...
45	96,188	Nellore.	M. T. Masulipatnam ...	17,268	18,920	36,188	...	...	...	...	...	...	...	...	...	...	...
46	163,127		Zemindaries ...	83,107	18,020	101,127	...	...	...	...	...	...	...	...	...	...	...
	1,452,374		Total ...	737,495	714,877	1,452,372	...	...	...	...	...	...	...	...	...	...	...
47	195,088	Nellore.	Onole ...	98,080	96,388	194,468	...	...	...	...	...	...	...	...	...	...	...
48	138,375		Kudakur ...	70,591	67,784	138,375	...	...	...	...	...	...	...	...	...	...	...
49	81,366		Kavali ...	42,011	39,325	81,336	...	...	...	...	...	...	...	...	...	...	...
50	149,947		Nellore ...	75,229	74,518	149,747	...	...	...	...	...	...	...	...	...	...	...
51	147,141		Gudur ...	76,637	70,504	147,141	...	...	...	...	...	...	...	...	...	...	...
52	68,865		Repur ...	33,131	30,754	63,885	...	...	...	...	...	...	...	...	...	...	...
53	103,892	Nellore.	Alankur ...	53,541	50,201	103,742	...	...	...	...	...	...	...	...	...	...	...
54	100,985		Udayagiri ...	52,519	48,469	100,988	...	...	...	...	...	...	...	...	...	...	...
55	127,253		Kanigiri ...	65,563	61,305	126,868	...	...	...	...	...	...	...	...	...	...	...
56	20,922		M. T. Nellore ...	14,879	15,043	29,922	...	...	...	...	...	...	...	...	...	...	...
57	239,192		Zemindaries ...	124,121	115,071	239,192	...	...	...	...	...	...	...	...	...	...	...
	1,376,811		Total ...	707,392	669,419	1,376,811	...	...	...	...	...	...	...	...	...	...	...
58	397,552	Madras Town.	Madras Town ...	194,676	202,876	397,552	...	...	...	...	...	...	...	...	...	...	...
59	104,210		Poonery ...	53,204	51,006	104,210	...	...	...	...	...	...	...	...	...	...	...
60	149,808		Trivellore ...	76,983	72,915	149,898	...	...	...	...	...	...	...	...	...	...	...
61	195,404		Sydapet ...	93,857	92,517	186,374	...	...	...	...	...	...	...	...	...	...	...
62	132,238		Chingampet ...	67,653	64,675	132,328	...	...	...	...	...	...	...	...	...	...	...
63	197,308		Madanantakam ...	100,453	96,855	197,308	...	...	...	...	...	...	...	...	...	...	...
64	130,709	Chingleput.	Conjeeveram ...	65,566	65,143	130,709	...	...	...	...	...	...	...	...	...	...	...
65	37,327		M. T. Conjeeveram ...	18,262	19,075	37,337	...	...	...	...	...	...	...	...	...	...	...
	938,184		Total ...	475,968	462,216	938,184	...	...	...	...	...	...	...	...	...	...	...
66	239,754	S. Arcot.	Tindivanam ...	122,412	117,342	239,754	...	...	...	...	...	...	...	...	...	...	...
67	164,557		Trinamally ...	83,671	81,036	164,707	...	...	...	...	...	...	...	...	...	...	...
68	236,108		Villapooram ...	120,178	115,930	236,108	...	...	...	...	...	...	...	...	...	...	...
69	244,559		Guddalore ...	123,289	121,290	244,579	...	...	...	...	...	...	...	...	...	...	...
70	239,123		Chellambaram ...	118,590	120,613	239,203	...	...	...	...	...	...	...	...	...	...	...
71	178,564		Vindobellam ...	89,495	89,069	178,564	...	...	...	...	...	...	...	...	...	...	...

No deaths from cholera.

No deaths from cholera.

No deaths from cholera.

No deaths from cholera.

No deaths from cholera.

VI.—(Continued.)
Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871	Districts	Names of Rural Circles and Towns.	Population for which Returns were received.		January.		February.		March.		April.		May.		June.	
				Males.	Females.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
72	196,566	S. Arcot.	Kallacorelli	52,375	97,193	...	...	...	...	...	...	...	...	...	...	...	...
73	216,246		Yellanasoor	100,599	105,647	...	...	...	...	...	...	...	...	...	...	...	...
74	40,280		M. T. Cuddalore	19,505	20,775	...	...	...	...	...	...	...	...	...	...	...	...
	1,755,517		Total	885,922	869,595	...	...	...	...	...	...	...	...	...	...	...	...
75	237,898	Trichinopoly.	Woodiarpotham	119,928	117,895	...	...	...	...	...	...	...	...	...	...	...	...
76	218,630		Trichinopoly	118,293	115,080	...	...	...	...	...	...	...	...	...	...	...	...
77	228,813		Kallitalai	133,515	133,299	...	...	...	...	...	...	...	...	...	...	...	...
78	257,174		Moosen	86,937	86,730	...	...	...	...	...	...	...	...	...	...	...	...
79	170,667	Tanjore.	Perambaloo	36,933	39,397	...	...	...	...	...	...	...	...	...	...	...	...
80	76,330		M. T. Trichinopoly	...	...	...	...	...	...	...	...	...	...	...	...	...	...
81	11,271		M. T. Sreerungum	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,219,403		Total	588,134	612,274	...	...	...	...	...	...	...	...	...	...	...	...
82	167,459	Tanjore.	Sheally	52,720	54,739	...	...	...	...	...	...	...	...	...	...	...	...
83	188,193		Mayavaram	96,110	102,083	...	...	...	...	...	...	...	...	...	...	...	...
84	307,407		Nannum	93,551	108,856	...	...	...	...	...	...	...	...	...	...	...	...
85	152,248		Nagapattinam	72,879	79,829	...	...	...	...	...	...	...	...	...	...	...	...
86	154,714	Tanjore.	Trichinopoly	76,177	78,637	...	...	...	...	...	...	...	...	...	...	...	...
87	237,423		Puttucottah	113,777	121,016	...	...	...	...	...	...	...	...	...	...	...	...
88	292,164		Tanjore	141,414	150,720	...	...	...	...	...	...	...	...	...	...	...	...
89	293,820		Combaconum	144,020	152,870	...	...	...	...	...	...	...	...	...	...	...	...
90	193,561	Tanjore.	Mannargoody	69,314	74,247	...	...	...	...	...	...	...	...	...	...	...	...
91	52,175		M. T. Tanjore	23,726	26,449	...	...	...	...	...	...	...	...	...	...	...	...
92	44,444		M. T. Combaconum	21,563	22,875	...	...	...	...	...	...	...	...	...	...	...	...
93	21,165		M. T. Mayavaram	10,407	10,758	...	...	...	...	...	...	...	...	...	...	...	...
94	48,525	Tanjore.	M. T. Nagapattinam	21,250	27,275	...	...	...	...	...	...	...	...	...	...	...	...
95	17,703		M. T. Mannargoody	5,524	9,179	...	...	...	...	...	...	...	...	...	...	...	...
	1,973,731		Total	953,968	1,019,763	...	...	...	...	...	...	...	...	...	...	...	...
96	311,501	Madurai.	Dindigul	133,169	154,302	...	...	...	...	...	...	...	...	...	...	...	...
97	128,933		Mayur	63,332	65,551	...	...	...	...	...	...	...	...	...	...	...	...
98	179,431		Madurai	88,326	91,105	...	...	...	...	...	...	...	...	...	...	...	...
99	241,215		Pennangalam	120,724	120,491	...	...	...	...	...	...	...	...	...	...	...	...
100	217,418	Madurai.	Poreaculum	107,072	110,345	...	...	...	...	...	...	...	...	...	...	...	...
101	184,831		Puloi	91,077	93,754	...	...	...	...	...	...	...	...	...	...	...	...
102	57,387		Settiamandai Villages	26,224	25,783	...	...	...	...	...	...	...	...	...	...	...	...
103	12,865		M. T. Madurai	6,540	6,325	...	...	...	...	...	...	...	...	...	...	...	...
	1,973,731		Total	953,968	1,019,763	...	...	...	...	...	...	...	...	...	...	...	...

No.	Population according to Census of 1871	Districts	Names of Rural Circles and Towns.	Population for which Returns were received.		January.		February.		March.		April.		May.		June.	
				Males.	Females.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
105	504,131	Ramanad Zemindary	Shivagunga do.	246,574	257,557	...	...	...	...	...	...	...	...	...	...	...	...
106	434,253		Total	208,897	225,255	...	...	...	...	...	...	...	...	...	...	...	...
	2,266,615		Total	1,112,066	1,154,549	...	...	...	...	...	...	...	...	...	...	...	...
107	170,954	Tinnevely.	Surivilipattur	88,268	88,691	...	...	...	...	...	...	...	...	...	...	...	...
108	156,862		Sattr	78,467	78,395	...	...	...	...	...	...	...	...	...	...	...	...
109	285,511		Ottapidram	142,862	142,949	...	...	...	...	...	...	...	...	...	...	...	...
110	234,346		Tenkara	112,704	121,642	...	...	...	...	...	...	...	...	...	...	...	...
111	178,078	Tinnevely.	Nangunery	87,025	91,053	...	...	...	...	...	...	...	...	...	...	...	...
112	163,215		Anbasamandram	77,640	85,575	...	...	...	...	...	...	...	...	...	...	...	...
113	123,001		Tenkasi	61,010	60,991	...	...	...	...	...	...	...	...	...	...	...	...
114	182,018		Sankaramar Kovil	90,214	91,804	...	...	...	...	...	...	...	...	...	...	...	...
115	145,120	Tinnevely.	Tinnevely	73,551	71,469	...	...	...	...	...	...	...	...	...	...	...	...
116	21,044		M. T. Tinnevely	10,549	10,495	...	...	...	...	...	...	...	...	...	...	...	...
117	17,945		M. T. Palamcottah	8,847	9,038	...	...	...	...	...	...	...	...	...	...	...	...
118	10,565		M. T. Tuticorin	5,283	5,282	...	...	...	...	...	...	...	...	...	...	...	...
	1,693,959		Total	836,515	857,444	...	...	...	...	...	...	...	...	...	...	...	...
119	101,866	Kannadkottur	Nasdikottur	52,269	49,507	...	...	...	...	...	...	...	...	...	...	...	...
120	92,665		Manakapur	47,213	46,452	...	...	...	...	...	...	...	...	...	...	...	...
121	115,747		Chumbam	58,765	56,982	...	...	...	...	...	...	...	...	...	...	...	...
122	71,066		Sirvelli	36,219	34,817	...	...	...	...	...	...	...	...	...	...	...	...
123	98,944	Cuddapah.	Keikundla	49,984	48,860	...	...	...	...	...	...	...	...	...	...	...	...
124	173,434		Puttikondah	89,868	83,566	...	...	...	...	...	...	...	...	...	...	...	...
125	120,616		Rumacottah	62,388	58,028	...	...	...	...	...	...	...	...	...	...	...	...
126	107,320		Nurdal	54,552	52,768	...	...	...	...	...	...	...	...	...	...	...	...
127	25,579	Cuddapah.	M. T. Kurnool	12,496	13,083	...	...	...	...	...	...	...	...	...	...	...	...
128	7,265		M. T. Chumbam	3,656	3,639	...	...	...	...	...	...	...	...	...	...	...	...
129	45,208		Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	959,640		Total	467,640	446,792	...	...	...	...	...	...	...	...	...	...	...	...
129	102,743	Cuddapah.	Paddatoo	52,224	50,520	...	...	...	...	...	...	...	...	...	...	...	...
130	93,051		Badavil	48,067	44,984	...	...	...	...	...	...	...	...	...	...	...	...
131	76,687		Sidkott	39,250	37,417	...	...	...	...	...	...	...	...	...	...	...	...
132	145,180		Pullampet	74,565	70,615	...	...	...	...	...	...	...	...	...	...	...	...
133	145,591	Cuddapah.	Vellipand	74,610	70,951	...	...	...	...	...	...	...	...	...	...	...	...
134	128,162		Roracottah	66,306	61,856	...	...	...	...	...	...	...	...	...	...	...	...
135	135,468		Medinapally	69,102	66,366	...	...	...	...	...	...	...	...	...	...	...	...
136	140,948		Kudri	72,693	68,255	...	...	...	...	...	...	...	...	...	...	...	...
137	110,405	Cuddapah.	Palivendla	57,284	53,121	...	...	...	...	...	...	...	...	...	...	...	...
138	109,965		Jandamadugu	56,444	53,521	...	...	...	...	...	...	...	...	...	...	...	...
139	146,738		Cuddapah	74,496	72,242	...	...	...	...	...	...	...	...	...	...	...	...
140	16,275		M. T. Cuddapah	8,329	7,946	...	...	...	...	...	...	...	...	...	...	...	...
	1,351,194		Total	698,400	657,794	...	...	...	...	...	...	...	...	...	...	...	...
141	130,478	Bellary.	Bellary	66,704	63,774	...	...	...	...	...	...	...	...	...	...	...	...
142	158,860		Adoni	81,690	77,170	...	...	...	...	...	...	...	...	...	...	...	...
143	98,230		Alur	51,052	47,178	...	...	...	...	...	...	...	...	...	...	...	...

VI.—(Continued.)

Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.			
144	137,834	Madr.	Ghoochy ...	71,693	68,145	139,838																		
145	117,211		Tadipatri ...	59,945	57,265	117,211																		
146	92,849		Anantapur ...	51,095	46,748	97,843																		
147	93,424		Hospett ...	47,605	45,812	93,417																		
148	120,008		Dharmavaram ...	63,055	57,513	120,568																		
149	88,751		Penackondah ...	46,182	42,572	88,754																		
150	87,895		Hindupur ...	45,200	42,695	87,895																		
151	79,154		Kadavoor ...	40,838	38,620	79,458																		
152	87,773		Rovadoor ...	45,988	41,841	87,829																		
153	93,284		Kudlighi ...	47,351	45,877	93,228																		
154	85,729	Madr.	Hunneahally ...	43,947	41,792	85,739																		
155	89,533		Hunneahally ...	45,536	44,002	89,538																		
156	27,185		M. T. Bellary ...	27,185	24,581	51,766																		
157	51,765		M. T. Bellary ...	11,090	11,123	22,213																		
158	22,723		M. T. Adoni ...	3,545	3,185	6,730																		
159	6,730		M. T. Ghoochy ...	2,438	2,480	4,918																		
160	4,918		M. T. Arantapur ...	7,534	7,452	14,986																		
161	14,985		Zamindari ...																					
162	90,623	Total ...	800,173	807,833	1,608,006																			
163	204,191	North Arcot.	Chandragiri ...	51,042	48,556	99,598																		
164	153,507		Walajahpett ...	103,172	100,229	203,401																		
165	137,391		Wandawash ...	77,197	76,310	153,507																		
166	141,134		Arcoot ...	78,564	78,327	156,891																		
167	142,150		Vellore ...	70,850	70,284	141,134																		
168	162,980		Behar ...	51,820	54,330	106,150																		
169	60,211		Gudlathum ...	32,466	30,214	62,680																		
170	213,043		Palmanair ...	30,702	29,509	60,211																		
171	38,022		Chittoor ...	103,588	103,457	207,045																		
172	12,163		M. T. Vellore ...	18,139	19,883	38,022																		
173	63,993	North Arcot.	M. T. Walajahpett ...	5,831	6,272	12,103																		
174	2,015,273		Zamindari ...	338,307	325,639	663,946																		
175	176,238		Total ...	1,020,678	994,600	2,015,278																		
176	130,890	Madr.	Kistnagerry ...	85,032	85,201	170,233																		
177	153,801		Triplicator ...	93,812	96,988	190,800																		
178	104,068		Uthangerry ...	75,986	77,815	153,801																		
179	251,553		Athoor ...	80,256	83,750	164,006																		
180	843,763		Varanasi ...	127,880	138,129	266,009																		
181	1,020,678		Salem ...	170,018	173,775	343,793																		
182	176,238		Total ...	1,020,678	994,600	2,015,278																		
183	130,890	Madr.	Kistnagerry ...	85,032	85,201	170,233																		
184	153,801		Triplicator ...	93,812	96,988	190,800																		
185	104,068		Uthangerry ...	75,986	77,815	153,801																		
186	251,553		Athoor ...	80,256	83,750	164,006																		
187	843,763		Varanasi ...	127,880	138,129	266,009																		
188	1,020,678		Salem ...	170,018	173,775	343,793																		
189	176,238		Total ...	1,020,678	994,600	2,015,278																		
190	130,890	Madr.	Kistnagerry ...	85,032	85,201	170,233																		
191	153,801		Triplicator ...	93,812	96,988	190,800																		
192	104,068		Uthangerry ...	75,986	77,815	153,801																		
193	251,553		Athoor ...	80,256	83,750	164,006																		
194	843,763		Varanasi ...	127,880	138,129	266,009																		
195	1,020,678		Salem ...	170,018	173,775	343,793																		
196	176,238		Total ...	1,020,678	994,600	2,015,278																		
197	130,890	Madr.	Kistnagerry ...	85,032	85,201	170,233																		
198	153,801		Triplicator ...	93,812	96,988	190,800																		
199	104,068		Uthangerry ...	75,986	77,815	153,801																		
200	251,553		Athoor ...	80,256	83,750	164,006																		
201	843,763		Varanasi ...	127,880	138,129	266,009																		
202	1,020,678		Salem ...	170,018	173,775	343,793																		
203	176,238		Total ...	1,020,678	994,600	2,015,278																		
204	130,890	Madr.	Kistnagerry ...	85,032	85,201	170,233																		
205	153,801		Triplicator ...	93,812	96,988	190,800																		
206	104,068		Uthangerry ...	75,986	77,815	153,801																		
207	251,553		Athoor ...	80,256	83,750	164,006																		
208	843,763		Varanasi ...	127,880	138,129	266,009																		
209	1,020,678		Salem ...	170,018	173,775	343,793																		
210	176,238		Total ...	1,020,678	994,600	2,015,278																		
211	130,890	Madr.	Kistnagerry ...	85,032	85,201	170,233																		
212	153,801		Triplicator ...	93,812	96,988	190,800																		
213	104,068		Uthangerry ...	75,986	77,815	153,801																		
214	251,553		Athoor ...	80,256	83,750	164,006																		
215	843,763		Varanasi ...	127,880	138,129	266,009																		
216	1,020,678		Salem ...	170,018	173,775	343,793																		
217	176,238		Total ...	1,020,678	994,600	2,015,278																		
218	130,890	Madr.	Kistnagerry ...	85,032	85,201	170,233																		
219	153,801		Triplicator ...	93,812	96,988	190,800																		
220	104,068		Uthangerry ...	75,986	77,815	153,801																		
221	251,553		Athoor ...	80,256	83,750	164,006																		
222	843,763		Varanasi ...	127,880	138,129	266,009																		
223	1,020,678		Salem ...	170,018	173,775	343,793																		
224	176,238		Total ...	1,020,678	994,600	2,015,278																		
225	130,890	Madr.	Kistnagerry ...	85,032	85,201	170,233																		
226	153,801		Triplicator ...	93,812	96,988	190,800																		
227	104,068		Uthangerry ...	75,986	77,815	153,801																		
228	251,553		Athoor ...	80,256	83,750	164,006																		
229	843,763		Varanasi ...	127,880	138,129	266,009																		

VI.—(Continued.)
Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	District.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
211	5,986	Madras—(Contd.)	Cochin ...	3,142	2,844	5,986	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
212	225,103		Puducherry ...	144,151	150,952	295,103	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
213	371,156		Pondicherry ...	186,306	189,150	374,752	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
214	...		Amjengo ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
215	...		Tanjavur ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
216	20,504		M. T. Pallicherry ...	9,847	10,657	20,504	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
217	47,962		M. T. Calicut ...	24,624	23,338	47,962	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
218	30,752		M. T. Palghat ...	15,074	15,678	30,752	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
219	13,840		M. T. Cochin ...	6,295	6,825	13,840	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
220	9,259		M. T. Cannanore ...	5,206	4,053	9,259	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	2,261,250		Total ...	1,134,889	1,126,361	2,261,250	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
	30,835,577		Total Madras Presidency ...	15,221,079	15,665,763	30,886,842	196	175	371	101	63	165	15	12	27	13	10	23	28	16	46	10	19	29

VI.—(Continued.)
Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.		August.		September.		October.		November.		December.		Total.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.		
1	158,051	Godevady.	Godevady ...	79,300	78,751	158,051	6	1	7	2	2	...	...	...	...	...	...	14	6	20
2	222,275		Bechampore ...	109,124	113,151	222,275	1	...	1	...	...	...	...	...	...	...	...	5	1	6
3	153,507		Chinnole ...	77,084	76,423	153,507	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	16,887		M. T. Chinnole ...	7,341	8,246	15,587	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	21,670		M. T. Bechampore ...	10,733	10,937	21,670	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	817,876		Zemindaries ...	347,431	289,662	637,093	2	...	2	...	...	...	...	...	...	...	...	...	26	30
	1,388,976		Total...	631,013	571,180	1,202,193	9	1	10	2	3	5	...	...	...	...	...	45	38	83
7	155,690	Vizagapatnam.	Palcondah ...	73,573	71,480	145,053	...	...	...	...	...	...	...	...	...	...	...	...	...	...
8	136,606		Theravipore ...	64,619	63,104	127,723	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	139,289		Robbly ...	49,754	47,134	96,888	...	...	...	...	...	...	...	...	...	...	...	...	...	...
10	77,254		Salar ...	35,270	34,751	70,021	...	...	...	...	...	...	...	...	...	...	...	...	...	...
11	117,276		Vizagapatnam ...	62,233	39,432	101,665	...	...	...	...	...	...	...	...	...	...	...	...	...	...
12	37,375		Bimlipatnam ...	11,231	39,040	50,271	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	48,637		Vizagapatnam ...	28,533	29,469	58,002	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	105,420		Ankapilly ...	61,636	60,657	122,293	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	32,191		M. T. Vizagapatnam ...	15,703	16,388	32,091	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	8,744		M. T. Bimlipatnam ...	4,318	4,426	8,744	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	20,169		M. T. Vizagapatnam ...	9,936	10,233	20,169	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	8,812		M. T. Palcondah ...	4,413	4,399	8,812	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	937,750		Zemindaries ...	351,125	335,805	686,930	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,844,711		Total...	780,142	749,818	1,529,960	...	...	...	...	...	...	...	...	...	...	...	...	...	...
20	109,163	Godevady.	Balahundry ...	55,800	63,363	119,163	...	...	...	...	...	...	...	...	...	...	...	...	...	...
21	111,480		Peddapore ...	55,333	56,101	111,434	...	...	...	...	...	...	...	...	...	...	...	...	...	...
22	203,583		Ramachandrapore ...	102,136	101,447	203,583	...	...	...	...	...	...	...	...	...	...	...	...	...	...
23	291,855		Amalapuram ...	195,045	101,840	296,885	...	...	...	...	...	...	...	...	...	...	...	...	...	...
24	177,576		Narasapore ...	89,703	88,108	177,811	...	...	...	...	...	...	...	...	...	...	...	...	...	...
25	111,888		Ellore ...	56,789	54,599	111,388	...	...	...	...	...	...	...	...	...	...	...	...	...	...
26	92,457		Udi ...	46,312	46,115	92,427	...	...	...	...	...	...	...	...	...	...	...	...	...	...
27	167,491		Tanuku ...	83,757	82,734	166,491	...	...	...	...	...	...	...	...	...	...	...	...	...	...
28	145,713		Yerragundem ...	72,806	72,549	145,355	...	...	...	...	...	...	...	...	...	...	...	...	...	...
29	17,839		M. T. Coimada ...	9,095	9,095	18,190	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	19,738		M. T. Balahundry ...	10,455	9,283	19,738	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	25,487		M. T. Balahundry ...	13,738	11,699	25,437	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	203,823		Zemindaries ...	102,374	101,454	203,828	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,512,939		Total...	803,603	759,335	1,562,938	...	...	...	...	...	...	...	...	...	...	...	...	...	...

VI.—(Continued.)

Deaths registered from Cholera in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	District.	Name of Rural Circle and Town.	Population of which Returns were received.		July.		August.		September.		October.		November.		December.		Total.	
				Males.	Females.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
33	107,452	Kistn.	Nandigram ..	64,184	32,268	...	...	...	...	...	...	...	...	...	...	...	...	...	...
34	83,081		Bezveedu ..	42,141	40,940	...	...	...	...	...	...	...	...	...	...	...	...	...	...
35	87,138		G. diwade ..	43,173	43,965	...	...	...	...	...	...	...	...	...	...	...	...	...	...
36	128,837		Machipuram ..	65,479	63,358	...	...	...	...	...	...	...	...	...	...	...	...	...	...
37	169,012		Rupathi ..	88,563	80,449	...	...	...	...	...	...	...	...	...	...	...	...	...	...
38	143,029		Palahalli ..	73,747	69,282	...	...	...	...	...	...	...	...	...	...	...	...	...	...
39	129,619		T. V. V. ..	63,630	55,989	...	...	...	...	...	...	...	...	...	...	...	...	...	...
40	61,508		T. V. V. ..	30,553	30,955	...	...	...	...	...	...	...	...	...	...	...	...	...	...
41	120,058		G. diwade ..	62,384	49,644	...	...	...	...	...	...	...	...	...	...	...	...	...	...
42	101,728		G. diwade ..	53,014	48,890	...	...	...	...	...	...	...	...	...	...	...	...	...	...
43	108,634	Nellore.	Guntur ..	55,074	48,033	...	...	...	...	...	...	...	...	...	...	...	...	...	...
44	18,033		M. T. Guntur ..	9,077	8,956	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	36,198		M. T. Masulipatam ..	17,268	18,920	...	...	...	...	...	...	...	...	...	...	...	...	...	...
46	163,127		Zamindari ..	83,167	80,960	...	...	...	...	...	...	...	...	...	...	...	...	...	...
47	1,432,374		Total ..	737,495	714,879	...	...	...	...	...	...	...	...	...	...	...	...	...	...
48	193,664	Chingleput.	Onole ..	98,689	96,288	...	...	...	...	...	...	...	...	...	...	...	...	...	...
49	194,875		Kandukur ..	70,601	67,784	...	...	...	...	...	...	...	...	...	...	...	...	...	...
50	91,306		Kavali ..	45,011	36,323	...	...	...	...	...	...	...	...	...	...	...	...	...	...
51	148,847		N. diwade ..	75,229	74,518	...	...	...	...	...	...	...	...	...	...	...	...	...	...
52	147,141		G. diwade ..	76,637	70,504	...	...	...	...	...	...	...	...	...	...	...	...	...	...
53	108,603		B. diwade ..	53,181	50,754	...	...	...	...	...	...	...	...	...	...	...	...	...	...
54	100,985		Alankur ..	53,341	53,261	...	...	...	...	...	...	...	...	...	...	...	...	...	...
55	127,258		Udayagiri ..	63,883	61,303	...	...	...	...	...	...	...	...	...	...	...	...	...	...
56	59,922		W. diwade ..	14,873	15,043	...	...	...	...	...	...	...	...	...	...	...	...	...	...
57	230,192		M. T. Nellore ..	124,121	115,071	...	...	...	...	...	...	...	...	...	...	...	...	...	...
58	1,974,511	Madras Town.	Zamindari ..	797,392	639,419	...	...	...	...	...	...	...	...	...	...	...	...	...	...
59	397,552		Total ..	1,910,776	202,976	...	...	...	...	...	...	...	...	...	...	...	...	...	...
60	104,270		P. diwade ..	53,234	51,006	...	...	...	...	...	...	...	...	...	...	...	...	...	...
61	149,898		T. diwade ..	76,953	72,915	...	...	...	...	...	...	...	...	...	...	...	...	...	...
62	183,404		S. diwade ..	95,857	92,546	...	...	...	...	...	...	...	...	...	...	...	...	...	...
63	132,529		Chingleput ..	67,633	64,675	...	...	...	...	...	...	...	...	...	...	...	...	...	...
64	137,408		Madras Town ..	100,253	96,855	...	...	...	...	...	...	...	...	...	...	...	...	...	...
65	130,700		Chingleput ..	67,656	66,143	...	...	...	...	...	...	...	...	...	...	...	...	...	...
66	37,327		M. T. Chingleput ..	18,252	19,075	...	...	...	...	...	...	...	...	...	...	...	...	...	...
67	939,184		Total ..	475,903	462,216	...	...	...	...	...	...	...	...	...	...	...	...	...	...

No deaths from cholera.

66	239,754	T. diwade.	T. diwade ..	129,412	117,342	...	...	...	...	...	...	...	...	...	...	...	...	...	...
67	164,657		Trinamali ..	83,671	81,086	...	...	...	...	...	...	...	...	...	...	...	...	...	...
68	244,550		Villaputur ..	120,178	115,930	...	...	...	...	...	...	...	...	...	...	...	...	...	...
69	230,133		Cuddalore ..	123,269	121,290	...	...	...	...	...	...	...	...	...	...	...	...	...	...
70	178,604		Chellambaram ..	118,520	120,613	...	...	...	...	...	...	...	...	...	...	...	...	...	...
71	196,566		Vindaluru ..	89,495	80,009	...	...	...	...	...	...	...	...	...	...	...	...	...	...
72	216,216		Kullacoorchi ..	93,373	97,193	...	...	...	...	...	...	...	...	...	...	...	...	...	...
73	40,290		Yellavasar ..	109,599	106,647	...	...	...	...	...	...	...	...	...	...	...	...	...	...
74	1,755,817		M. T. Cuddalore ..	19,505	20,785	...	...	...	...	...	...	...	...	...	...	...	...	...	...
75	237,892	T. diwade.	Total ..	885,922	869,895	...	...	...	...	...	...	...	...	...	...	...	...	...	...
76	218,660		Woodward ..	119,993	117,895	...	...	...	...	...	...	...	...	...	...	...	...	...	...
77	228,313		Trichinopoly ..	113,233	115,080	...	...	...	...	...	...	...	...	...	...	...	...	...	...
78	257,174		Kullitala ..	123,875	133,999	...	...	...	...	...	...	...	...	...	...	...	...	...	...
79	170,567		Mooseri ..	83,887	86,780	...	...	...	...	...	...	...	...	...	...	...	...	...	...
80	76,530		P. diwade ..	36,933	39,597	...	...	...	...	...	...	...	...	...	...	...	...	...	...
81	11,271		M. T. Trichinopoly ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
82	107,459		M. T. Srerangam ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
83	108,193		Total ..	585,134	612,274	...	...	...	...	...	...	...	...	...	...	...	...	...	...
84	207,407	T. diwade.	S. diwade ..	52,730	54,739	...	...	...	...	...	...	...	...	...	...	...	...	...	...
85	152,208		Mayavaram ..	96,110	102,083	...	...	...	...	...	...	...	...	...	...	...	...	...	...
86	174,714		Nanniam ..	98,551	108,856	...	...	...	...	...	...	...	...	...	...	...	...	...	...
87	237,423		Negapatam ..	72,379	79,829	...	...	...	...	...	...	...	...	...	...	...	...	...	...
88	292,164		Trichinopoly ..	76,177	78,537	...	...	...	...	...	...	...	...	...	...	...	...	...	...
89	236,590		Pattinoti ..	115,777	121,046	...	...	...	...	...	...	...	...	...	...	...	...	...	...
90	143,561		Tanjore ..	141,444	150,720	...	...	...	...	...	...	...	...	...	...	...	...	...	...
91	52,175		Connacon ..	134,026	152,570	...	...	...	...	...	...	...	...	...	...	...	...	...	...
92	44,444		M. T. Tanjore ..	69,314	74,217	...	...	...	...	...	...	...	...	...	...	...	...	...	...
93	21,165		M. T. Connacon ..	25,728	26,449	...	...	...	...	...	...	...	...	...	...	...	...	...	...
94	48,535	Madras.	M. T. Mayavaram ..	21,660	22,875	...	...	...	...	...	...	...	...	...	...	...	...	...	...
95	17,703		M. T. Negapatam ..	10,407	10,758	...	...	...	...	...	...	...	...	...	...	...	...	...	...
96	311,501		M. T. Tanjore ..	21,250	27,275	...	...	...	...	...	...	...	...	...	...	...	...	...	...
97	128,983		M. T. Connacon ..	8,524	9,179	...	...	...	...	...	...	...	...	...	...	...	...	...	...
98	179,431		Total ..	953,968	1,019,763	...	...	...	...	...	...	...	...	...	...	...	...	...	...
99	241,215		Dindigul ..	153,199	158,302	...	...	...	...	...	...	...	...	...	...	...	...	...	...
100	217,418		Mayar ..	63,332	65,651	...	...	...	...	...	...	...	...	...	...	...	...	...	...
101	184,531		Madras ..	88,326	91,105	...	...	...	...	...	...	...	...	...	...	...	...	...	...
102	61,987		Trinamali ..	120,724	120,491	...	...	...	...	...	...	...	...	...	...	...	...	...	...
103	12,835		Peracotum ..	107,073	110,315	...	...	...	...	...	...	...	...	...	...	...	...	...	...
104	...		P. diwade ..	91,077	93,754	...	...	...	...	...	...	...	...	...	...	...	...	...	...

No deaths from cholera.

VI.—(Continued.)

136	140,918	Kadri ...	72,695	68,255	110,373																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	</
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[illegible]

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1878.

No.	Population of Districts	Names of Rural Circles and Towns.	Population for which Returns were received.		January.		February.		March.		April.		May.		June.	
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.
1	158,061	Coimbatore	79,300	78,761	158,061	1	6	7	1	6	7	1	6	7	1	6
2	222,275	Berhampore	109,124	113,151	222,275	18	21	39	18	21	39	18	21	39	18	21
3	153,597	Chingleput	77,684	75,913	153,597	1	1	2	1	1	2	1	1	2	1	1
4	176,587	M. T. Chingleput	7,811	8,246	16,057	1	1	2	1	1	2	1	1	2	1	1
5	21,675	M. T. Chingleput	10,783	10,892	21,675	1	1	2	1	1	2	1	1	2	1	1
6	817,576	Zemindaries	347,431	283,382	630,813	4	9	13	4	9	13	4	9	13	4	9
7	1,388,976	Total	631,013	571,180	1,202,193	23	35	58	24	36	60	25	37	62	26	38
8	157,609	Palestine	78,373	79,236	157,609	10	12	22	10	12	22	10	12	22	10	12
9	133,465	Palestine	64,619	68,846	133,465	1	1	2	1	1	2	1	1	2	1	1
10	139,289	Debbin	49,751	47,131	96,882	1	1	2	1	1	2	1	1	2	1	1
11	77,364	Salur	34,270	30,021	64,291	1	1	2	1	1	2	1	1	2	1	1
12	117,276	Vizianagaram	42,192	39,026	81,218	1	1	2	1	1	2	1	1	2	1	1
13	97,675	Budipetam	41,291	39,026	80,317	1	1	2	1	1	2	1	1	2	1	1
14	48,637	Vizianagaram	22,356	22,439	44,795	1	1	2	1	1	2	1	1	2	1	1
15	165,469	Arakapally	64,606	60,037	124,643	1	1	2	1	1	2	1	1	2	1	1
16	32,101	M. T. Vizianagaram	15,703	16,436	32,139	1	1	2	1	1	2	1	1	2	1	1
17	8,714	M. T. Vizianagaram	4,318	4,396	8,714	1	1	2	1	1	2	1	1	2	1	1
18	27,169	M. T. Vizianagaram	9,936	10,233	20,169	1	1	2	1	1	2	1	1	2	1	1
19	837,720	Zemindaries	4,413	4,339	8,752	1	1	2	1	1	2	1	1	2	1	1
20	1,824,711	Total	780,149	748,818	1,528,967	77	97	174	77	97	174	77	97	174	77	97
21	169,163	Beinamundry	83,800	85,363	169,163	1	1	2	1	1	2	1	1	2	1	1
22	111,189	Pudupore	55,388	56,101	111,489	1	1	2	1	1	2	1	1	2	1	1
23	208,583	Rameswaram	101,437	107,146	208,583	1	1	2	1	1	2	1	1	2	1	1
24	203,583	Amalapuram	101,840	101,743	203,583	1	1	2	1	1	2	1	1	2	1	1
25	177,876	Narasipore	88,103	89,773	177,876	1	1	2	1	1	2	1	1	2	1	1
26	111,888	Ellore	56,789	55,099	111,888	1	1	2	1	1	2	1	1	2	1	1
27	92,167	Undy	46,342	45,825	92,167	1	1	2	1	1	2	1	1	2	1	1
28	167,401	Tanuku	83,734	83,734	167,468	1	1	2	1	1	2	1	1	2	1	1
29	145,715	Yernagallu	72,866	72,849	145,715	1	1	2	1	1	2	1	1	2	1	1
30	17,839	M. T. Comand	9,095	8,744	17,839	1	1	2	1	1	2	1	1	2	1	1
31	19,738	M. T. Rajahmundry.	10,155	9,233	19,388	1	1	2	1	1	2	1	1	2	1	1
32	25,487	M. T. Ellore	13,783	11,039	24,822	1	1	2	1	1	2	1	1	2	1	1
33	203,828	Zemindaries	102,374	101,451	203,825	1	1	2	1	1	2	1	1	2	1	1
34	1,822,939	Total	803,008	789,836	1,592,844	215	186	401	211	181	392	207	179	386	207	179
35	169,163	Beinamundry	83,800	85,363	169,163	1	1	2	1	1	2	1	1	2	1	1
36	111,189	Pudupore	55,388	56,101	111,489	1	1	2	1	1	2	1	1	2	1	1
37	208,583	Rameswaram	101,437	107,146	208,583	1	1	2	1	1	2	1	1	2	1	1
38	203,583	Amalapuram	101,840	101,743	203,583	1	1	2	1	1	2	1	1	2	1	1
39	177,876	Narasipore	88,103	89,773	177,876	1	1	2	1	1	2	1	1	2	1	1
40	111,888	Ellore	56,789	55,099	111,888	1	1	2	1	1	2	1	1	2	1	1
41	92,167	Undy	46,342	45,825	92,167	1	1	2	1	1	2	1	1	2	1	1
42	167,401	Tanuku	83,734	83,734	167,468	1	1	2	1	1	2	1	1	2	1	1
43	145,715	Yernagallu	72,866	72,849	145,715	1	1	2	1	1	2	1	1	2	1	1
44	17,839	M. T. Comand	9,095	8,744	17,839	1	1	2	1	1	2	1	1	2	1	1
45	19,738	M. T. Rajahmundry.	10,155	9,233	19,388	1	1	2	1	1	2	1	1	2	1	1
46	25,487	M. T. Ellore	13,783	11,039	24,822	1	1	2	1	1	2	1	1	2	1	1
47	1,822,939	Total	803,008	789,836	1,592,844	215	186	401	211	181	392	207	179	386	207	179
48	169,163	Beinamundry	83,800	85,363	169,163	1	1	2	1	1	2	1	1	2	1	1
49	111,189	Pudupore	55,388	56,101	111,489	1	1	2	1	1	2	1	1	2	1	1
50	208,583	Rameswaram	101,437	107,146	208,583	1	1	2	1	1	2	1	1	2	1	1
51	203,583	Amalapuram	101,840	101,743	203,583	1	1	2	1	1	2	1	1	2	1	1
52	177,876	Narasipore	88,103	89,773	177,876	1	1	2	1	1	2	1	1	2	1	1
53	111,888	Ellore	56,789	55,099	111,888	1	1	2	1	1	2	1	1	2	1	1
54	92,167	Undy	46,342	45,825	92,167	1	1	2	1	1	2	1	1	2	1	1
55	167,401	Tanuku	83,734	83,734	167,468	1	1	2	1	1	2	1	1	2	1	1
56	145,715	Yernagallu	72,866	72,849	145,715	1	1	2	1	1	2	1	1	2	1	1
57	17,839	M. T. Comand	9,095	8,744	17,839	1	1	2	1	1	2	1	1	2	1	1
58	19,738	M. T. Rajahmundry.	10,155	9,233	19,388	1	1	2	1	1	2	1	1	2	1	1
59	25,487	M. T. Ellore	13,783	11,039	24,822	1	1	2	1	1	2	1	1	2	1	1
60	203,828	Zemindaries	102,374	101,451	203,825	1	1	2	1	1	2	1	1	2	1	1
61	169,163	Beinamundry	83,800	85,363	169,163	1	1	2	1	1	2	1	1	2	1	1
62	111,189	Pudupore	55,388	56,101	111,489	1	1	2	1	1	2	1	1	2	1	1
63	208,583	Rameswaram	101,437	107,146	208,583	1	1	2	1	1	2	1	1	2	1	1
64	203,583	Amalapuram	101,840	101,743	203,583	1	1	2	1	1	2	1	1	2	1	1
65	177,876	Narasipore	88,103	89,773	177,876	1	1	2	1	1	2	1	1	2	1	1
66	111,888	Ellore	56,789	55,099	111,888	1	1	2	1	1	2	1	1	2	1	1
67	92,167	Undy	46,342	45,825	92,167	1	1	2	1	1	2	1	1	2	1	1
68	167,401	Tanuku	83,734	83,734	167,468	1	1	2	1	1	2	1	1	2	1	1
69	145,715	Yernagallu	72,866	72,849	145,715	1	1	2	1	1	2	1	1	2	1	1
70	17,839	M. T. Comand	9,095	8,744	17,839	1	1	2	1	1	2	1	1	2	1	1
71	19,738	M. T. Rajahmundry.	10,155	9,233	19,388	1	1	2	1	1	2	1	1	2	1	1
72	25,487	M. T. Ellore	13,783	11,039	24,822	1	1	2	1	1	2	1	1	2	1	1

33	106,452	Nandigama	54,184	52,268	106,452	12	10	22	10	14	24	13	19	32	4	6	4	4
34	83,081	Beinam	42,134	40,947	83,081	1	6	7	1	6	7	1	6	7	1	6	4	4
35	87,138	Gudivada	43,473	43,665	87,138	4	6	10	4	6	10	17	12	29	10	11	1	1
36	129,387	Machilipatnam	62,868	62,868	125,736	5	9	14	6	3	9	15	16	30	21	20	1	1
37	189,912	Repalle	86,268	83,644	169,912	8	18	27	8	15	23	7	20	27	27	19	13	13
38	143,629	Repalle	73,747	69,982	143,729	10	16	28	16	16	31	4	6	10	8	5	4	4
39	120,619	Repalle	61,680	58,953	120,633	12	12	24	16	16	31	4	6	10	8	5	4	4
40	64,508	Rajahmundry	31,965	31,548	63,513	4	12	16	12	12	24	13	13	10	11	8	2	2
41	120,658	Palnadu	60,655	60,000	120,655	13	19	22	16	12	24	13	13	10	11	8	2	2
42	101,728	Palnadu	52,382	49,344	101,726	17	13	24	12	4	16	11	8	19	4	12	7	7
43	108,561	Palnadu	52,382	49,344	101,726	17	13	24	12	4	16	11	8	19	4	12	7	7
44	88,033	M. T. Guntur	43,074	40,959	84,033	1	1	2	5	5	10	3	3	4	7	5	1	1
45	86,183	M. T. Guntur	43,074	40,959	84,033	1	1	2	5	5	10	3	3	4	7	5	1	1
46	163,127	Zemindaries	83,107	80,020	163,127	12	5	17	12	11	23	10	10	15	19	18	15	6
	1,452,374	Total	737,493	713,879	1,452,374	117	39	216	121	107	298	87	120	217	133	127	200	108
47	195,068	Angada	98,050	96,358	194,408	7	3	15	12	11	23	15	15	23	11	5	19	6
48	138,375	Kudnair	70,501	67,784	138,285	4	4	8	4	4	8	3	3	7	2	5	7	2
49	82,336	Kavali	42,011	39,325	81,336	3	6	10	3	6	9	1	1	6	3	3	4	4
50	149,847	Nellore	75,529	74,518	149,847	4	6	10	6	2	7	6	6	9	11	17	28	5
51	147,141	Palair	76,837	70,504	147,141	4	2	6	3	2	5	3	3	9	2	2	4	1
52	83,285	Raipur	33,151	30,754	63,885	1	1	2	3	6	9	5	5	6	3	1	4	1
53	103,862	Abrakur	53,541	50,261	103,802	7	6	13	1	6	9	1	1	6	3	1	4	1
54	100,956	Tidayagur	52,513	48,466	100,985	1	1	2	1	1	1	1	1	3	1	2	3	1
55	127,258	Kangiri	65,563	61,305	127,258	2	...	2	...	...	...	...	...	18	13	12	25	10
56	29,922	M. T. Nellore	14,879	15,043	29,922	...	...	...	...	...	...	...	...	7	...	...	...	1
57	230,192	Zemindaries	124,121	116,071	230,192	6	10	16	15	10	25	11	11	18	13	12	25	10
	1,376,811	Total	707,532	689,419	1,376,811	39	83	73	45	38	83	42	42	77	47	31	98	27
58	307,552	Madras Town	194,676	202,876	397,552	21	21	45	46	59	105	82	101	153	105	105	210	69
59	104,210	Pannery	53,204	51,005	104,210	4	4	8	12	11	15	11	11	23	6	3	9	6
60	149,838	Tatavalla	76,983	72,915	149,898	18	21	39	12	22	34	14	14	36	22	20	51	10
61	186,401	Sydspect	89,857	82,337	172,194	14	17	31	19	17	36	13	17	30	23	20	46	13
62	132,423	Chingelput	67,553	64,675	132,328	13	7	20	12	16	28	12	10	22	6	4	9	11
63	197,308	Maduranakam	100,453	96,855	197,308	15	4	9	7	15	23	6	6	14	14	19	33	9
64	130,769	Comporeum	65,566	65,143	130,769	9	7	16	15	8	23	23	23	49	20	16	62	15
65	37,327	M. T. Comporeum	18,262	19,075	37,327	1	2	3	...	...	...	3	3	6	4	10	14	11
	938,184	Total	475,963	462,216	938,184	44	62	126	63	89	158	84	103	197	100	104	204	75
66	230,754	Tindivanam	122,412	117,342	239,754	9	4	13	18	16	29	7	14	23	9	6	15	15
67	164,657	Thiruvannamalai	83,571	81,066	164,637	4	2	6	20	11	31	15	13	23	14	16	30	1
68	235,108	Villupoream	120,178	115,920	236,198	11	10	21	12	9	29	12	12	23	15	11	26	17
69	244,559	Cuddalore	121,200	121,200	242,400	3	5	8	15	14	29	15	14	27	11	9	30	6
70	239,133	Chidambaram	118,520	120,613	239,133	3	10	15	10	13	23	14	13	27	93	14	37	12
71	172,501	Vilachellam	83,493	80,009	173,501	11	23	37	18	24	42	29	53	82	26	20	46	17

VII.—(Continued.)

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1878.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		January.			February.			March.			April.			May.			June.				
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	
72	196,566	Kannur.	Kallacorelli...	98,373	97,193	195,566	23	27	50	14	8	22	6	12	18	22	21	43	7	6	13	7	6	13	
73	216,246		Yellamangoor	109,599	106,647	216,246	11	21	32	16	10	26	33	37	70	26	31	57	15	9	24	15	9	24	
74	40,290		M. T. Cuddalore	19,505	20,785	40,290	...	1	1	1	...	1	2	2	4	2	2	4	4	1	2	3	1	2	3
	1,755,817		Total	885,922	869,895	1,755,817	80	103	183	109	108	217	133	151	284	148	130	278	91	81	172	61	60	121	
75	237,893	Kannur.	Woodhampolli...	119,993	117,895	237,888	9	11	20	9	6	15	1	3	4	24	18	42	9	7	16	9	7	16	
76	218,660		Tachinopoly...	...	...	...	15	12	27	16	15	31	19	25	44	11	12	23	12	14	26	10	10	20	
77	228,313		Kallikudi...	123,876	133,298	257,174	11	6	17	11	15	26	5	6	11	6	10	16	10	8	18	5	6	11	
78	257,174		Mooeri...	123,876	133,298	257,174	16	16	32	11	15	26	18	13	31	13	10	23	13	13	27	9	8	17	
79	170,567	Kannur.	Pambalore...	83,837	86,730	170,567	31	16	47	33	26	59	16	11	27	24	19	43	9	13	22	10	15	25	
80	76,530		M. T. Trichinopoly	36,593	39,937	76,530	7	6	13	5	5	10	5	11	16	8	8	11	6	3	9	8	7	15	
81	11,271		M. T. Steerungum...	...	...	...	2	1	3	3	...	3	...	1	1	...	...	...	1	1	2	2	2	4	
81a	...		Zaminidaries...	...	...	...	3	1	4	5	3	8	3	4	7	1	9	10	12	6	18	2	2	2	
	1,200,408	Total	588,131	612,274	1,200,408	89	69	157	93	74	167	67	74	141	87	81	163	72	68	140	56	53	109		
82	107,459	Kannur.	Shelly...	52,720	54,739	107,459	5	1	6	12	8	20	23	22	45	19	18	37	6	4	10	8	6	14	
83	198,193		Mayavaram...	93,110	105,083	198,193	12	8	20	13	15	28	20	17	35	16	23	39	12	14	26	13	6	19	
84	207,407		Nannam...	98,551	108,856	207,407	22	8	30	14	15	29	25	17	42	16	9	25	12	16	28	21	19	40	
85	152,208		Nagapattinam...	72,379	79,829	152,208	5	5	10	2	9	11	10	20	30	16	22	38	14	18	32	21	15	36	
86	154,714	Kannur.	Tiruchendur...	76,177	78,537	154,714	4	1	5	4	9	13	7	1	8	8	3	11	6	6	12	3	3	6	
87	287,423		Pattinettal...	115,777	121,646	237,423	21	17	38	17	36	53	15	9	24	11	12	23	5	7	12	4	4	8	
88	232,164		Taylore...	141,444	150,720	292,164	37	26	63	33	19	52	41	50	91	45	61	95	26	38	74	27	28	55	
89	294,590		Conbaconum...	141,020	152,570	293,590	22	22	44	20	12	32	32	39	61	31	40	71	34	19	53	28	25	53	
90	143,561	Kannur.	Mannargodey...	69,314	74,247	143,561	14	17	31	22	16	38	15	20	35	21	17	41	16	12	23	11	15	28	
91	52,175		M. T. Tanjore...	25,726	26,449	52,175	4	4	8	3	2	5	3	7	10	4	5	1	1	2	6	6	4	12	
92	44,114		M. T. Combaconum	21,569	22,545	44,114	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
93	21,185		M. T. Mayavaram...	10,407	10,778	21,185	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
94	48,225	Kannur.	M. T. Nagapattinam...	21,250	27,275	48,525	2	3	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...		
95	17,703		M. T. Mannargodey...	8,524	9,179	17,703	4	4	8	3	2	5	3	7	10	4	5	1	1	2	3	2	2	4	
	1,973,731		Total	953,968	1,019,763	1,973,731	153	113	266	145	144	289	204	197	401	199	210	409	152	147	299	157	143	300	
96	311,501		Kannur.	Dindigul...	158,199	153,302	311,501	37	33	70	26	45	71	18	25	43	12	12	24	21	32	53	16	23	39
97	128,898	Mayar...		63,332	65,561	128,893	4	4	8	2	2	4	10	7	17	1	1	2	8	11	19	6	8	14	
98	179,431	Madura...		88,326	91,105	179,431	7	9	16	10	10	20	13	6	19	7	7	10	10	10	20	12	14	26	
99	241,215	Tirunagalam...		120,734	120,481	241,215	35	32	67	11	6	17	14	10	24	6	8	14	15	14	29	12	14	26	
100	217,418	Kannur.	Percacatum...	107,073	110,345	217,418	11	4	15	10	23	33	4	12	16	3	4	7	15	15	30	1	3	4	
101	181,831		Pulni...	91,077	98,754	189,831	7	5	12	12	15	27	8	7	15	5	8	13	2	9	11	3	3	6	
102	...		Sittanadai Villages...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
103	51,987		M. T. Madura...	26,224	25,763	51,987	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

104	12,865	Kannur	M. T. Dindigul	6,540	6,325	12,865	...	...	...	...	...	...	...	...	...	...	...	...
105	504,181		Ramnad Zaminidary	246,574	257,557	504,181	...	...	...	...	...	...	...	...	...	...	...	...
106	434,253		Shevagaunga do.	208,397	225,856	434,253	...	...	...	...	...	...	...	...	...	...	...	...
	2,266,615		Total	1,112,066	1,154,549	2,266,615	137	114	251	119	155	274	83	92	178	49	68	114
107	176,954	Kannur	Sittrillipattur	88,263	88,691	176,954	5	8	13	5	2	7	3	5	8	5	3	8
108	156,862		Satur...	78,467	78,395	156,862	20	18	38	10	10	20	7	7	16	14	10	12
109	253,811		Ottapideran...	142,862	142,949	285,811	48	48	96	48	43	91	45	38	84	58	115	23
110	231,316		Tankarai...	87,025	91,083	178,108	23	21	44	16	12	28	11	13	24	2	3	5
111	178,078	Kannur	Naugunery...	77,640	83,575	161,215	11	9	20	11	11	22	5	7	12	4	9	13
112	163,315		Arabasandram...	61,010	60,991	122,001	10	6	16	...	...	...	...	...	...	...	...	...
113	122,001		Tankarai...	90,214	91,804	182,018	18	11	29	19	11	30	11	31	42	12	12	24
114	182,018		Sankarasinai Corvill...	73,651	71,409	145,060	17	6	23	15	22	37	15	14	29	12	10	22
115	145,120	Kannur	Tinnervelly...	10,549	10,495	21,044	...	...	...	...	...	...	...	...	...	...	...	...
116	21,044		M. T. Tinnervelly...	8,847	9,068	17,915	1	...	...	...	...	...	...	...	...	...	...	...
117	17,945		M. T. Palamcottah...	5,283	5,282	10,565	...	...	...	...	...	...	...	...	...	...	...	...
118	10,565		M. T. Tuticorin...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1,692,959		Total	838,515	854,444	1,692,959	188	160	348	168	156	324	131	154	285	162	149	311
119	101,886	Kannur	Nandikottur...	52,289	49,597	101,886	...	...	...	...	...	...	...	...	...	...	...	...
120	62,655		Marapur...	47,218	45,432	92,650	...	...	...	...	...	...	...	...	...	...	...	...
121	115,747		Cumbum...	58,765	56,982	115,747	...	...	...	...	...	...	...	...	...	...	...	...
122	71,066		Servilli...	36,249	34,817	71,066	...	...	...	...	...	...	...	...	...	...	...	...
123	98,844	Kannur	Kalkunda...	49,984	48,860	98,844	...	...	...	...	...	...	...	...	...	...	...	...
124	173,434		Pattikondah...	89,868	83,566	173,434	11	19	30	9	11	20	15	12	29	2	2	4
125	120,616		Ramnad...	62,598	58,028	120,626	...	...	...	...	...	...	...	...	...	...	...	...
126	107,320		Nandial...	54,532	52,788	107,320	...	...	...	...	...	...	...	...	...	...	...	...
127	25,579	Kannur	M. T. Kurnool...	12,456	13,083	25,539	...	...	...	...	...	...	...	...	...	...	...	...
128	7,295		M. T. Cumbum...	3,656	3,639	7,295	...	...	...	...	...	...	...	...	...	...	...	...
129	959,610		Total	467,640	446,792	914,432	43	53	96	45	57	102	47	36	83	60	40	106
130	102,714	Kannur	Paidatoor...	52,224	50,520	102,744	...	...	...	...	...	...	...	...	...	...	...	...
131	93,051		Berwai...	45,067	44,984	90,051	...	...	...	...	...	...	...	...	...	...	...	...
132	76,667		Sidbott...	39,260	37,417	76,677	...	...	...	...	...	...	...	...	...	...	...	...
133	145,180		Pullamott...	74,565	70,615	145,180	...	...	...	...	...	...	...	...	...	...	...	...
134	128,162	Kannur	Vallipand...	66,306	70,961	137,267	...	...	...	...	...	...	...	...	...	...	...	...
135	135,468		Royacottah...	69,103	68,366	137,469	...	...	...	...	...	...	...	...	...	...	...	...
136	140,948		Madanally...	72,693	68,255	140,948	...	...	...	...	...	...	...	...	...	...	...	...
137	110,405		Pulivendla...	57,281	53,121	110,402	...	...	...	...	...	...	...	...	...	...	...	...
138	109,963	Kannur	Jamunadanga...	53,621	53,621	107,242	...	...	...	...	...	...	...	...	...	...	...	...
139	146,733		Cuddalore...	74,466	72,242	146,708	...	...	...	...	...	...	...	...	...	...	...	...
140	16,275		M. T. Cuddalore...	8,329	7,946	16,275	...	...	...	...	...	...	...	...	...	...	...	...
	1,351,194		Total	693,400	657,794	1,351,194	44	46	90	48	43	91	38	35	73	46	51	97

VII.—(Continued.)
Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.			
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.				
204	248,118	Madras.	122,190	125,929	248,118	8	5	13	12	5	17	1	5	6	3	3	6	1	1	2	2	3	5	
205	133,057		60,719	62,308	123,027	2	2	4	3	2	5	1	4	5	1	1	2	2	2	4	1	1	2	
206	123,838		76,228	49,710	125,938	11	4	15	16	5	21	15	10	25	21	10	31	23	19	42	10	7	17	
207	243,751		121,560	122,191	243,751	11	4	15	16	5	21	15	10	25	21	10	31	23	19	42	10	7	17	
208	141,806		70,126	71,680	141,806	50	26	76	69	29	98	49	23	72	50	23	73	49	23	72	49	23	72	
209	257,935		145,465	142,471	287,936	34	23	57	100	41	141	51	32	83	103	37	140	15	14	29	15	16	31	
210	292,432		144,796	147,686	292,482	6	4	10	29	10	39	33	21	54	25	14	39	15	9	24	16	12	28	
211	5,986		3,142	2,844	5,986	26	16	42	47	40	87	38	21	59	39	100	1	1	2	24	15	39	53	
212	295,103		144,151	150,952	295,103	66	50	116	131	154	285	166	105	271	103	261	107	71	35	106	113	85	198	
213	371,766		185,306	186,460	371,766	66	50	116	131	154	285	166	105	271	103	261	107	71	35	106	113	85	198	
214	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
215	...		Tangacherry	9,847	10,657	20,504	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
216	20,504		M. T. Tellicherry	10,657	10,657	20,504	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2	1	1	2
217	47,962		M. T. Calicut	23,998	23,962	47,962	50	38	88	41	28	69	28	22	50	27	22	49	8	11	19	4	4	8
218	30,752		M. T. Pulghat	15,074	15,678	30,752	4	1	5	2	1	3	6	3	9	3	3	6	1	1	2	5	4	9
219	13,840		M. T. Cochin	6,985	6,855	13,840	48	31	79	68	63	131	46	37	83	26	28	54	23	16	39	18	15	33
220	9,259		M. T. Cannanore	5,206	4,053	9,259	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
2,261,250			Total ...	1,134,889	1,263,351	2,398,240	395	199	594	577	381	953	495	327	822	421	300	724	253	197	450	219	155	374
30,235,577			Total Madras Presidency ...	15,221,079	15,066,763	30,287,842	2,314	4,563	6,877	2,142	2,812	4,954	3,036	2,885	5,921	3,159	2,905	6,064	2,256	2,184	4,440	1,792	1,732	3,524

VII.—(Continued.)
Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	158,061	Canniam.	Goenator	79,800	78,761	158,561	1	...	1	1	5	6	2	1	3	2	4	3	...	...	...	...	...	...	...	...	...
2	222,275		Bochampore	109,124	113,151	222,275	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
3	163,607		Chinnacole	77,084	76,453	153,537	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
4	15,587		M. T. Chinnacole	7,341	8,246	15,587	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
5	21,670		M. T. Bochampore	10,733	10,937	21,670	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
6	817,876		Zaminidaries	347,431	263,692	611,123	13	14	27	15	16	31	16	12	28	8	9	17	14	7	21	19	4	23	152	148	300
Total ...				631,013	571,180	1,202,193	16	15	31	20	26	46	18	15	33	13	17	30	15	8	23	20	14	44	270	275	545
7	155,609	Vizagapatnam.	Puducherry	72,576	71,430	144,006	15	13	28	5	6	11	8	4	12	4	10	14	19	24	16	1	1	2	23	25	48
8	135,606		Parvatipore	64,619	63,104	127,723	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
9	139,289		Pobbi	49,754	47,134	96,888	4	4	8	3	4	7	14	10	24	16	6	22	...	...	...	...	...	...	...	...	...
10	77,364		Salar	38,270	34,751	73,021	1	1	2	...	...	...	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
11	177,276		Vizagapatnam	42,192	39,453	81,645	1	1	2	6	8	14	3	3	6	3	3	6	3	4	4	4	4	4	4	4	4
12	97,675		Manipattanam	41,284	38,040	79,324	5	3	8	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
13	48,637		Vizagapatnam	22,356	22,469	44,825	2	2	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
14	165,499		Anakapilly	64,806	60,067	124,873	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
15	82,191		M. T. Vizagapatnam	15,703	16,488	32,191	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
16	8,744		M. T. Bimilipatan	4,318	4,426	8,744	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
17	20,169		M. T. Vizagapatnam	9,935	10,233	20,169	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
18	8,812		M. T. Palcondah	4,413	4,399	8,812	3	3	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
19	937,750		Zaminidaries	251,125	385,805	636,930	32	35	67	20	22	42	25	22	47	17	14	31	11	11	22	18	17	35	454	437	891
Total ...				780,149	748,818	1,528,967	76	71	150	38	49	87	65	49	114	60	36	96	27	40	67	72	63	135	997	985	1,982
20	164,471	Goenator.	Goenator	55,800	53,363	109,163	6	4	10	15	12	27	14	8	22	3	1	4	4	4	4	4	4	4	4	4	4
21	111,489		Bochampore	55,958	56,101	112,059	32	26	58	23	18	41	20	13	33	17	13	30	19	24	16	1	1	2	23	25	48
22	203,583		Chinnacole	102,136	101,447	203,583	4	4	8	14	14	28	11	10	21	6	5	11	7	10	9	3	3	6	11	10	21
23	206,885		Manipattanam	102,045	101,840	203,885	21	17	38	16	12	28	11	10	21	6	5	11	7	10	9	3	3	6	11	10	21
24	177,876		Bochampore	88,763	88,108	176,871	1	1	2	2	2	4	2	2	4	2	2	4	2	2	4	2	2	4	2	2	4
25	111,888		Bochampore	55,958	56,101	112,059	11	11	22	23	29	52	2	2	4	4	4	8	9	16	16	1	1	2	2	2	4
26	92,457		Bochampore	46,342	46,115	92,457	1	1	2	4	4	8	2	2	4	2	2	4	2	2	4	2	2	4	2	2	4
27	167,491		Bochampore	84,757	82,734	167,491	3	3	6	6	6	12	2	2	4	2	2	4	2	2	4	2	2	4	2	2	4
28	145,715		Bochampore	72,966	72,749	145,715	36	36	72	25	23	48	2	2	4	2	2	4	2	2	4	2	2	4	2	2	4
29	17,839		M. T. Goenator	9,055	8,784	17,839	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
30	19,738		M. T. Bochampore	10,355	9,383	19,738	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
31	25,487		M. T. Chinnacole	13,768	11,719	25,487	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
32	203,829		Zaminidaries	103,371	101,454	204,825	29	28	57	23	19	42	26	14	40	5	11	16	17	22	11	12	23	280	219	500	
Total ...				803,003	789,336	1,592,339	145	138	283	162	137	299	114	79	193	51	45	96	47	29	75	26	36	62	1,882	1,688	3,570

VII.—(Continued.)

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each month of the year 1873.—(Continued.)

No.	Population according to Census of 1871	Districts	Name of Rural Circles and Towns	Population of which Returns were received		July		August		September		October		November		December		Total		
				Males	Females	Total	M	F	Total	M	F	Total	M	F	Total	M	F		Total	
33	106,452	North Arcot	Nandigama	54,781	25,503	80,284	7	5	12	8	7	15	1	3	4	12	17	29	159	
34	85,051		Devanahalli	42,154	19,857	62,011	2	2	4	3	1	4	1	1	2	1	1	2	44	
35	87,138		Madhavaram	42,487	19,857	62,344	6	6	12	6	6	12	3	3	6	5	5	10	117	
36	128,397		Madhavaram	65,476	32,538	98,014	94	10	104	21	4	25	12	4	16	10	16	26	265	
37	160,012		Repalle	86,208	43,614	129,822	5	6	11	2	4	6	2	3	5	3	4	7	163	
38	133,579		Repalle	73,747	39,832	113,579	11	7	18	6	4	10	2	3	5	3	4	7	153	
39	120,619		Repalle	61,680	30,939	92,619	4	4	8	4	4	8	2	2	4	2	2	4	74	
40	64,538		Yercaud	32,085	15,453	47,538	7	6	13	7	6	13	2	2	4	2	2	4	120	
41	129,658		Yercaud	65,881	33,777	99,658	12	13	25	7	7	14	2	2	4	2	2	4	120	
42	131,728		Yercaud	65,881	33,777	99,658	12	13	25	7	7	14	2	2	4	2	2	4	120	
43	105,961	North Arcot	Madhavaram	52,974	25,503	78,477	17	13	30	17	14	31	7	6	13	6	5	11	104	
44	55,158		Madhavaram	27,205	13,953	41,158	2	3	5	2	3	5	1	1	2	1	1	2	23	
45	55,158		Madhavaram	27,205	13,953	41,158	2	3	5	2	3	5	1	1	2	1	1	2	23	
46	163,127		Madhavaram	83,107	40,020	123,127	3	3	6	2	2	4	1	1	2	1	1	2	30	
47	143,574		Madhavaram	72,745	35,829	108,574	71	71	142	39	39	78	13	13	26	6	6	12	113	
48	185,969		Madhavaram	98,980	50,989	149,969	9	9	18	9	9	18	4	4	8	4	4	8	80	
49	182,475		Madhavaram	98,980	50,989	149,969	9	9	18	9	9	18	4	4	8	4	4	8	80	
50	149,807		Madhavaram	75,807	38,000	113,807	1	1	2	1	1	2	1	1	2	1	1	2	17	
51	147,101		Madhavaram	73,551	36,550	110,101	1	1	2	1	1	2	1	1	2	1	1	2	17	
52	65,885		Madhavaram	33,131	16,754	49,885	1	1	2	1	1	2	1	1	2	1	1	2	17	
53	103,802	North Arcot	Madhavaram	52,519	26,283	78,802	1	1	2	1	1	2	1	1	2	1	1	2	17	
54	103,802		Madhavaram	52,519	26,283	78,802	1	1	2	1	1	2	1	1	2	1	1	2	17	
55	127,308		Madhavaram	63,954	31,354	95,308	1	1	2	1	1	2	1	1	2	1	1	2	17	
56	127,308		Madhavaram	63,954	31,354	95,308	1	1	2	1	1	2	1	1	2	1	1	2	17	
57	250,192		Madhavaram	125,096	62,546	187,642	6	6	12	6	6	12	10	10	20	3	3	6	272	
58	1,376,511		Madhavaram	707,392	353,119	1,060,511	22	22	44	15	15	30	22	22	44	68	68	136	744	
59	397,552	North Arcot	Madhavaram	198,775	98,777	297,552	30	30	60	20	20	40	20	20	40	62	62	124	543	
60	101,210		Madhavaram	50,605	25,302	75,907	4	4	8	4	4	8	4	4	8	12	12	24	155	
61	183,401		Madhavaram	91,700	45,850	137,550	13	13	26	13	13	26	13	13	26	13	13	26	250	
62	132,338		Madhavaram	66,169	33,084	99,253	13	13	26	13	13	26	13	13	26	13	13	26	250	
63	197,709		Madhavaram	98,854	48,855	147,709	13	13	26	13	13	26	13	13	26	13	13	26	250	
64	197,709		Madhavaram	98,854	48,855	147,709	13	13	26	13	13	26	13	13	26	13	13	26	250	
65	37,327		Madhavaram	18,663	9,331	27,994	3	3	6	3	3	6	3	3	6	3	3	6	72	
66	938,184		Madhavaram	479,092	239,092	718,184	72	72	144	40	40	80	40	40	80	124	124	248	1,108	
67	1,755,817	North Arcot	Madhavaram	885,922	442,961	1,328,883	140	140	280	80	80	160	120	120	240	228	228	456	2,126	
68	237,893		Madhavaram	118,946	59,473	178,419	22	22	44	15	15	30	22	22	44	68	68	136	543	
69	218,030		Madhavaram	109,015	54,507	163,522	22	22	44	15	15	30	22	22	44	68	68	136	543	
70	238,313		Madhavaram	119,156	59,578	178,734	22	22	44	15	15	30	22	22	44	68	68	136	543	
71	257,174		Madhavaram	128,587	64,293	192,880	22	22	44	15	15	30	22	22	44	68	68	136	543	
72	170,567		Madhavaram	85,283	42,641	127,924	13	13	26	13	13	26	13	13	26	13	13	26	250	
73	170,567		Madhavaram	85,283	42,641	127,924	13	13	26	13	13	26	13	13	26	13	13	26	250	
74	76,530		Madhavaram	38,265	19,132	57,397	8	8	16	8	8	16	8	8	16	8	8	16	140	
75	11,271		Madhavaram	5,635	2,817	8,452	1	1	2	1	1	2	1	1	2	1	1	2	20	
76	1,200,498		North Arcot	Madhavaram	600,249	300,124	900,373	140	140	280	80	80	160	120	120	240	228	228	456	1,108
77	107,459	Madhavaram		53,729	26,864	80,593	10	10	20	10	10	20	10	10	20	10	10	20	155	
78	198,193	Madhavaram		99,096	49,548	148,644	10	10	20	10	10	20	10	10	20	10	10	20	155	
79	297,407	Madhavaram		148,703	74,351	223,054	10	10	20	10	10	20	10	10	20	10	10	20	155	
80	152,298	Madhavaram		76,149	38,074	114,223	10	10	20	10	10	20	10	10	20	10	10	20	155	
81	154,714	Madhavaram		77,357	38,683	116,040	10	10	20	10	10	20	10	10	20	10	10	20	155	
82	237,433	Madhavaram		118,716	59,358	178,074	10	10	20	10	10	20	10	10	20	10	10	20	155	
83	232,134	Madhavaram		116,067	58,033	174,100	10	10	20	10	10	20	10	10	20	10	10	20	155	
84	236,590	Madhavaram		118,295	59,145	177,440	10	10	20	10	10	20	10	10	20	10	10	20	155	
85	143,341	North Arcot		Madhavaram	71,670	35,835	107,505	10	10	20	10	10	20	10	10	20	10	10	20	155
86	48,535		Madhavaram	24,267	12,133	36,400	3	3	6	3	3	6	3	3	6	3	3	6	72	
87	17,763		Madhavaram	8,881	4,440	13,321	3	3	6	3	3	6	3	3	6	3	3	6	72	
88	1,973,731		Madhavaram	986,865	493,432	1,480,297	140	140	280	80	80	160	120	120	240	228	228	456	1,108	
89	311,501		North Arcot	Madhavaram	155,750	77,875	233,625	20	20	40	10	10	20	20	20	40	40	40	80	543
90	128,983			Madhavaram	64,491	32,245	96,736	20	20	40	10	10	20	20	20	40	40	40	80	543
91	179,431	Madhavaram		89,715	44,857	134,572	20	20	40	10	10	20	20	20	40	40	40	80	543	
92	241,215	Madhavaram		120,607	60,303	180,910	20	20	40	10	10	20	20	20	40	40	40	80	543	
93	217,418	Madhavaram		108,709	54,354	163,063	20	20	40	10	10	20	20	20	40	40	40	80	543	
94	181,831	Madhavaram		90,915	45,457	136,372	20	20	40	10	10	20	20	20	40	40	40	80	543	
95	51,987	North Arcot	Madhavaram	26,087	13,043	39,130	3	3	6	3	3	6	3	3	6	3	3	6	72	
96	48,535		Madhavaram	24,267	12,133	36,400	3	3	6	3	3	6	3	3	6	3	3	6	72	
97	17,763		Madhavaram	8,881	4,440	13,321	3	3	6	3	3	6	3	3	6	3	3	6	72	
98	1,973,731		Madhavaram	986,865	493,432	1,480,297	140	140	280	80	80	160	120	120	240	228	228	456	1,108	
99	311,501		North Arcot	Madhavaram	155,750	77,875	233,625	20	20	40	10	10	20	20	20	40	40	40	80	543
100	128,983			Madhavaram	64,491	32,245	96,736	20	20	40	10	10	20	20	20	40	40	40	80	543
101	179,431	Madhavaram		89,715	44,857	134,572	20	20	40	10	10	20	20	20	40	40	40	80	543	
102	241,215	Madhavaram		120,607	60,303	180,910	20	20	40	10	10	20	20	20	40	40	40	80	543	
103	217,418	Madhavaram		108,709	54,354	163,063	20	20												

Deaths registered from Small-pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.		August.		September.		October.		November.		December.		Total.	
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	Total.
107	176,954	Stravilpattur	88,953	88,953	176,953	6	7	13	4	4	8	11	8	19	4	5	9	121
108	166,802	Saur	78,407	78,407	156,814	4	7	11	2	7	9	3	8	11	4	7	18	200
109	252,512	Chidambaram	126,256	126,256	252,512	18	17	35	25	21	46	73	30	103	36	67	139	883
110	231,316	Thiruvannamalai	115,658	115,658	231,316	22	17	39	12	10	22	19	14	33	14	19	33	460
111	178,978	Nagapattinam	89,489	89,489	178,978	6	7	13	4	4	8	11	8	19	4	5	9	904
112	163,215	Amiasandram	81,607	81,607	163,214	7	7	14	3	3	6	5	5	10	2	7	9	182
113	122,001	Tenkasi	61,000	61,000	122,000	4	4	8	1	1	2	3	2	5	1	1	2	170
114	182,018	Sankaranthar Govt.	91,009	91,009	182,018	7	8	15	4	3	7	13	8	21	3	17	38	258
115	145,120	Thiruvannamalai	72,560	72,560	145,120	16	10	26	12	13	25	10	10	20	6	6	12	284
116	21,044	M. T. P. Valluvar	10,522	10,522	21,044	1	2	3	1	1	2	1	1	2	1	1	2	19
117	17,945	M. T. P. Valluvar	8,972	8,972	17,944	1	1	2	1	1	2	1	1	2	1	1	2	14
118	10,565	M. T. P. Valluvar	5,282	5,282	10,564	1	1	2	1	1	2	1	1	2	1	1	2	8
Total			836,515	836,515	1,673,030	92	99	191	105	109	214	153	168	321	105	113	218	2,751
119	105,206	Nandikotkur	52,603	52,603	105,206	4	4	8	1	1	2	3	1	2	3	1	2	25
120	62,675	Marakur	31,337	31,337	62,674	1	1	2	1	1	2	1	1	2	1	1	2	27
121	115,747	Cumbum	57,873	57,873	115,746	3	3	6	2	2	4	3	3	6	1	1	2	59
122	71,096	Servai	35,548	35,548	71,096	2	2	4	1	1	2	1	1	2	1	1	2	14
123	98,814	Kottur	49,407	49,407	98,814	1	1	2	1	1	2	1	1	2	1	1	2	14
124	173,434	Pudukottah	86,717	86,717	173,434	10	12	22	7	8	15	4	4	8	2	2	4	75
125	120,616	Pudukottah	60,308	60,308	120,616	8	4	12	5	3	8	11	6	17	3	11	18	105
126	107,320	Rundal	53,660	53,660	107,320	5	4	9	1	1	2	3	2	5	1	1	2	100
127	25,379	M. T. P. Valluvar	12,689	12,689	25,378	1	1	2	1	1	2	1	1	2	1	1	2	10
128	7,395	M. T. P. Valluvar	3,697	3,697	7,394	1	1	2	1	1	2	1	1	2	1	1	2	3
129	45,208	Zemindaries	22,604	22,604	45,208	1	1	2	1	1	2	1	1	2	1	1	2	1
Total			467,610	467,610	935,220	25	27	52	22	26	48	15	18	33	21	25	46	758
130	102,744	Pudattur	51,372	51,372	102,744	3	3	6	1	1	2	1	1	2	1	1	2	25
131	93,001	Belur	46,500	46,500	93,000	1	1	2	1	1	2	1	1	2	1	1	2	10
132	74,580	Tellamatt	37,290	37,290	74,580	1	1	2	1	1	2	1	1	2	1	1	2	9
133	145,180	Tellamatt	72,590	72,590	145,180	9	8	17	5	4	9	4	3	7	1	1	2	51
134	145,331	Valluvar	72,665	72,665	145,330	1	1	2	1	1	2	1	1	2	1	1	2	63
135	128,162	Thiruvannamalai	64,081	64,081	128,162	3	3	6	1	1	2	1	1	2	1	1	2	107
136	153,466	Thiruvannamalai	76,733	76,733	153,466	8	6	14	4	3	7	9	6	15	3	3	6	61
137	140,948	Karri	70,474	70,474	140,948	8	6	14	4	3	7	9	6	15	3	3	6	204
138	110,463	Pallavandla	55,231	55,231	110,462	9	13	22	12	17	29	10	14	24	18	23	41	244
139	100,957	Jandamattur	50,478	50,478	100,956	5	6	11	4	4	8	3	3	6	2	2	4	231

139	146,739	Cuddalore	74,466	72,242	146,708	5	6	11	4	1	5	1	4	...	5	4	5	9	3	6	27	8	...	571	1,171
140	16,275	M. T. Cuddalore	8,329	7,946	16,275	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	600	...
Total			693,400	657,794	1,351,194	47	49	96	53	54	107	61	84	...	121	56	70	126	77	56	133	...	...	...	
141	130,478	Bellary	66,704	63,774	130,478	4	5	9	1	2	3	4	7	...	2	1	2	3	2	3	...	...	...	...	
142	158,860	Adoni	77,170	77,170	158,860	23	24	47	17	17	23	5	8	...	4	3	5	8	9	10	...	...	...	...	
143	98,260	Alur	51,052	47,178	98,260	9	8	17	8	12	24	3	1	...	3	...	6	8	9	10	...	...	...	...	
144	137,838	Ghoosy	66,145	66,145	137,838	4	3	7	4	3	7	6	10	...	4	...	10	14	14	7	...	...	...	...	
145	117,211	Tadipatri	59,945	57,266	117,211	4	3	7	4	3	7	4	4	...	4	...	10	14	6	4	...	...	...	...	
146	97,513	Anantapur	51,005	46,748	97,513	6	2	8	3	4	8	3	4	...	4	...	5	14	2	4	...	...	...	...	
147	93,424	Hospett	47,005	45,819	92,824	2	2	4	1	1	2	1	5	...	6	...	...	7	10	9	...	...	...	...	
148	129,008	Dharmavaram	63,004	57,513	129,008	3	2	5	2	2	4	1	6	...	5	...	...	7	10	9	...	...	...	...	
149	84,754	Pennacottah	46,182	42,572	88,754	1	1	2	1	1	2	1	3	...	2	...	...	7	10	9	...	...	...	...	
150	87,895	Madakara	43,200	42,685	85,895	8	5	13	4	2	6	2	1	...	2	...	...	7	10	9	...	...	...	...	
151	79,458	Madakara	40,838	38,620	79,458	1	1	2	1	1	2	1	2	...	2	...	...	7	10	9	...	...	...	...	
152	87,779	Roydurg	45,838	41,841	87,779	2	7	9	4	2	5	7	3	...	2	...	...	7	10	9	...	...	...	...	
153	93,228	Kudlich	47,851	45,877	93,228	3	1	4	2	2	5	7	3	...	2	...	...	7	10	9	...	...	...	...	
154	85,729	Hurpiballi	43,947	41,782	85,729	1	1	2	1	1	2	1	2	...	2	...	...	7	10	9	...	...	...	...	
155	80,538	Huvindagalli	45,636	44,002	89,638	10	8	18	11	10	13	2	2	...	2	...	...	7	10	9	...	...	...	...	
156	51,706	M. T. Bellary	27,135	24,551	51,706	1	1	2	1	1	2	1	3	...	5	...	...	7	10	9	...	...	...	...	
157	22,723	M. T. Adoni	11,360	11,123	22,723	1	1	2	1	1	2	1	3	...	5	...	...	7	10	9	...	...	...	...	
158	6,730	M. T. Ghosy	3,465	3,185	6,730	1	1	2	1	1	2	1	1	...	1	...	...	7	10	9	...	...	...	...	
159	4,918	M. T. Anantapur	2,458	2,458	4,918	...	...	...	...	...	...	...	...	...	...	...	...	7	10	9	...	...	...	...	
160	14,996	Zemindaries	7,462	7,462	14,996	...	...	...	...	...	...	...	...	...	...	...	...	7	10	9	...	...	...	...	
Total			890,173	867,833	1,668,006	74	73	147	53	54	124	42	72	...	66	34	33	67	59	53	112	790	790	1,580	
161	93,628	Chondragherry	48,586	48,586	97,172	1	2	3	1	3	4	4	13	...	10	5	3	8	7	9	...	...	...	...	
162	201,101	Wandawash	100,550	100,550	201,101	50	48	98	33	31	74	24	53	...	71	42	45	87	48	49	...	...	...	...	
163	163,507	Wandawash	77,197	76,310	153,507	28	22	50	18	26	44	14	43	...	38	41	38	74	48	45	...	...	...	...	
164	167,391	Arcon	78,567	78,567	157,391	24	35	59	28	26	54	16	35	...	61	23	27	50	32	32	...	...	...	...	
165	141,134	Vellore	70,560	70,560	141,134	4	3	7	4	4	9	6	8	...	2	4	5	9	3	2	...	...	...	...	
166	109,150	Polar	54,820	54,820	109,150	6	8	14	11	13	7	5	12	...	9	11	20	24	13	10	...	...	...	...	
167	162,950	Gudalur	82,466	80,514	162,950	8	12	20	12	8	20	8	15	...	13	8	7	15	12	6	...	...	...	...	
168	60,211	Palamanar	30,792	29,509	60,211	2	3	5	3	5	8	6	9	...	8	8	3	11	9	9	...	...	...	...	
169	213,015	Chittoor	106,588	103,457	213,015	6	11	16	12	12	25	7	10	...	5	6	5	11	9	15	...	...	...	...	
170	88,622	M. T. Vellore	44,311	44,311	88,622	2	2	4	1	1	2	2	2	...	1	...	...	1	1	...	...	...	...	...	
171	12,103	M. T. Wallajahpett	6,051	6,051	12,103	1	1	2	1	1	2	1	2	...	1	...	...	1	1	...	...	...	...	...	
172	684,006	Zemindaries	342,003	342,003	684,006	48	46	94	53	51	104	14	142	...	222	183	150	283	114	143	...	...	...	...	
Total			1,020,678	994,600	2,015,278	179	200	379	172	172	395	162	389	...	465	291	303	594	291	320	611	2,593	2,593	5,394	
173	170,283	Kadachery	85,141	85,141	170,283	9	11	20	13	13	28	41	26	...	51	26	25	61	32	24	...	...	...	...	
174	169,800	Triplicore	84,900	84,900	169,800	11	18	29	7	7	18	8	20	...	26	19	22	41	22	12	...	...	...	...	
175	163,801	Uthangudi	77,851	77,851	163,801	8	14	22	6	10	16	7	11	...	28	24	12	36	21	14	...	...	...	...	
176	161,006	Althoor	80,506	80,506	161,006	15	16	33	16	20	36	11	23	...	35	20	20	32	14	22	...	...	...	...	
177	291,009	Namakkal	145,504	145,504	291,009	40	42	82	28	28	56	14	53	...	44	26	19	45	20	34	...	...	...	...	
178	343,793	Salau	171,896	171,896	343,793	61	53	114	55	48	103	22	64	...	54	18	150	61	54	118	...	...	...	...	
179	249,678	Trichygoode	124,458	124,458	249,678	36	36	72	33	32	66	39	74	...	155	38	78	150	61	54	...	...	...	...	

VII.—(Continued.)
Deaths registered from Small pox in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.		August.		September.		October.		November.		December.		Total.	
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.
186	190,629	Cuddalore	Dhanampetty	95,080	95,548	23	27	23	23	25	25	34	10	37	34	41	24	284	243
187	193,061		Chittoor	97,276	95,782	18	20	12	17	19	14	11	10	14	13	6	7	189	132
188	20,012		M. T. Salem	21,942	25,070	5	10	5	3	2	1	1	1	1	1	1	1	192	165
189	1,906,395		Total	975,503	930,892	225	249	208	231	234	169	256	251	205	233	292	244	4,011	3,569
190	149,916	Chingleput	Sethuramangalam	51,321	55,595	81	30	35	28	20	43	24	15	39	21	10	32	325	289
191	80,830		Collegal	48,137	42,673	2	2	2	2	2	2	2	1	3	2	2	2	12	16
192	162,813		Bhoorany	51,235	51,878	5	5	1	4	7	10	18	11	6	6	6	3	170	142
193	223,363		Paruthi	223,363	223,363	12	10	22	8	16	15	24	16	13	27	16	8	26	366
194	175,629	Chingleput	Taroor	96,200	89,459	9	7	16	6	4	10	6	5	10	3	4	7	119	133
195	217,435		Parapanam	107,881	109,674	10	7	17	5	9	7	14	14	10	4	10	6	94	94
196	124,620		Chandanalapeta	82,507	87,972	13	7	17	5	6	11	14	14	10	4	10	6	119	133
197	167,545		Tollachy	82,507	87,972	13	7	17	5	6	11	14	14	10	4	10	6	94	94
198	298,687	Chingleput	Chittoor	162,544	167,545	28	23	24	19	43	24	18	42	8	12	10	22	282	281
199	207,893		Chittoor	117,191	120,814	9	16	25	7	18	20	16	16	2	2	10	13	225	215
200	33,310		M. T. Chittoor	17,066	18,214	2	3	3	1	1	1	2	2	1	1	1	1	53	60
201	10,501		M. T. Erode	10,501	10,501	2	3	3	1	1	1	2	2	1	1	1	1	38	59
202	17,032,271	Chingleput	Total	5,74,973	5,74,973	133	122	255	108	118	238	126	89	216	57	124	116	1,979	1,864
203	36,461		Chittoor	30,209	36,461	3	2	5	4	1	1	1	1	1	1	1	1	12	7
204	9,982		M. T. Chittoor	6,255	4,717	2	2	2	1	1	2	1	1	1	1	1	1	3	6
205	9,358		M. T. Chittoor	1,658	1,400	1	1	1	1	1	1	1	1	1	1	1	1	2	3
206	43,501	Chingleput	Total	27,192	22,309	8	4	7	4	1	1	1	1	1	1	1	1	17	15
207	113,713		Chittoor	55,878	57,835	3	1	4	1	1	1	2	1	1	1	1	1	25	24
208	231,578		Chittoor	114,828	117,241	2	1	3	2	1	1	1	1	1	1	1	1	60	88
209	213,987		Chittoor	107,922	106,045	12	11	23	2	6	6	3	2	3	2	3	2	89	80
210	167,722	Chingleput	Narasangudi	55,625	62,007	8	6	13	31	1	1	8	5	13	3	1	1	39	41
211	233,573		Chittoor	111,687	110,881	4	4	9	1	1	1	10	3	16	13	13	6	54	71
212	23,712		M. T. Mangalore	15,188	14,864	1	1	1	1	1	1	1	1	1	1	1	1	1	1
213	918,952		Total	459,729	458,633	29	22	51	34	7	2	23	14	37	15	22	16	327	300
214	243,114	Chingleput	Chittoor	122,190	125,938	2	2	3	1	5	4	4	4	4	4	4	4	74	51
215	123,037		Kottayam	69,749	62,308	1	1	3	1	1	1	1	1	1	1	1	1	31	21
216	165,938		Wernad	76,223	76,710	2	2	4	11	4	6	4	4	4	4	4	4	51	52
217	243,501		Kurumburand	121,500	123,191	11	13	23	13	3	3	6	6	6	6	6	6	152	152
218	111,896	Chingleput	Chittoor	70,136	71,830	4	3	8	8	1	1	1	1	1	1	1	1	25	25
219	237,936		Chittoor	145,465	142,471	9	7	11	9	4	4	9	7	9	8	9	10	318	293
220	229,432		Chittoor	141,790	147,886	23	11	34	23	10	12	22	10	13	13	13	13	225	198
221	5,986		Chittoor	459,729	458,633	29	22	51	34	7	2	23	14	37	15	22	16	327	300
222	295,103	Chingleput	Chittoor	122,190	125,938	2	2	3	1	5	4	4	4	4	4	4	4	74	51
223	374,756		Chittoor	69,749	62,308	1	1	3	1	1	1	1	1	1	1	1	1	31	21
224	...		Chittoor	76,223	76,710	2	2	4	11	4	6	4	4	4	4	4	4	51	52
225	...		Chittoor	121,500	123,191	11	13	23	13	3	3	6	6	6	6	6	6	152	152
226	20,504	Chingleput	Chittoor	70,136	71,830	4	3	8	8	1	1	1	1	1	1	1	1	25	25
227	47,962		Chittoor	145,465	142,471	9	7	11	9	4	4	9	7	9	8	9	10	318	293
228	30,752		Chittoor	141,790	147,886	23	11	34	23	10	12	22	10	13	13	13	13	225	198
229	13,840		Chittoor	459,729	458,633	29	22	51	34	7	2	23	14	37	15	22	16	327	300
230	9,259	Chingleput	Chittoor	122,190	125,938	2	2	3	1	5	4	4	4	4	4	4	4	74	51
231	...		Chittoor	69,749	62,308	1	1	3	1	1	1	1	1	1	1	1	1	31	21
232	...		Chittoor	76,223	76,710	2	2	4	11	4	6	4	4	4	4	4	4	51	52
233	...		Chittoor	121,500	123,191	11	13	23	13	3	3	6	6	6	6	6	6	152	152
234	2,261,250	Chingleput	Chittoor	70,136	71,830	4	3	8	8	1	1	1	1	1	1	1	1	25	25
235	...		Chittoor	145,465	142,471	9	7	11	9	4	4	9	7	9	8	9	10	318	293
236	...		Chittoor	141,790	147,886	23	11	34	23	10	12	22	10	13	13	13	13	225	198
237	30,835,577		Total	1,134,889	1,126,361	200	151	351	238	150	388	170	125	202	139	341	274	3,637	2,507
238	...	Chingleput	Chittoor	122,190	125,938	2	2	3	1	5	4	4	4	4	4	4	4	74	51
239	...		Chittoor	69,749	62,308	1	1	3	1	1	1	1	1	1	1	1	1	31	21
240	...		Chittoor	76,223	76,710	2	2	4	11	4	6	4	4	4	4	4	4	51	52
241	...		Chittoor	121,500	123,191	11	13	23	13	3	3	6	6	6	6	6	6	152	152
242	...	Chingleput	Chittoor	70,136	71,830	4	3	8	8	1	1	1	1	1	1	1	1	25	25
243	...		Chittoor	145,465	142,471	9	7	11	9	4	4	9	7	9	8	9	10	318	293
244	...		Chittoor	141,790	147,886	23	11	34	23	10	12	22	10	13	13	13	13	225	198
245	...		Total	1,134,889	1,126,361	200	151	351	238	150	388	170	125	202	139	341	274	3,637	2,507
246	...	Chingleput	Chittoor	122,190	125,938	2	2	3	1	5	4	4	4	4	4	4	4	74	51
247	...		Chittoor	69,749	62,308	1	1	3	1	1	1	1	1	1	1	1	1	31	21
248	...		Chittoor	76,223	76,710	2	2	4	11	4	6	4	4	4	4	4	4	51	52
249	...		Chittoor	121,500	123,191	11	13	23	13	3	3	6	6	6	6	6	6	152	152
250	...	Chingleput	Chittoor	70,136	71,830														

No.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.			
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	
1	Ganjam.	Goosor...	79,400	78,761	158,061	118	112	230	83	66	149	72	155	227	66	46	102	44	41	85	44	41	85	
2		Bhatnagar...	104,124	113,101	223,275	82	83	165	80	80	160	103	73	182	88	47	48	115	53	133	107	53	160	
3		Chandole...	77,084	76,123	153,607	92	76	168	84	79	163	67	4	108	47	56	107	60	39	99	60	39	99	
4		M. T. Chandole...	7,311	8,245	15,556	6	11	17	9	7	16	4	8	5	3	5	14	2	...	...	2	...	...	
5		M. T. Bhatnagar...	10,733	10,917	21,650	7	10	17	10	9	19	11	3	19	4	2	7	9	6	11	6	11	17	
6		Zemindaries...	847,431	838,632	1,686,063	520	481	1,001	353	273	626	365	316	681	161	205	373	203	187	393	203	187	393	
Total			631,013	571,150	1,202,163	825	773	1,598	619	514	1,133	622	521	1,143	401	305	720	377	296	703	377	296	703	
7	Vizagapatnam.	Talacunda...	78,573	71,480	145,053	181	94	275	78	65	143	72	145	268	68	41	101	61	53	120	61	53	120	
8		Parvathipuram...	64,019	63,101	127,120	107	95	202	62	51	113	37	37	74	49	33	82	40	31	71	82	33	68	
9		Bahali...	43,754	47,134	90,888	49	36	85	34	19	53	26	12	40	20	11	30	20	15	35	40	15	46	
10		Salar...	35,370	34,751	70,121	63	42	105	16	16	32	18	9	27	28	11	23	23	22	13	35	22	13	
11		Vizagapatnam...	41,234	39,432	80,666	55	46	101	35	30	65	14	13	27	29	21	46	22	12	39	29	12	39	
12		Eludupeta...	39,010	39,324	78,334	48	27	75	30	20	50	34	25	59	27	19	46	24	22	33	24	22	33	
13		Vizagapatnam...	98,256	92,403	190,659	30	18	48	6	7	13	9	10	19	14	24	24	22	11	13	24	22	11	
14		M. T. Vizagapatnam...	16,703	16,488	33,191	10	19	29	10	21	31	25	21	46	32	29	61	83	47	41	88	47	41	
15		M. T. Bhatnagar...	4,315	4,425	8,740	2	1	3	1	1	2	1	1	2	2	1	8	4	12	10	4	14	10	
16		M. T. Vizagapatnam...	9,306	9,306	18,612	12	16	28	5	2	7	1	5	6	6	2	2	3	11	14	25	3	2	
17		M. T. Vizagapatnam...	4,313	4,340	8,653	12	16	28	5	2	7	1	5	6	6	2	2	7	7	2	4	2	4	
18		Zemindaries...	351,125	339,806	690,931	330	330	660	275	201	476	178	120	298	150	165	315	197	180	387	189	182	371	
Total			780,119	749,818	1,529,937	990	784	1,774	614	483	1,097	466	315	811	497	309	874	477	418	895	477	418	895	
19		Rajahmundry.	Rajahmundry...	53,363	53,363	106,726	110	109	219	57	36	93	39	86	125	25	21	46	21	30	51	21	30	51
20	Peddapalle...		55,388	56,101	111,489	119	95	214	43	38	81	53	56	109	26	31	57	64	46	28	74	46	28	
21	Rajahmundry...		102,136	101,427	203,563	105	78	183	85	60	145	68	57	123	60	41	101	60	43	86	60	43	86	
22	Arasikere...		165,093	161,840	326,933	76	63	139	33	27	60	44	49	93	44	49	93	45	39	81	45	39	81	
23	Narasapur...		89,763	88,108	177,871	40	33	73	19	20	39	22	17	34	20	19	39	21	28	48	21	28	48	
24	Ellore...		68,759	64,599	133,358	122	116	238	53	50	103	41	40	81	37	26	63	44	46	83	44	46	83	
25	Tundi...		46,115	46,115	92,230	20	19	39	17	17	34	18	9	27	15	14	29	10	16	20	15	20	35	
26	Rajahmundry...		88,737	83,734	172,471	74	63	137	38	31	69	36	32	68	45	37	82	66	41	61	105	66	41	
27	Ellore...		72,860	72,860	145,720	143	89	232	56	46	102	23	43	98	23	22	45	63	59	108	23	22	45	
28	M. T. Rajahmundry...		9,093	9,283	18,376	2	2	4	1	1	2	2	1	3	3	2	4	1	2	3	3	2	3	
29	M. T. Rajahmundry...		10,455	9,283	19,738	10	10	20	5	5	10	1	2	3	1	3	4	4	...	...	5	4	...	
30	M. T. Rajahmundry...		10,728	11,020	21,748	14	10	24	8	5	13	81	61	142	52	50	102	48	...	...	1	...	...	
31	Zemindaries...		182,873	182,873	365,746	141	106	247	82	53	135	52	50	102	48	36	84	46	40	86	46	40	86	
Total			803,603	789,336	1,592,939	966	771	1,737	524	420	944	463	378	836	352	331	683	376	359	735	376	359	735	

53	106,452	64,181	52,268	106,452	68	49	117	41	26	67	27	19	45	15	15	35	17	18	31																		
54	83,681	43,194	40,947	83,681	45	41	86	26	22	58	25	20	45	25	15	31	13	14	40																		
55	67,188	43,473	43,473	87,139	26	19	45	11	6	21	16	11	27	9	12	21	9	14	21																		
56	128,337	65,470	62,968	128,337	23	19	42	18	6	24	16	14	30	14	10	24	6	19	24																		
57	169,912	86,268	83,814	169,912	39	30	69	28	20	48	20	21	51	22	22	46	20	21	46																		
58	143,629	73,747	69,932	143,629	66	43	109	34	21	55	28	24	62	53	33	53	29	33	53																		
59	120,619	61,080	58,939	120,619	70	43	127	39	41	80	56	46	102	42	30	72	50	53	72																		
60	61,508	32,965	31,543	61,508	69	53	122	20	14	34	28	13	42	24	24	52	31	31	52																		
61	120,658	60,658	60,000	120,658	128	120	248	55	54	109	74	38	112	49	32	81	52	52	81																		
62	49,444	52,354	49,444	101,798	98	67	165	28	24	52	24	24	64	36	33	25	22	22	33																		
63	55,674	55,674	111,348	108,264	69	44	113	40	24	64	40	24	64	24	63	28	16	16	60																		
64	18,033	5,074	5,074	10,148	1	1	2	1	1	2	1	1	2	3	3	6	1	1	2																		
65	26,168	17,208	18,920	36,128	5	2	7	3	2	5	3	1	2	3	3	6	1	1	2																		
66	163,147	83,107	80,920	163,147	96	104	200	63	54	117	39	36	75	7	4	106	31	31	106																		
Total																				733	374	269	643	846	273	619	343	315	657								
47	135,008	98,680	98,680	195,698	75	52	127	42	30	72	29	26	60	48	37	85	41	41	85																		
48	138,376	70,331	67,781	138,376	45	33	78	29	20	49	12	12	22	22	22	44	25	25	44																		
49	81,336	42,011	39,826	81,336	13	16	29	5	4	9	2	2	4	2	2	17	18	18	20																		
50	149,847	76,839	71,518	149,847	55	40	95	20	18	38	37	31	68	27	19	46	46	46	46																		
51	147,141	76,637	70,504	147,141	44	27	71	22	23	45	28	24	58	31	31	69	33	33	69																		
52	63,886	30,733	30,733	60,733	15	15	30	7	7	14	14	14	28	14	14	31	29	29	31																		
53	100,802	68,511	60,701	108,902	39	26	65	16	14	30	42	25	47	31	18	49	20	20	42																		
54	100,965	52,619	48,408	101,027	10	21	31	13	6	19	10	18	32	5	2	38	12	12	23																		
55	127,258	63,623	61,903	127,258	32	26	58	19	14	33	22	18	32	20	18	40	22	22	40																		
56	29,922	14,879	14,879	29,922	3	3	6	2	2	4	6	4	8	2	2	5	3	3	5																		
57	296,192	124,121	116,071	239,192	193	191	384	130	103	233	135	138	273	123	130	243	104	104	243																		
Total																				659	320	301	626	325	301	626	320	301	626	320	301	626	320	301	626	320	301
58	897,552	194,670	202,876	397,552	102	117	219	91	118	209	105	100	205	104	112	216	97	125	216																		
59	104,210	53,204	51,006	104,210	32	25	57	26	25	51	24	20	50	18	17	35	10	9	20																		
60	149,838	76,838	72,915	149,838	36	32	78	34	31	65	40	31	71	41	36	70	24	19	35																		
61	163,401	98,577	92,517	163,401	39	37	76	36	33	69	26	26	52	41	39	63	33	33	63																		
62	182,328	67,453	61,672	182,328	20	10	30	9	7	16	4	4	8	3	3	6	4	4	6																		
63	197,708	100,453	96,855	197,708	53	38	91	54	40	94	40	45	90	39	39	81	33	33	81																		
64	130,709	65,566	65,143	130,709	33	20	53	16	14	30	7	7	14	3	3	6	3	3	6																		
65	37,327	18,252	19,075	37,327	3	4	7	2	2	4	1	1	2	4	4	8	12	12	12																		
Total																				395	201	202	394	192	202	394	201	202	394	201	202	394	201	202	394	201	202
66	239,754	122,412	117,343	239,754	26	20	46	15	14	29	12	12	24	4	4	42	51	51	42																		
67	194,657	83,571	81,030	194,657	28	27	55	14	13	27	10	10	20	15	15	30	123	123	32																		
68	236,104	120,178	115,930	236,104	45	32	77	28	20	48	11	11	22	5	5	10	166	166	45																		
69	244,459	123,240	121,240	244,459	78	60	138	56	43	99	45	45	90	43	43	86	131	131	69																		
70	239,133	118,530	116,630	239,133	43	34	77	18	14	32	10	10	20	7	7	14	68	68	32																		
71	178,501	89,427	86,640	178,501	73	46	119	62	40	102	40	40	80	42	42	84	104	104	50																		

Deaths registered from Figures in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population of 1871	Districts	Names of Rural Circles and Towns.	Population for which Returns were received.		January.		February.		March.		April.		May.		June.	
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	Total.
72	196,506	K. Arcot (Contd.)	Kulasekhar ...	99,373	97,193	196,566	71	72	143	56	57	113	59	51	110	52	47
73	216,246		Yelavancoor ...	108,583	106,817	215,400	4	3	7	...	...	...	...	...	...	...	...
74	40,280		M. T. Cuddalore	19,563	20,717	40,280	4	3	7	...	...	...	...	...	...	...	...
75	175,817	S. Arcot	Total ...	865,922	869,595	1,735,517	401	314	715	426	385	811	553	519	1,072	548	477
76	237,893		Woodwardpeth ...	119,998	117,895	237,893	83	86	169	67	57	124	76	75	151	60	65
77	228,813		Trichinopoly ...	112,238	116,575	228,813	63	68	131	38	47	85	51	51	102	63	61
78	257,174	T. Arcot	Kudali ...	123,875	133,299	257,174	93	69	162	53	47	100	54	50	104	48	38
79	170,557		Mosur ...	83,837	86,720	170,557	65	67	132	43	49	112	60	61	121	54	56
80	76,530		Perambalur ...	36,922	39,607	76,529	11	13	24	9	9	18	12	12	24	2	2
81	11,271	T. Arcot	M. T. Trichinopoly ...	...	...	11,271	1	2	3	4	1	5	2	2	4	2	2
82	1,200,405		M. T. Srirangam	598,184	612,274	1,210,458	261	245	506	211	180	391	218	229	447	233	229
83	107,459		Total ...	52,720	54,739	107,459	8	7	15	11	6	17	9	13	22	12	13
84	198,193	T. Arcot	Shelley ...	98,110	102,083	198,193	27	24	51	16	18	34	23	20	43	22	21
85	207,407		Mayavaram ...	98,551	108,856	207,407	16	9	25	12	9	21	8	14	22	16	7
86	152,208		Narasimham ...	72,379	79,829	152,208	14	11	25	20	19	39	16	18	34	16	20
87	237,423	T. Arcot	Trichinopoly ...	115,777	121,646	237,423	30	17	47	21	5	26	23	20	43	10	13
88	232,194		Pulicat ...	141,074	150,720	291,794	48	51	99	49	36	85	39	46	85	57	53
89	206,590		Chembaram ...	144,020	152,570	296,590	60	59	119	37	34	71	36	41	77	44	50
90	143,561	T. Arcot	Meenagody ...	69,814	74,217	144,031	13	12	25	6	8	21	10	10	20	8	8
91	52,175		M. T. Tanjore ...	25,736	26,439	52,175	2	3	5	2	...	2	3	5	8	1	1
92	44,444		M. T. Combarum ...	21,569	22,875	44,444	2	3	5	2	...	2	3	5	8	1	1
93	21,165	T. Arcot	M. T. Yagavaram ...	10,407	10,758	21,165	6	2	8	3	3	6	3	3	6	1	...
94	48,523		M. T. Nagapattinam ...	21,250	27,273	48,523	13	15	28	5	18	23	6	6	12	5	5
95	17,763		M. T. Mannargudi ...	8,521	9,179	17,700	2	...	2	...	4	4	1	...	1	...	1
96	1,973,731	M. Arcot	Total ...	953,968	1,019,763	1,973,731	261	245	506	211	180	391	218	229	447	233	229
97	311,501		Dindigul ...	153,139	158,362	311,501	116	71	187	53	63	115	64	55	119	68	54
98	128,583		Mayyur ...	63,332	65,251	128,583	13	16	29	14	6	20	9	7	16	9	15
99	179,431	M. Arcot	Madurai ...	88,325	91,105	179,430	44	44	88	24	27	51	26	11	37	26	19
100	241,245		Tamiraparani ...	120,724	120,521	241,245	76	69	145	57	41	101	46	49	95	45	51
101	247,418		Perambalur ...	107,073	110,345	217,418	57	57	114	53	55	109	51	53	107	50	44
102	184,531	M. Arcot	Pala ...	91,077	93,764	184,841	49	37	86	35	42	77	41	24	65	37	21
103	51,937		Settevedel Villages ...	25,221	25,763	50,984	14	9	23	5	...	7	4	11	13	6	6
104	12,865		M. T. Dindigul	6,540	6,325	12,865	9	14	23	5	...	12	6	18	7	5	5

105	504,131	Ramnad Zomindary ...	257,557	504,131	156	135	295	104	99	203	77	67	159	77	68	145	48	104	59	63	122
106	434,253	S. Arcot ...	225,256	434,253	61	61	115	31	40	71	45	43	91	30	39	69	47	90	81	29	60
Total ...			1,112,866	2,265,315	682	631	1,116	378	368	766	343	354	746	343	317	660	314	680	320	320	640
107	176,054	S. Arcot ...	88,369	176,054	23	27	50	20	11	31	14	23	37	25	16	41	9	17	1	5	6
108	285,811	Chidambaram ...	142,552	285,811	35	48	83	31	34	68	33	47	98	34	33	67	80	40	70	46	46
109	281,535	Chidambaram ...	142,552	281,535	70	75	145	47	41	88	37	39	99	36	37	75	48	84	38	35	78
110	175,078	Chidambaram ...	87,025	175,078	63	72	141	25	25	50	32	45	87	32	36	68	18	33	31	24	55
111	163,215	Chidambaram ...	77,640	163,215	28	28	56	24	22	46	48	16	48	34	33	29	5	33	16	14	80
112	122,049	Chidambaram ...	61,310	122,049	30	43	73	24	25	49	21	17	34	17	12	29	16	39	22	17	39
113	182,015	Chidambaram ...	90,211	182,015	43	41	84	15	17	32	10	19	40	21	16	37	22	37	14	18	27
114	145,129	Chidambaram ...	73,631	145,129	35	29	64	15	17	32	21	24	45	15	10	25	10	25	14	2	42
115	21,664	Chidambaram ...	10,549	21,664	5	5	9	2	3	5	7	2	9	1	2	8	2	3	5	6	41
116	17,945	Chidambaram ...	8,847	17,945	1	1	6	2	2	4	10	5	16	10	3	13	1	3	4	2	8
117	10,355	Chidambaram ...	6,283	10,355	3	5	7	2	2	4	11	5	11	10	3	13	1	3	4	2	8
Total ...			856,515	1,693,369	380	387	787	247	238	485	262	269	566	262	217	479	195	407	163	160	373
119	101,836	Chidambaram ...	52,255	101,836	133	120	253	71	55	126	83	51	138	83	59	142	76	135	64	50	111
120	92,455	Chidambaram ...	47,213	92,455	133	120	253	71	55	126	83	51	138	83	59	142	76	135	64	50	111
121	115,747	Chidambaram ...	58,765	115,747	71	77	148	28	22	50	76	40	138	76	44	120	43	78	30	14	44
122	71,366	Chidambaram ...	36,249	71,366	61	64	125	31	31	62	43	39	86	43	40	82	39	78	42	39	81
123	98,874	Chidambaram ...	49,984	98,874	61	64	125	31	31	62	43	39	86	43	40	82	39	78	42	39	81
124	175,337	Chidambaram ...	89,592	175,337	61	64	125	31	31	62	43	39	86	43	40	82	39	78	42	39	81
125	120,616	Chidambaram ...	62,588	120,616	194	185	379	61	48	109	55	54	180	55	52	107	63	70	133	64	139
126	107,920	Chidambaram ...	54,582	107,920	82	85	167	53	50	103	80	68	148	80	63	142	72	133	64	139	139
127	95,579	Chidambaram ...	48,496	95,579	87	87	174	53	50	103	80	68	148	80	63	142	72	133	64	139	139
128	7,295	Chidambaram ...	3,656	7,295	9	7	16	3	4	7	6	4	10	9	5	15	7	10	3	9	12
129	45,298	Chidambaram ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total ...			467,619	936,371	602	616	1,218	445	383	825	519	475	1,026	519	494	982	495	894	438	388	836
129	102,744	Chidambaram ...	52,255	102,744	63	62	125	47	47	94	53	54	107	53	30	65	35	49	29	19	48
130	92,051	Chidambaram ...	47,213	92,051	46	39	85	32	26	58	82	24	66	38	30	65	35	49	29	19	48
131	75,067	Chidambaram ...	36,249	75,067	24	24	48	23	15	38	23	11	31	38	31	69	35	28	74	29	53
132	115,591	Chidambaram ...	74,040	115,591	79	63	147	63	50	119	64	55	119	64	70	144	75	68	63	23	63
133	128,162	Chidambaram ...	66,366	128,162	72	68	140	50	46	95	57	62	139	64	70	144	75	68	63	23	63
134	145,468	Chidambaram ...	65,102	145,468	64	61	125	31	31	62	43	40	87	43	40	82	35	77	41	26	66
135	110,918	Chidambaram ...	57,284	110,918	74	70	144	35	34	69	32	40	87	43	40	82	35	77	41	26	66
136	109,405	Chidambaram ...	57,284	109,405	39	32	71	50	44	79	69	48	117	61	56	116	73	109	56	57	113
137	116,738	Chidambaram ...	74,496	116,738	43	40	84	32	31	86	82	47	98	35	25	60	38	44	62	40	65
138	16,275	Chidambaram ...	8,329	16,275	61	41	102	46	40	86	41	40	81	45	29	72	32	71	33	39	72
139	1,351,194	Total ...	688,400	1,351,194	610	586	1,196	494	423	917	484	484	1,056	511	456	997	553	1,041	493	413	938
141	130,478	Chidambaram ...	66,704	130,478	23	24	47	17	26	43	19	15	34	9	21	30	27	57	30	24	64
142	108,860	Chidambaram ...	51,052	108,860	29	19	48	10	6	16	14	10	24	19	15	34	23	49	26	22	48
143	98,230	Chidambaram ...	51,052	98,230	29	19	48	10	6	16	14	10	24	19	15	34	23	49	26	22	48

VIII.—(Continued.)
Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population to be counted of 1871	Districts	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
144	137,838	Belary—(Continued.)	Gloomy ..	71,603	66,145	137,748	37	28	55	20	22	42	23	17	40	29	43	72	25	39	64	13	19	32
145	117,211		Tadypatri ..	59,915	57,266	117,181	17	2	19	7	6	13	5	4	9	6	10	16	26	11	8	19	16	32
146	97,813		Anantapore ..	51,065	46,748	97,813	17	10	27	19	16	35	19	12	31	14	20	34	56	18	16	34	18	24
147	93,424		Hespet ..	47,065	46,819	93,884	17	117	138	74	67	141	69	68	137	70	55	125	139	45	45	90	65	90
148	120,008		Dharmapuri ..	63,065	57,513	120,578	33	33	66	47	39	86	45	46	91	26	37	64	38	40	78	31	19	50
149	88,754		Pennakondah ..	46,183	42,572	88,755	30	61	91	29	21	50	15	9	24	23	45	68	113	34	31	65	49	49
150	87,895		Hindapur ..	45,200	42,655	87,855	33	38	71	24	13	37	33	51	84	32	65	22	57	79	21	28	49	49
151	79,458		Madakurra ..	40,585	38,620	79,205	7	6	13	19	11	30	15	11	26	24	39	29	68	31	32	63	63	63
152	67,779		Devadrog ..	41,811	37,779	79,590	28	37	65	19	20	39	36	31	67	24	16	40	59	31	32	63	63	63
153	92,228		Rudra ..	45,983	41,811	87,794	20	22	42	17	16	33	32	31	63	33	48	22	40	27	25	52	52	52
154	86,729		Rudra ..	47,351	41,782	89,133	8	2	10	6	8	14	1	5	6	8	13	10	18	7	6	13	13	13
155	89,538		Muvattupuzha ..	46,655	44,002	90,657	23	15	38	13	15	27	7	15	22	6	8	14	23	1	8	9	9	9
156	51,766		M. T. Rellay ..	27,185	24,681	51,866	4	6	10	3	6	9	13	8	21	6	9	15	15	9	14	23	23	23
157	22,723		M. T. Adoni ..	11,133	11,133	22,266	11	6	17	11	10	21	11	11	22	11	8	13	15	6	13	19	19	19
158	6,750		M. T. Gloomy ..	3,545	3,185	6,730	3	2	5	6	3	9	3	2	5	1	2	3	5	...	4	4	4	4
159	4,918		M. T. Anantapore ..	2,138	2,480	4,618	12	10	22	11	4	15	12	1	10	22	14	20	17	10	10	20	20	20
160	14,936		Zemindaries ..	7,534	7,102	14,636	12	10	22	11	4	15	12	1	10	22	14	20	17	10	10	20	20	20
Total ..				860,173	807,843	1,668,016	432	441	903	356	317	673	491	382	783	357	309	666	712	316	362	708	708	708
161	99,528	North Arcot.	Chendragheri ..	51,042	48,585	99,625	35	23	58	21	20	41	40	44	84	22	18	40	49	33	33	71	71	
162	204,101		Walloppett ..	103,172	100,929	204,101	61	62	123	34	38	72	59	71	130	63	60	126	93	53	55	108	108	
163	153,507		Wandiarah ..	77,197	76,310	153,507	21	21	42	23	30	53	22	21	43	25	34	69	47	37	39	86	86	
164	157,391		Arct ..	78,501	78,877	157,378	24	24	48	25	33	58	35	34	69	31	37	74	61	37	24	61	71	
165	141,134		Vellore ..	70,850	70,284	141,134	245	269	515	187	202	389	187	179	366	286	278	561	434	201	177	378	378	
166	109,150		Polar ..	54,820	54,339	109,159	84	87	171	82	102	184	127	135	262	140	172	312	235	184	85	167	167	
167	162,980		Udichath ..	82,466	80,534	163,000	144	132	276	106	91	197	179	181	360	162	188	350	245	163	319	319		
168	60,211		Palmatt ..	30,702	29,509	60,211	40	33	73	37	33	70	29	29	58	29	37	66	73	47	52	99	99	
169	213,045		Chittoor ..	109,588	103,457	213,045	65	53	118	71	64	135	101	66	170	67	104	172	137	58	49	107	107	
170	38,032		M. T. Vellore ..	18,139	19,893	38,032	24	18	42	14	19	33	15	10	25	14	29	44	16	10	26	26	26	
171	12,103		M. T. Walloppett ..	5,631	6,222	11,853	1	1	2	1	1	2	...	1	1	2	2	3	5	...	1	1	1	
172	661,006		Zemindaries ..	335,307	325,699	661,006	308	222	530	253	222	450	266	253	519	300	244	544	576	291	297	588	588	
Total ..				1,020,078	994,560	2,014,638	507	475	982	491	482	973	1,030	1,029	2,059	1,147	1,129	2,276	2,261	1,069	992	2,001	2,001	
173	170,232	Kistnagerry ..	Kistnagerry ..	86,082	86,201	172,283	111	118	229	63	60	123	69	68	137	87	95	185	183	60	55	115	115	
174	190,800		Tupatore ..	98,812	96,688	195,500	164	153	317	172	131	305	312	220	411	227	250	486	539	177	182	369	369	
175	153,801		Vengal ..	75,983	77,815	153,798	71	74	145	81	74	155	101	79	180	69	77	166	192	84	81	165	165	
176	164,006		Athor ..	80,256	83,750	164,006	104	101	205	98	79	175	96	92	188	69	51	120	132	66	76	142	142	

177	261,029	Nannau	127,690	132,123	251,009	234	310	694	266	207	533	216	247	453	184	124	308	213
178	343,773	Salem	170,018	175,775	343,793	159	162	311	105	131	236	132	139	271	154	99	253	201
179	243,078	Tiruchengode	124,458	124,458	248,916	133	142	335	113	111	227	155	129	254	86	71	156	192
180	180,026	Dharmapuri	95,080	95,546	190,626	132	145	218	115	115	230	125	129	254	86	71	156	178
181	128,037	Ossapur	97,476	96,761	194,237	132	145	168	87	80	187	74	63	137	79	68	147	113
182	60,012	M. T. Salem	29,942	25,070	55,012	16	13	29	8	10	18	5	11	16	4	10	14	20
Total				975,502	991,433	1,966,935	1,816	1,222	2,539	1,159	1,090	2,243	1,217	1,155	2,352	1,083	950	1,698
183	103,916	Sadiganam	84,321	85,595	169,916	36	32	63	76	47	123	61	48	109	51	52	103	96
184	39,830	Chilgall	48,157	42,673	90,830	39	33	77	23	17	40	35	23	58	43	34	82	72
185	102,813	Bhowani	51,235	51,578	102,813	34	28	72	41	37	78	47	31	73	48	25	53	61
186	223,363	Perindurai	...	...	223,363	60	53	113	62	23	121	42	34	76	67	42	109	80
187	175,659	Carur	86,209	89,450	175,659	45	35	124	36	23	59	47	29	76	34	28	62	51
188	217,498	Dharmapuri	107,861	104,612	212,473	65	53	124	36	23	59	47	29	76	34	28	62	51
189	127,630	Ossapur	60,452	63,188	123,630	31	25	56	16	12	28	21	11	32	31	14	45	37
190	167,546	Polachy	82,074	84,321	166,395	79	75	154	61	47	108	65	45	112	41	36	77	80
191	208,656	Cumbalure	102,644	106,141	208,656	41	31	72	37	34	71	65	55	110	45	37	72	102
192	237,808	Pallah	117,194	120,614	237,808	78	55	133	43	47	90	53	53	108	47	39	86	102
193	45,740	M. T. Cumbalure	17,956	18,214	36,160	5	4	9	...	...	...	2	3	5	1	1	2	6
194	10,501	M. T. Erode	...	...	10,501	4	2	6	...	...	...	3	1	4	2	3	1	4
Total				874,975	898,269	1,763,274	517	453	970	459	328	787	475	343	818	446	372	742
195	26,451	Nellcherries	20,249	16,192	36,441	15	8	23	8	3	11	10	8	18	12	9	21	52
196	9,802	M. T. Odanahundi	6,365	4,717	11,082	4	3	7	2	5	8	3	5	8	4	2	6	8
197	2,053	M. T. Oozoor	1,553	1,460	3,013	1	...	...	...	...	...	...	...	...	1	2	3	...
Total				27,192	22,209	49,401	20	11	31	11	8	19	13	13	26	17	13	30
198	118,713	Kandapur	55,878	57,865	113,743	34	32	66	18	14	32	18	13	34	20	24	41	38
199	231,570	Uttal	115,329	117,211	232,540	19	23	42	20	20	40	15	13	28	20	13	33	25
200	213,067	Mangalore	107,032	106,045	213,067	62	45	107	39	27	66	48	29	77	23	27	50	40
201	167,722	Uppanagall	55,625	52,087	107,722	51	45	96	40	42	82	41	32	73	34	40	74	54
202	223,575	Keserigode	111,687	110,891	223,575	47	45	92	39	23	62	18	16	34	27	34	61	98
203	29,712	M. T. Mangalore	16,183	14,524	30,707	5	6	11	2	2	4	2	2	4	1	1	2	5
Total				459,720	458,632	918,352	213	196	414	158	128	286	142	105	240	123	137	362

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VIII.—(Continued.)

Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Names of Rural Circles and Towns.	Population for which Returns were received.			January.			February.			March.			April.			May.			June.		
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
204	248,118	Chemical	122,190	125,928	248,118	72	61	133	18	42	98	52	40	92	55	38	93	34	44	78	48	42	90
205	123,057	Kottayam...	60,749	62,308	123,057	47	41	91	37	80	67	42	31	73	25	40	65	28	24	52	26	37	63
206	125,938	Wynaad...	76,238	49,710	125,938	45	24	69	35	28	67	43	27	70	36	31	90	53	48	102	49	87	85
207	243,751	Karambunad	121,560	122,191	243,751	84	74	158	55	42	97	64	50	114	62	44	97	64	49	102	49	89	89
208	141,806	Calicut	70,126	71,680	141,806	34	51	115	48	36	84	40	37	67	51	34	65	33	33	71	50	89	82
209	287,886	Ernad	145,465	142,421	287,886	132	95	227	100	72	172	169	76	185	83	68	153	76	66	135	105	85	190
210	292,762	Palakkad	144,796	147,966	292,762	140	133	273	96	100	196	121	91	212	80	72	162	74	66	140	99	71	170
211	5,986	Cochin	3,142	2,844	5,986	113	96	209	74	69	143	85	63	148	76	68	144	73	65	138	70	52	122
212	295,103	Palghat	144,151	150,952	295,103	83	46	99	36	43	81	44	30	71	46	41	87	42	38	80	42	34	76
213	374,756	Ponnani...	185,306	168,450	374,756	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
214	...	Aringacherry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
215	...	Targacherry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
216	29,504	M. T. Tholcherry	9,847	10,627	20,474	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
217	47,862	M. T. Calicut	24,094	23,398	47,492	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
218	30,752	M. T. Palghat	15,074	15,978	31,052	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
219	13,540	M. T. Cochin	6,885	6,833	13,718	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
220	9,259	M. T. Cannanore	5,206	4,033	9,239	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	2,261,250	Total	1,124,819	1,126,361	2,251,180	763	646	1,415	562	478	1,038	607	470	1,077	548	450	998	484	435	919	531	453	1,044
30,835,577		Total Madras Presidency	15,221,079	15,066,763	30,287,842	12,230	10,922	23,152	8,979	7,856	16,896	9,542	8,298	17,750	8,749	7,967	16,716	8,506	7,849	16,355	8,176	7,531	15,715

VIII.—(Continued.)

Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.			August.			September.			October.			November.			December.			Total.			
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.				
Canjann.																												
1	128,001		Gomsoor	79,300	78,761	158,061	64	36	90	44	48	92	52	46	98	69	44	113	8	7	15	65	59	115	791	647	1,438	
2	222,275		Borhampore	109,124	113,151	222,275	70	48	118	94	73	167	49	62	111	42	59	101	76	62	138	60	43	103	930	712	1,642	
3	153,507		Chiracole	77,084	78,423	155,507	46	46	92	62	76	138	75	80	155	43	59	102	68	62	130	71	54	125	772	712	1,484	
4	15,587		M. T. Chiracole	7,611	8,243	15,854	4	1	5	2	7	9	11	9	19	4	7	14	5	5	10	8	5	13	52	64	116	
5	21,670		M. T. Borhampore	10,733	10,937	21,670	7	5	12	8	12	20	11	8	19	1	10	11	21	5	5	10	8	4	12	59	94	153
6	817,876		Zemindaries	434,731	283,662	718,393	173	133	306	204	170	374	225	225	450	176	142	319	236	177	407	248	193	441	3,658	2,762	6,420	
Total				681,013	571,189	1,252,202	351	309	660	419	381	800	441	433	874	346	317	663	392	302	694	402	366	768	5,698	5,039	10,737	
Vizagapatnam.																												
7	155,629		Palacada	73,673	71,480	145,153	71	41	112	64	60	124	70	52	122	55	50	105	88	54	142	92	90	182	910	705	1,615	
8	135,466		Purvaipore	64,619	64,104	128,723	80	44	124	63	46	109	65	37	102	54	45	99	61	56	116	65	31	96	732	531	1,263	
9	139,259		Bobbili	49,754	47,131	96,885	27	23	50	53	33	86	45	41	86	37	24	61	43	40	83	25	42	67	489	327	816	
10	77,364		Sador	35,270	34,751	70,021	20	11	31	22	22	44	29	22	51	23	21	44	25	14	39	23	20	43	204	224	428	
11	117,276		Vizagapatnam	42,192	39,422	81,614	26	21	47	29	28	57	41	28	69	30	26	56	27	38	65	45	39	82	379	319	698	
12	97,637		Andapattam	41,284	39,324	80,608	31	32	63	50	50	100	47	47	94	47	39	86	31	62	93	29	32	61	424	346	770	
13	48,637		Vizagapatnam	23,356	22,467	45,823	8	12	20	13	13	26	17	17	34	14	14	28	15	17	35	23	11	34	173	161	334	
14	155,393		Andapattam	64,693	60,657	125,350	33	30	63	35	29	64	23	26	49	23	36	70	43	27	69	47	50	97	496	414	910	
15	32,151		M. T. Vizagapatnam	15,753	16,488	32,241	8	4	12	18	7	25	10	10	20	14	11	25	16	5	13	7	5	12	121	106	227	
16	8,714		M. T. Elampattam	4,218	4,226	8,444	3	3	6	3	3	6	3	3	6	3	3	6	2	2	4	3	1	4	21	24	45	
17	20,169		M. T. Vizagapatnam	9,936	10,333	20,269	9	7	16	13	11	24	17	16	33	13	11	24	5	5	10	8	3	11	21	24	45	
18	8,512		M. T. Palacada	4,313	4,389	8,702	1	2	3	4	4	7	1	1	2	3	3	6	4	3	7	3	7	10	50	63	113	
19	387,760		Zemindaries	201,125	225,805	426,930	185	191	376	230	198	428	277	255	532	248	257	505	274	254	498	261	548	261	2,806	2,654	5,460	
Total				780,149	745,818	1,525,967	405	431	836	595	478	1,073	645	535	1,180	587	550	1,137	645	525	1,170	678	560	1,238	7,174	5,919	13,093	
Godavery.																												
20	109,103		Rajahmundry	55,800	53,363	109,163	29	24	53	37	41	78	36	29	65	38	37	75	105	105	210	138	121	259	655	520	1,175	
21	111,159		Peddapore	57,388	56,101	113,489	45	58	103	63	66	129	85	79	163	85	65	151	91	88	179	201	163	364	919	825	1,744	
22	208,653		Panatchandrapore	102,126	101,447	203,573	62	60	122	63	88	151	94	87	181	122	109	232	161	126	287	242	162	404	1,164	929	2,093	
23	208,885		Amalapur	105,045	101,840	206,885	80	75	155	80	76	156	105	112	217	104	97	201	89	66	177	242	201	403	1,164	929	2,093	
24	177,876		Narasipore	86,108	85,108	171,216	33	32	65	34	38	72	33	40	73	30	31	61	52	41	93	73	57	130	857	796	1,653	
25	111,988		Ellore	56,789	55,108	111,897	39	41	80	54	56	110	49	24	83	48	39	87	241	217	458	241	229	464	1,015	922	1,937	
26	92,457		Undi	46,343	46,115	92,458	11	11	22	25	26	51	16	24	40	19	11	30	45	43	88	69	45	106	236	240	476	
27	167,491		Tandikuru	83,757	83,734	167,491	58	74	132	74	66	140	96	70	166	69	65	138	137	135	282	188	123	309	940	793	1,733	
28	145,716		Venkatadriem	72,808	72,849	145,657	46	57	103	68	56	124	63	49	112	65	57	122	237	236	473	240	230	494	1,222	1,001	2,223	
29	17,839		M. T. Cocanada	9,095	8,744	17,839	1	1	2	4	2	6	1	1	2	3	4	7	1	1	2	3	4	7	13	13	26	
30	10,738		M. T. Rajahmundry	10,455	9,283	19,738	1	2	3	8	5	13	2	2	4	6	8	13	4	4	9	16	18	34	51	40	79	
31	25,487		M. T. Ellore	13,788	11,699	25,487	3	4	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	24	39	73	
32	203,528		Zemindaries	101,454	203,828	305,282	57	72	129	81	67	148	97	86	180	97	85	182	115	133	248	166	182	348	1,052	939	2,061	
Total				803,603	789,385	1,592,988	468	511	979	603	598	1,201	689	635	1,304	684	672	1,356	1,415	1,249	2,658	1,703	1,412	3,115	8,614	7,587	16,201	

VIII.—(Continued.)

Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.		August.		September.		October.		November.		December.		Total.	
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	F.
23	106,152	Kistna.	Nandigama	54,181	52,298	106,479	22	20	42	32	28	60	17	15	32	177	147	324	690
34	83,081		Bezwada	42,135	40,947	83,081	14	12	26	10	9	19	23	21	44	122	74	196	531
35	57,139		Gudwada	43,478	43,665	87,143	15	13	28	11	17	28	20	18	38	67	30	97	205
36	128,827		Masulipatam	65,479	62,358	127,837	16	11	27	19	13	32	19	13	32	48	36	84	207
37	109,912		Repalli	86,263	80,814	167,077	24	28	52	19	22	41	21	20	41	53	46	99	263
38	143,629		Rajapeta	73,747	69,882	143,629	32	27	59	34	25	59	31	26	57	73	46	119	290
39	120,619		Rajahmundry	61,680	59,619	121,299	41	39	80	65	46	111	48	42	90	153	71	224	350
40	61,508		Yennakondal	31,543	31,543	63,086	19	11	30	23	16	39	25	13	38	103	76	179	207
41	123,638		Pavada	60,068	60,068	120,136	48	57	105	50	50	100	51	51	102	85	81	166	353
42	101,728		Croore	52,582	49,314	101,896	31	19	50	30	32	62	43	41	84	113	79	192	292
43	108,934	Nellore.	Guntur	53,894	53,894	107,788	23	20	43	37	33	70	35	27	62	57	53	110	210
44	18,033		M. T. Guntur	9,074	8,959	18,033	4	3	7	2	2	4	2	2	4	3	3	6	10
45	36,183		M. T. Masulipatam	17,268	18,920	36,188	8	5	13	5	5	10	4	4	8	6	6	12	24
46	163,127		Zemindaries	83,107	80,020	163,127	68	47	115	61	46	107	66	42	108	51	45	96	196
47	1,452,374		Total	737,495	714,879	1,452,374	305	314	619	408	355	763	418	382	800	416	347	763	1,452
48	195,038	Madras Town.	Ongole	96,680	96,680	193,360	56	34	90	60	46	106	49	47	96	42	42	84	172
49	81,395		Kondakur	70,591	67,794	138,385	21	30	51	33	24	57	40	17	57	26	23	49	79
50	143,847		Kavali	42,011	39,325	81,336	20	19	39	20	19	39	17	15	32	26	23	49	66
51	147,141		Nellore	76,329	74,518	150,847	28	11	39	31	27	58	33	16	49	55	46	101	173
52	63,886		Gudur	33,131	30,754	63,885	18	17	35	32	32	64	30	27	57	45	45	90	96
53	103,802		Raipur	53,541	50,261	103,802	20	18	38	23	16	39	17	11	28	19	26	45	45
54	100,985		Atmakur	52,619	48,456	101,075	12	5	17	11	4	15	32	16	48	8	16	24	26
55	127,258		Udayagiri	65,935	61,305	127,240	20	15	35	27	18	45	26	17	43	35	35	70	80
56	29,422		Kanigiri	14,879	15,063	29,942	2	1	3	2	4	6	4	4	8	1	1	2	3
57	239,192		Zemindaries	124,121	115,071	239,192	136	108	244	139	132	271	149	136	285	151	130	281	345
58	1,375,811	Pud.	Total	707,392	668,419	1,375,811	358	289	647	390	310	700	417	351	768	404	425	829	857
59	397,552		Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
60	104,210		Ponneri	53,201	51,006	104,207	23	25	48	25	25	50	25	39	64	28	25	53	53
61	186,404		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
62	132,328		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
63	132,328		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64
64	132,328		Total	707,392	668,419	1,375,811	358	289	647	390	310	700	417	351	768	404	425	829	857
65	132,328		Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
66	239,192	Chingle.	Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
67	164,657		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
68	236,108		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
69	236,108		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64
70	236,108		Total	707,392	668,419	1,375,811	358	289	647	390	310	700	417	351	768	404	425	829	857
71	178,604		Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
72	178,604		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
73	216,246		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
74	40,290		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64
75	237,893	T. Chingle.	Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
76	218,663		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
77	227,174		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
78	227,174		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64
79	170,567		Total	707,392	668,419	1,375,811	358	289	647	390	310	700	417	351	768	404	425	829	857
80	76,530		Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
81	11,271		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
82	1,755,817		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
83	237,893		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64
84	193,191	T. Chingle.	Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
85	207,407		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
86	154,714		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
87	237,423		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64
88	294,164		Total	707,392	668,419	1,375,811	358	289	647	390	310	700	417	351	768	404	425	829	857
89	296,590		Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
90	143,561		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
91	52,175		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
92	44,444		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64
93	21,163	T. Chingle.	Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
94	49,525		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
95	17,703		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
96	1,973,731		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64
97	311,501		Total	707,392	668,419	1,375,811	358	289	647	390	310	700	417	351	768	404	425	829	857
98	128,983		Madras Town	194,576	202,876	397,452	112	128	240	99	118	217	85	92	177	85	102	167	106
99	241,215		Trivellore	76,988	72,515	149,503	29	32	61	31	30	61	31	40	71	30	32	62	28
100	217,418		Sydupet	93,857	92,547	186,404	45	49	94	47	35	82	44	44	88	44	44	88	73
101	184,831		Chingleput	87,653	64,675	152,328	41	31	72	35	24	59	28	30	58	40	40	80	64

VIII.—(Continued.)

Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to Census of 1871.	Districts.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.		August.		September.		October.		November.		December.		Total.			
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.		Total.		
102	51,987	(Coastal)	Sethanad Villages ...	...	25,768	57,987	14	11	25	2	13	10	2	3	3	1	4	4	12		
103	12,805		M. T. Madras ...	26,294	6,540	12,805	5	13	18	5	3	8	4	3	7	...	...	...	5		
104	12,805		M. T. Dindigul ...	6,540	6,540	12,805	5	13	18	5	3	8	4	3	7	...	...	...	12		
105	50,131		Ramanad Zamin ...	236,571	257,557	504,131	70	73	143	90	92	182	109	...	...	...	...	...	207		
106	431,253		Sheravanga do. ...	209,997	222,256	434,253	34	36	70	42	44	86	37	71	...	...	...	...	73		
	2,266,615		Total ...	1,112,066	1,154,549	2,266,615	379	386	765	309	309	618	401	399	800	317	361	678	9,297		
107	178,954	Tinnevely.	Sreeviliputtur ...	88,263	89,691	178,954	20	18	38	15	10	25	22	8	30	16	11	27	419		
108	156,862		Satur ...	78,467	78,395	156,862	25	31	56	33	26	59	41	40	99	43	44	87	456		
109	235,811		Ottapattanam ...	142,862	142,949	285,811	49	47	96	34	46	80	46	38	118	87	77	195	588		
110	234,346		Tenkani ...	112,704	121,642	234,346	80	73	153	28	21	49	23	24	73	35	35	70	761		
111	178,078		Yanguery ...	87,035	91,043	178,078	16	15	31	22	18	40	11	7	47	18	19	37	297		
112	163,215	Tinnevely.	Ambarasundam ...	77,630	85,575	163,215	21	19	40	14	12	26	21	9	35	17	16	52	246		
113	122,001		Tenkasi ...	61,010	60,991	122,001	22	18	40	19	17	36	19	18	54	32	32	86	250		
114	182,018		Sunkaramar Corv. ...	90,314	91,804	182,018	21	24	45	23	27	49	29	23	62	32	18	50	242		
115	145,130		Tinnevely ...	73,651	71,469	145,120	18	15	33	22	16	38	16	11	49	27	29	76	204		
116	21,044		M. T. Tinnevely ...	10,549	10,495	21,044	2	4	6	2	3	5	1	1	6	1	1	2	4	246	
117	17,945	Tinnevely.	M. T. Palanacottah ...	8,847	9,098	17,945	1	3	4	2	3	5	1	1	6	1	1	2	4	246	
118	10,565		M. T. Palanacottah ...	5,283	5,282	10,565	3	1	4	3	5	8	1	1	2	1	1	2	4	246	
	1,693,959		Total ...	836,515	857,444	1,693,959	228	208	436	216	203	419	236	199	615	332	219	452	3,159	2,992	
119	101,866	Kannad.	Kundikoth ...	52,269	49,597	101,866	55	57	112	68	54	122	69	59	181	56	48	104	86	67	
120	92,665		Marakapur ...	47,213	45,452	92,665	43	38	81	52	37	89	59	47	106	53	35	88	105	107	
121	115,747		Cumbam ...	58,768	56,982	115,747	52	48	100	63	70	123	79	54	106	67	60	127	108	89	
122	71,066		Servilli ...	36,249	34,517	70,766	38	35	73	29	22	61	40	30	70	38	39	77	45	47	
123	98,874		Kolkunda ...	49,984	48,844	98,828	58	52	110	51	83	89	64	46	110	67	67	134	81	58	
124	173,434	Kannad.	Patticoorah ...	89,968	83,566	173,534	104	98	202	120	94	214	76	69	165	97	83	180	80	68	
125	120,516		Ramalecottah ...	62,588	53,028	115,616	79	71	150	57	70	127	64	63	117	69	63	135	81	62	
126	107,390		Nundhal ...	54,552	52,768	107,320	80	40	120	59	34	113	63	48	111	64	61	125	77	86	
127	25,579		M. T. Kannool ...	12,456	13,093	25,549	5	15	20	8	9	17	8	16	24	12	9	21	9	13	
128	7,295		M. T. Cumbam ...	3,658	3,639	7,295	5	14	19	5	10	15	2	3	5	1	2	3	3	4	
129	45,208	Dapah.	Zemindaries ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	93,640		Total ...	467,640	440,792	908,432	319	458	777	512	453	970	483	486	955	646	581	1,227	644	555	
129	102,744		Dapah.	Proddatur ...	52,221	50,420	102,641	30	24	54	34	30	64	48	31	79	40	35	114	49	49
130	93,640			Badwal ...	48,067	44,984	93,051	36	31	67	32	30	71	40	37	77	42	31	98	37	37
131	76,667			Sidhont ...	39,250	37,417	76,667	34	25	59	30	29	59	33	26	59	47	32	86	53	28
132	145,180	Pullanet ...		74,565	70,615	145,180	69	73	142	80	68	148	77	72	149	84	62	146	86	63	
133	145,351	Voland ...		74,640	70,951	145,591	76	63	139	85	100	185	64	81	145	61	72	133	78	67	

VIII.—(Continued.)

Deaths registered from Fevers in the Rural Circles and Towns of the Madras Presidency during each Month of the Year 1923.

No.	Population of Census 1921	District.	Names of Rural Circles and Towns.	Population for which Returns were received.		July.		August.		September.		October.		November.		December.		Total.	
				Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	F.
177	261,009	Salem (C.D.)	Nannal	127,380	133,129	260,509	100	102	202	111	124	235	101	89	190	122	243	1,834	3,693
178	348,793		Salem	170,018	178,775	348,793	168	141	309	129	154	283	102	145	247	122	243	1,834	3,693
179	249,678		Trichy	125,220	124,458	249,678	100	102	202	111	124	235	101	89	190	122	243	1,834	3,693
180	190,635		Thiruvannamalai	95,040	95,595	190,635	100	102	202	111	124	235	101	89	190	122	243	1,834	3,693
181	191,037		Osser	97,376	93,661	191,037	100	102	202	111	124	235	101	89	190	122	243	1,834	3,693
182	50,012		M. T. Salem	24,912	25,070	50,012	11	15	26	13	15	28	7	14	21	6	16	112	242
183	1,968,995		Total	975,522	993,473	1,968,995	958	855	1,813	1,000	1,000	2,000	952	906	1,858	1,257	1,135	2,392	4,694
184	169,916	Salem (C.D.)	Sathiamangalam	84,321	85,595	169,916	55	58	113	66	67	133	68	72	140	121	111	232	463
185	90,580		Collegal	48,157	42,423	90,580	28	34	62	37	38	75	33	38	71	50	46	96	177
186	102,813		Elowany	51,235	51,578	102,813	33	31	64	37	36	73	33	32	65	33	31	64	125
187	223,353		Perundurai	111,659	111,694	223,353	63	61	124	63	61	124	63	61	124	63	61	124	248
188	175,559		Caroor	86,300	89,259	175,559	42	43	85	42	43	85	42	43	85	42	43	85	177
189	217,193		Dharmapuri	107,881	109,312	217,193	11	12	23	11	12	23	11	12	23	11	12	23	24
190	123,650		Odumalpet	60,463	63,188	123,650	22	23	45	22	23	45	22	23	45	22	23	45	50
191	167,516		Pollachi	82,604	84,912	167,516	69	62	131	69	62	131	69	62	131	69	62	131	154
192	208,985		Coimbatore	102,544	106,441	208,985	48	48	96	48	48	96	48	48	96	48	48	96	107
193	237,808		Palladam	117,194	120,614	237,808	59	41	100	50	50	100	50	50	100	50	50	100	123
194	35,310	Salem (C.D.)	M. T. Coimbatore	17,096	18,214	35,310	3	2	5	1	1	2	1	1	2	1	1	2	3
195	10,301		M. T. Erode	...	...	10,301	3	2	5	1	1	2	1	1	2	1	1	2	3
196	1,763,274		Total	874,975	888,299	1,763,274	431	399	830	451	404	855	489	408	897	615	494	1,109	2,214
197	36,461	Salem (C.D.)	Kelcherries	20,269	16,192	36,461	20	14	34	21	8	29	10	17	27	11	8	19	154
198	9,952		M. T. Coimbatore	4,865	4,717	9,952	2	2	4	1	1	2	1	1	2	1	1	2	3
199	3,068		M. T. Coimbatore	1,558	1,400	3,068	1	1	2	1	1	2	1	1	2	1	1	2	3
200	49,501		Total	27,192	22,309	49,501	23	18	41	22	9	31	12	19	31	24	13	37	285
201	113,713	Salem (C.D.)	Kandam	57,878	57,835	113,713	27	23	50	27	27	54	29	29	58	30	23	53	103
202	231,570		Kandam	114,329	117,241	231,570	9	9	18	10	10	20	16	16	32	17	10	27	33
203	213,067		Mangalore	107,022	106,045	213,067	52	63	115	42	42	84	33	27	60	41	33	74	138
204	107,722		Uppanigadi	5,625	52,097	107,722	59	63	123	35	51	86	23	27	50	23	23	46	73
205	222,578		Kaserode	111,687	110,891	222,578	77	63	140	48	31	79	41	30	71	52	28	80	138
206	29,712		M. T. Mangalore	15,188	14,524	29,712	4	6	10	2	4	6	5	6	11	5	4	9	14
207	918,362		Total	459,729	458,633	918,362	240	201	441	185	167	352	157	143	300	164	136	300	592
208	249,118	Malerbar.	Cheruvu	122,190	126,928	249,118	69	62	131	39	43	82	34	34	68	34	33	67	138
209	123,057		Kottiyam	60,749	62,308	123,057	41	33	74	42	29	71	28	18	46	33	17	50	84
210	125,938		Wynad	76,228	49,710	125,938	52	31	83	45	32	77	36	27	63	45	24	69	107
211	243,751		Karimnagar	121,560	122,191	243,751	48	45	93	55	43	98	57	38	95	41	35	76	138
212	141,806		Calicut	70,126	71,680	141,806	63	56	119	45	28	73	41	28	69	29	28	57	107
213	287,946		Ernad	145,465	142,481	287,946	120	110	230	101	66	167	60	68	128	67	62	128	248
214	292,462		Valavanad	144,796	147,666	292,462	88	80	168	87	63	150	71	58	129	65	54	119	248
215	5,986		Cochin	3,142	2,844	5,986	...	...	...	...	...	...	...	...	...	...	...	...	...
216	295,103		Palghat	144,151	150,952	295,103	83	73	156	96	55	151	60	47	107	64	50	114	248
217	374,756		Ponani	185,806	189,450	374,756	57	35	92	41	34	75	30	25	55	24	25	49	107
218	...		Alengode	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
219	20,504	Malerbar.	Tanjacherry	9,847	10,657	20,504	5	1	6	4	5	9	4	4	8	4	4	8	11
220	47,952		M. T. Tellicherry	24,084	23,898	47,982	3	3	6	3	3	6	3	3	6	3	3	6	9
221	30,752		M. T. Calicut	15,674	15,078	30,752	9	12	21	7	8	15	8	8	16	7	7	14	18
222	13,840		M. T. Palghat	6,985	6,855	13,840	...	...	...	...	...	...	...	...	...	...	...	...	...
223	9,259		M. T. Cochin	5,296	4,053	9,259	5	5	10	4	7	11	10	9	19	3	7	10	14
224	...		M. T. Cannanore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
225	2,261,240		Total	1,134,939	1,126,361	2,261,240	642	546	1,188	571	419	990	444	360	804	391	339	724	1,428
226	30,835,877		Total Madras Presidency	15,221,037	15,069,763	30,289,800	8,600	8,140	16,740	8,865	8,241	17,106	9,038	8,536	17,624	8,979	8,255	17,234	34,894
227	...		Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

IX.

Deaths registered from Fovrel-complaints in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1873.

No.	Population according to the Census of 1871	Names of Districts.	Population for which Returns were received.			January.		February.		March.		April.		May.		June.	
			Males.	Females.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1	1,998,976	Gujarat District	531,013	571,129	1,102,142	19	24	43	28	31	59	148	21	109	23	18	41
2	1,253,379	Taluk (R. C.)	285,688	285,688	571,376	11	6	17	8	21	29	12	13	25	13	13	26
3	1,253,379	Municipal Towns.	10,774	10,774	21,548	...	...	...	...	...	...	...	...	...	...	...	...
4	877,576	Zemindaries	527,431	527,431	1,054,862	8	17	25	...	16	25	126	8	132	10	5	15
5	1,311,711	Vizagapatnam District	721,110	738,818	1,459,928	24	17	41	13	32	45	13	10	23	24	14	37
6	1,777,819	Taluk (R. C.)	821,584	877,576	1,699,160	14	4	18	6	16	22	6	3	9	8	7	15
7	63,634	Municipal Towns.	31,810	31,810	63,620	6	2	8	4	7	11	5	4	9	7	7	13
8	203,828	Zemindaries	351,185	355,825	707,010	6	12	18	1	8	9	5	2	7	16	2	18
9	1,522,669	Madras District	802,565	750,356	1,552,921	81	28	109	20	41	61	87	34	121	28	30	58
10	1,253,379	Taluk (R. C.)	607,531	653,135	1,260,666	24	25	49	33	39	72	33	33	66	23	23	46
11	63,634	Municipal Towns.	31,810	31,810	63,620	3	2	5	3	5	8	3	3	6	3	3	6
12	203,828	Zemindaries	101,154	101,154	202,308	4	1	5	...	3	3	1	...	1	...	...	...
13	1,453,374	Kistna District	757,405	711,879	1,469,284	20	22	42	18	47	65	20	14	34	21	24	45
14	1,453,374	Taluk (R. C.)	628,046	608,080	1,236,126	25	19	44	24	19	43	17	12	29	16	20	36
15	5,322	Municipal Towns.	26,842	27,879	54,721	2	4	6	2	8	10	...	...	...	1	...	...
16	161,127	Zemindaries	83,107	80,920	164,027	2	1	3	3	4	7	...	...	...	4	4	8
17	1,376,811	Nellore District	707,393	670,419	1,377,812	50	22	72	23	37	60	34	25	59	23	29	52
18	1,177,697	Taluk (R. C.)	538,392	539,303	1,077,695	27	6	33	13	18	31	14	10	24	10	13	23
19	23,922	Municipal Towns.	14,579	15,049	29,628	1	...	...	1	1	2	...	...	...	1	1	2
20	239,192	Zemindaries	124,121	116,971	241,092	22	16	38	8	18	26	15	9	24	12	9	21
21	307,552	Madras Town (R. C.)	191,676	202,876	394,552	104	91	195	75	162	257	82	60	142	66	75	141
22	938,192	Chingleput District	475,863	462,216	938,079	35	74	109	63	125	192	48	34	82	78	63	141
23	940,857	Taluk (R. C.)	457,715	443,141	900,856	93	73	166	62	123	211	57	41	98	63	52	115
24	37,827	Municipal Towns.	18,232	19,075	37,307	2	1	3	1	2	3	...	...	...	15	11	26
25	1,735,817	South Arcot District	885,922	869,895	1,755,817	52	37	89	45	92	134	62	50	112	64	44	108
26	1,715,827	Taluk (R. C.)	866,417	843,110	1,709,527	52	33	85	42	85	127	53	43	96	50	45	95
27	40,290	Municipal Towns.	19,565	20,785	40,350	...	5	...	5	7	12	4	5	9	4	8	12
28	1,200,408	Trichinopoly District	598,134	612,274	1,210,408	51	47	98	51	99	150	52	43	95	48	63	111
29	1,112,607	Taluk (R. C.)	...	...	1,112,607	41	88	129	42	18	60	36	26	62	42	54	96
30	81,801	Municipal Towns.	...	...	81,801	10	9	19	9	11	20	8	7	15	6	15	21
31	1,739,719	Tanjore District	953,969	1,013,763	1,967,732	108	93	201	68	118	226	85	61	146	56	58	114
32	1,739,719	Taluk (R. C.)	866,462	923,227	1,789,689	74	61	135	51	89	140	63	40	103	53	57	110
33	181,012	Municipal Towns.	87,476	96,536	184,012	34	32	66	17	29	46	21	21	42	27	21	48
34	2,265,618	Madras District	1,112,066	1,154,549	2,266,615	155	116	271	134	257	420	85	60	145	96	80	176
35	1,253,379	Taluk (R. C.)	623,731	639,648	1,263,379	62	38	100	47	104	147	30	23	53	46	43	89
36	61,852	Municipal Towns.	32,764	32,088	64,852	7	5	12	6	11	17	...	...	...	6	6	12
37	938,354	Zemindaries	455,571	482,813	938,384	86	73	159	81	139	205	45	35	80	44	31	75
38	1,693,953	Tinnevely District	836,515	857,444	1,693,959	381	344	725	298	627	1,225	191	137	328	192	152	344
39	1,641,405	Taluk (R. C.)	811,835	832,569	1,644,404	349	307	656	266	469	1,135	177	170	347	178	131	309
40	49,554	Municipal Towns.	24,079	24,875	48,954	82	37	69	32	58	90	21	14	35	14	21	35
41	989,640	Karnool District	467,640	448,792	916,432	13	16	29	20	29	49	15	17	32	27	13	40
42	881,553	Taluk (R. C.)	451,188	430,070	881,258	10	7	17	13	19	32	9	8	17	17	6	23
43	32,574	Municipal Towns.	18,152	16,722	34,874	3	9	12	7	10	17	...	...	...	10	7	17
44	45,208	Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
45	1,351,191	Cuddapah District	638,400	657,794	1,296,194	37	26	63	22	45	68	18	16	34	30	20	50
46	1,321,919	Taluk (R. C.)	656,071	649,848	1,305,919	87	26	63	21	43	64	16	16	32	30	18	48
47	16,275	Municipal Towns.	8,329	7,946	16,275	...	...	...	...	...	...	...	...	...	...	...	...
48	1,688,008	Bellary District	800,173	807,883	1,608,056	103	88	191	79	134	205	78	68	146	94	104	198
49	1,366,873	Taluk (R. C.)	607,571	759,002	1,366,573	99	85	184	76	135	210	66	55	121	90	93	183
50	85,137	Municipal Towns.	41,769	41,859	83,628	3	2	5	2	7	9	1	5	6	8	11	14
51	14,996	Zemindaries	7,534	7,462	14,996	1	1	2	1	2	...	...	...	...	1	...	...
52	2,015,278	North Arcot District	1,020,678	994,600	2,015,278	115	118	233	77	141	218	70	68	138	68	55	123
53	1,301,147	Taluk (R. C.)	658,401	642,746	1,301,147	90	79	169	52	98	150	43	43	86	51	31	82
54	50,125	Municipal Towns.	23,970	26,153	50,123	...	...	...	...	...	...	...	...	...	...	...	...
55	631,063	Zemindaries	338,570	323,639	662,209	23	39	62	24	61	114	26	26	52	17	24	41
56	1,095,953	Salem District	575,502	991,493	1,566,995	82	70	152	57	135	185	61	63	124	95	59	154
57	1,916,983	Taluk (R. C.)	950,580	968,428	1,918,998	79	68	147	55	130	184	56	60	116	93	53	161
58	50,012	Municipal Towns.	21,942	25,070	47,012	3	2	5	2	6	11	3	3	6	2	1	3
59	1,768,274	Coimbatore District	874,975	888,299	1,763,274	117	103	220	94	168	262	77	76	153	97	67	164
60	1,717,793	Taluk (R. C.)	...	...	1,717,793	114	105	219	94	168	262	76	76	152	94	65	160
61	45,511	Municipal Towns.	...	...	45,511	...	...	...	...	...	...	...	...	...	...	...	...
62	49,501	Nediperry District	27,192	22,803	49,995	3	4	7	5	9	14	3	3	6	8	6	14
63	36,451	Taluk (R. C.)	20,263	16,187	36,450	1	2	3	3	6	9	2	2	4	6	2	8
64	15,040	Municipal Towns.	6,923	6,117	13,040	...	...	...	...	...	...	...	...	...	...	...	...
65	218,362	South Canara	455,729	458,633	914,362	154	150	304	125	212	337	80	76	156	84	67	151
66	668,660	Taluk (R. C.)	444,541	441,109	885,650	149	145	294	124	211	335	76	76	152	81	61	142
67	29,712	Municipal Towns.	13,188	13,524	26,712	5	5	10	1	2	3	4	4	8	3	6	9
68	2,261,250	Malabar District	1,120,361	1,120,250	2,240,611	147	133	280	128	262	405	94	94	188	120	91	211
69	2,188,933	Taluk (R. C.)	1,073,718	1,065,220	2,138,938	145	129	274	122	230	352	85	85	170	85	85	170
70	122,317	Municipal Towns.	61,176	61,141	122,317	2	4	6	6	10	14	6	6	12	3	6	9
Total Madras Presidency			15,221,079	15,066,763	30,287,842	1,871	1,610	3,481	1,457	1,228	2,685	1,447	1,137	2,584	1,372	1,182	2,554
Total Madras Presidency			...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

IX.—(Continued.)

Deaths registered from Bowel-Complaints in the Rural Circles and Towns of the Madras Presidency during each Month of the year 1973.

No.	Population according to Census of 1971.	Names of Rural Circles and Towns.	Population for which Returns were received.			July.		August.		September.		October.		November.		December.		Total.	
			Males.	Females.	Total.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
1	1,388,976	Ganjam District	631,013	571,180	1,202,193	14	9	18	12	31	19	29	17	31	19	29	17	31	19
2	533,843	Talangs (R. C.)	265,508	208,336	473,844	4	3	12	8	19	13	10	7	16	11	10	7	16	11
3	37,257	Municipal Towns.	18,074	10,183	28,257	1	1	1	1	1	1	1	1	1	1	1	1	1	1
4	817,578	Zemindaries	347,431	233,952	581,383	10	7	11	11	12	7	18	10	14	8	18	10	24	17
5	1,844,711	Vizagapatnam District	780,140	748,818	1,528,958	22	17	39	10	24	19	30	15	46	14	37	22	53	19
6	1,577,819	Talangs (R. C.)	324,654	377,407	702,061	9	5	13	5	8	7	13	6	19	6	13	6	22	9
7	63,031	Municipal Towns.	34,370	35,646	69,916	5	8	10	7	9	9	5	5	11	11	7	7	12	12
8	23,828	Zemindaries	354,125	335,905	690,030	5	5	10	4	7	5	14	13	15	6	12	7	29	19
9	1,532,930	Godavari District	803,603	789,295	1,592,898	60	42	102	78	128	67	114	43	185	124	209	147	394	271
10	1,226,017	Talangs (R. C.)	637,831	658,156	1,295,987	48	40	88	61	147	108	96	31	178	124	209	147	394	271
11	63,764	Municipal Towns.	33,328	28,726	62,054	6	2	8	6	16	14	9	7	14	11	11	7	25	18
12	203,529	Zemindaries	102,374	201,454	203,828	6	6	6	4	4	3	5	1	4	3	5	1	9	9
13	1,452,374	Kistna District	737,495	714,379	1,451,874	28	16	42	30	22	28	29	23	52	28	52	23	75	41
14	1,225,026	Talangs (R. C.)	628,046	606,980	1,235,026	23	16	39	23	17	40	41	31	72	40	72	31	103	61
15	54,221	Municipal Towns.	26,342	27,879	54,221	1	1	1	1	1	1	1	1	1	1	1	1	1	1
16	163,127	Zemindaries	82,107	80,920	163,027	1	1	2	1	1	1	1	1	1	1	1	1	1	1
17	1,376,811	Nellore District	707,892	689,419	1,397,311	29	29	52	18	28	46	30	26	56	23	56	23	80	49
18	1,107,697	Talangs (R. C.)	568,492	538,205	1,106,697	16	19	35	8	21	29	18	16	47	21	47	21	68	37
19	29,922	Municipal Towns.	14,879	13,043	27,922	7	10	17	10	7	12	7	10	11	15	9	12	14	19
20	239,192	Zemindaries	124,121	115,071	239,192	7	10	17	10	7	12	7	10	11	15	9	12	14	19
21	397,552	Madras Town (R. C.)	194,076	202,376	396,452	71	89	160	96	103	199	95	176	114	199	95	176	114	199
22	988,184	Chingleput District	475,908	482,216	958,124	64	75	139	70	65	135	46	59	108	79	108	79	137	108
23	990,857	Talangs (R. C.)	457,716	443,141	900,857	50	66	116	61	52	113	39	52	92	67	92	67	113	89
24	37,237	Municipal Towns.	18,252	19,075	37,327	14	9	23	9	13	29	10	6	10	12	13	8	21	17
25	1,755,817	South Arcot District	885,922	869,895	1,755,817	48	39	87	41	47	88	61	36	97	64	108	87	132	103
26	1,715,327	Talangs (R. C.)	866,417	849,110	1,715,527	47	37	84	35	45	83	57	30	87	61	102	84	129	103
27	40,260	Municipal Towns.	19,505	20,755	40,260	1	2	2	3	2	5	4	6	10	3	9	6	14	10
28	1,202,403	Trichinopoly District	588,134	612,274	1,200,408	78	67	145	68	55	123	86	45	155	83	174	94	232	183
29	1,112,637	Talangs (R. C.)	588,134	612,274	1,200,408	78	67	145	68	55	123	86	45	155	83	174	94	232	183
30	87,801	Municipal Towns.	...	...	87,801	18	21	39	17	16	33	20	16	36	20	24	15	30	24
31	1,973,781	Tanjore District	952,648	1,019,763	1,972,411	111	78	189	118	83	268	107	190	117	108	215	106	323	224
32	1,732,719	Talangs (R. C.)	869,492	923,227	1,792,719	89	59	139	85	68	121	83	53	136	85	127	81	221	166
33	184,012	Municipal Towns.	87,476	96,536	184,012	22	28	50	32	22	35	24	20	47	23	37	24	61	41

34	2,265,615	Madras District	1,112,068	1,154,548	2,266,615	111	93	204	143	115	258	135	117	252	172	140	312	92	77	169	110	95	205	1,444	1,200	2,644
35	1,263,379	{ Talangs (R. C.)	623,781	639,379	1,263,160	52	50	102	60	59	119	63	63	128	95	57	152	86	75	161	106	86	192	743	651	1,394
36	61,852	{ Municipal Towns.	32,764	32,088	64,852	8	8	16	8	8	16	7	7	14	9	9	16	8	2	...	...	...	13	71	53	124
37	938,381	{ Zemindaries	455,571	482,819	938,391	51	43	94	80	51	131	65	50	115	75	76	151	...	...	...	...	...	680	496	1,136	
38	1,693,959	Tinnevely District	857,444	1,639,959	2,497,403	203	153	368	217	168	385	238	183	416	246	245	491	288	247	535	314	352	696	2,907	2,638	5,600
39	1,614,405	{ Talangs (R. C.)	811,836	832,569	1,644,405	172	133	321	198	141	339	193	162	365	221	211	432	266	221	487	304	307	611	2,651	2,319	4,970
40	49,554	{ Municipal Towns.	24,679	24,875	49,554	31	1	47	19	27	46	40	21	61	25	34	59	22	26	48	40	45	85	316	314	680
41	950,640	{ Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
42	581,558	Kannool District	457,610	446,792	904,402	27	23	56	29	24	53	25	27	52	38	27	65	22	16	28	17	11	28	279	221	503
43	32,874	{ Talangs (R. C.)	451,488	430,070	881,558	30	11	39	18	17	35	13	11	24	19	13	32	14	4	18	8	4	12	107	118	280
44	45,208	{ Municipal Towns.	16,152	16,722	32,874	7	10	17	11	7	18	12	10	28	19	14	33	8	12	29	9	7	15	112	111	223
45	1,351,194	{ Zemindaries	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
46	1,234,919	Cuddapah District	603,400	657,794	1,351,194	45	2	74	46	40	86	48	30	73	40	37	77	34	31	65	43	26	69	426	314	740
47	16,275	{ Talangs (R. C.)	682,071	649,848	1,331,919	48	2	74	45	39	84	43	29	72	39	30	75	34	30	64	43	25	68	433	305	723
48	1,038,036	{ Municipal Towns.	8,329	7,946	1,625	1	1	2	1	1	2	1	1	1	1	1	2	...	...	...	...	...	1	3	8	11
49	1,556,873	Bellary District	800,173	807,833	1,608,006	124	104	228	116	97	213	114	129	243	108	113	221	106	101	206	85	83	156	1,181	1,083	2,264
50	86,137	{ Talangs (R. C.)	807,871	759,002	1,566,873	120	100	220	111	93	204	104	117	221	99	103	202	104	94	193	79	71	159	1,120	1,007	2,127
51	14,996	{ Municipal Towns.	41,763	41,363	83,126	4	1	8	4	4	8	10	12	22	9	10	19	1	7	8	6	12	18	57	72	129
52	2,015,278	{ Zemindaries	7,524	7,462	14,986	1	1	1	1	1	1	1	1	1	1	1	1	...	...	...	...	...	...	...	...	...
53	1,901,147	North Arcot District	994,000	2,015,278	2,909,278	120	118	248	89	62	151	68	52	131	78	72	153	79	83	163	100	80	180	998	954	1,932
54	604,125	{ Talangs (R. C.)	668,401	642,746	1,311,147	62	57	119	68	40	108	35	42	77	40	33	79	54	52	103	72	49	121	662	675	1,337
55	604,006	{ Municipal Towns.	23,970	26,156	50,125	1	1	2	1	1	2	2	2	2	2	2	3	5	...	...	...	1	2	14	15	29
56	1,966,095	{ Zemindaries	338,370	325,639	664,009	67	57	124	20	21	41	31	21	52	36	30	66	25	37	62	27	30	57	322	364	686
57	1,916,983	Salem District	975,502	991,493	1,966,995	118	79	197	90	80	180	150	102	252	133	120	253	151	124	278	117	77	194	1,223	988	2,221
58	50,012	{ Talangs (R. C.)	960,560	966,423	1,926,983	113	76	189	82	81	163	142	99	241	129	112	241	147	123	269	109	79	182	1,169	955	2,124
59	1,763,274	{ Municipal Towns.	24,942	25,070	50,012	5	3	8	8	9	17	8	3	11	1	1	12	7	2	9	8	4	12	54	43	97
60	1,717,763	Coimbatore District	874,975	883,299	1,758,274	145	123	268	147	127	274	172	145	317	171	163	333	152	91	246	161	110	271	1,565	1,252	2,817
61	45,511	{ Talangs (R. C.)	...	...	...	1	1	2	2	2	6	6	5	10	2	7	9	2	3	5	2	3	5	33	29	62
62	49,501	{ Municipal Towns.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
63	26,451	Nellore District	27,192	22,303	49,495	4	5	9	4	4	8	6	7	13	2	3	5	2	4	6	6	5	11	51	53	104
64	13,010	{ Talangs (R. C.)	20,269	16,192	36,461	2	2	4	2	2	4	4	2	6	...	1	1	...	1	1	1	1	2	26	18	44
65	918,362	{ Zemindaries	6,923	6,117	13,040	2	3	5	2	2	4	2	5	7	2	2	4	2	3	5	5	4	9	25	35	60
66	888,650	South Canara District	459,729	458,033	917,762	127	103	230	117	97	214	116	76	192	117	95	212	93	91	181	119	94	213	1,327	1,093	2,420
67	29,712	{ Talangs (R. C.)	444,541	444,109	888,650	118	113	214	111	91	203	104	75	179	116	92	203	90	86	176	112	93	205	1,366	1,045	2,311
68	2,231,250	{ Municipal Towns.	15,155	14,524	29,679	3	1	16	6	6	12	12	1	13	1	1	4	3	5	8	7	1	48	61	48	109
69	2,138,933	Malabar District	1,134,899	1,129,361	2,264,260	181	163	347	194	200	394	197	149	340	136	122	258	145	124	269	182	118	250	1,763	1,550	3,313
70	122,517	{ Talangs (R. C.)	1,673,713	1,656,220	3,329,933	167	154	317	184	185	369	180	136	316	126	115	211	133	118	251	129	114	245	1,663	1,456	3,119
		{ Municipal Towns.	61,176	61,141	122,317	14	10	80	10	15	25	17	13	50	10	7	17	12	6	18	3	4	7	100	94	194
30,895,577	Total Madras Presidency		15,221,079	15,046,763	30,267,842	1735	1472	3,207	1741	1674	3,248	1813	1477	3,250	1828	1635	3,436	1797	1524	3,225	1892	1537	3,479	19,726	16,606	36,332

Comparative Statement of Births, Deaths, and Marriages registered in the Rural Circles and Towns of the Madras Presidency during the Year 1873.

1	2	3	4		5		6		7	8	9	10
No.	Population according to Census of 1871	Names of Districts.	Population for which Returns were received.		Number of Births registered.		Ratio of Births per 1,000 of Population.		Excess of Births over Deaths per 1,000 of Population.	Ratio of Marriages per 1,000 of Population.	Number of Marriages registered.	
			Males.	Females.	Total.	Males.	Females.	Total.				
1	1,338,976	Ganjam District ...	631,013	571,180	1,202,193	8,589	7,921	16,490	13.5	13.8	13.7	1.9
2	538,843	Talangs (R. C.)	268,333	268,333	536,666	3,845	3,461	7,306	13.4	12.8	13.6	2.2
3	37,237	Municipal Towns	18,074	19,163	37,237	331	320	651	15.8	16.6	17.4	1.5
4	817,817	Zemindaries ...	347,431	283,682	631,113	4,233	4,140	8,333	12.6	14.5	13.5	1.3
5	1,844,711	Vizagapatam District ...	750,149	748,818	1,498,967	8,037	7,463	15,500	10.3	9.9	10.1	1.9
6	937,015	Talangs (R. C.)	384,654	377,467	762,121	3,815	3,610	7,425	9.6	9.5	9.6	2.1
7	69,916	Municipal Towns	34,370	35,546	69,916	585	552	1,137	28.6	23.9	26.2	0.1
8	837,750	Zemindaries ...	331,125	335,805	666,930	3,222	3,001	6,223	9.2	3.9	6.08	1.9
9	1,592,989	Godavary District ...	803,603	789,336	1,592,939	12,310	11,794	24,104	15.3	14.9	15.1	4.5
10	1,326,017	Talangs (R. C.)	667,891	658,156	1,326,047	10,276	9,829	20,045	15.2	14.9	15.1	4.5
11	54,221	Municipal Towns	28,338	29,756	58,094	784	719	1,503	23.5	24.1	23.8	2.6
12	203,828	Zemindaries ...	102,374	101,454	203,828	1,310	1,246	2,556	12.7	12.2	12.5	4.6
13	1,432,374	Kistna District ...	727,495	714,879	1,442,374	12,049	12,388	24,037	17.1	17.3	17.2	0.9
14	1,235,026	Talangs (R. C.)	628,046	606,989	1,235,035	10,895	10,686	21,581	17.3	17.5	17.4	0.4
15	54,221	Municipal Towns	28,338	29,756	58,094	618	586	1,204	23.4	24.1	23.2	2.0
16	163,127	Zemindaries ...	83,107	80,020	163,127	1,136	1,136	2,372	13.6	14.1	13.9	5.7
17	1,376,511	Nellore District ...	707,392	669,419	1,376,811	9,785	9,169	18,945	13.8	13.6	13.7	0.3
18	1,107,697	Talangs (R. C.)	568,392	539,305	1,107,697	5,936	5,492	11,448	10.4	10.1	10.3	0.9
19	29,322	Municipal Towns	14,875	15,013	29,888	369	296	665	24.8	19.6	22.2	7.2
20	239,192	Zemindaries ...	124,121	115,071	239,192	3,450	3,372	6,832	27.8	29.3	28.5	1.4
21	397,552	Madras Town (R. C.)	194,676	202,876	397,552	5,935	4,340	9,382	25.8	21.4	23.6	13.2
22	938,184	Chingleput District ...	475,968	462,216	938,184	10,171	9,710	19,981	21.3	21.0	21.1	1.4
23	900,857	Talangs (R. C.)	457,716	443,141	900,857	9,775	9,341	19,111	21.3	21.0	21.2	1.6
24	37,327	Municipal Towns	18,252	19,075	37,327	366	366	732	21.6	19.1	20.4	1.9
25	1,755,817	South Arcot District ...	885,922	869,895	1,755,817	13,627	12,149	25,176	14.7	13.9	14.3	0.5
26	1,715,527	Talangs (R. C.)	866,417	849,110	1,715,527	12,121	11,089	24,210	14.4	13.7	14.1	0.4
27	40,230	Municipal Towns	19,505	20,785	40,290	556	460	956	25.9	22.1	23.9	7.2
28	1,200,408	Trichinopoly District ...	588,134	612,274	1,200,408	12,932	12,268	25,250	22.04	20.03	21.03	2.8
29	1,112,607	Talangs (R. C.)	...	...	1,112,607	11,496	10,828	22,324	...	...	20.66	2.1
30	87,801	Municipal Towns	...	...	87,801	1,456	1,440	2,936	...	...	33.1	11.2

Not available.

Information

31	1,973,731	Tanjore District ...	953,988	1,019,743	1,973,731	27,968	39.3	23.7	27.4	5.0
32	1,789,719	Talangs (R. C.)	866,492	923,227	1,789,719	23,172	23.05	25.5	27.2	5.4
33	184,012	Total {Municipal Towns	87,476	96,536	184,012	2,654	51.9	37.4	29.6	1.4
34	2,243,615	Madras District ...	1,112,066	1,131,549	2,243,615	14,323	12.96	11.7	12.3	2.9
35	1,292,379	Talangs (R. C.)	622,731	669,648	1,292,379	9,040	12.9	12.3	12.3	3.1
36	61,852	Total {Municipal Towns	32,764	32,088	64,852	947	28.9	27.4	28.1	5.6
37	998,384	Zemindaries ...	455,511	483,813	939,324	4,386	9.3	8.7	9.1	2.4
38	1,693,959	Tinnevely District ...	836,515	857,444	1,693,959	13,965	16.7	16.03	15.3	1.1
39	1,644,405	Talangs (R. C.)	821,936	822,469	1,644,405	13,098	16.04	14.3	15.1	0.9
40	49,554	Total {Municipal Towns	24,679	24,875	49,554	968	1,902	37.9	38.3	7.2
41	538,640	Karnool District ...	269,643	269,997	539,640	8,241	17.6	18.3	17.9	1.2
42	881,558	Talangs (R. C.)	431,488	450,070	881,558	7,775	17.2	18.09	17.6	0.8
43	32,874	Total {Municipal Towns	16,152	16,722	32,874	455	28.7	24.8	26.7	0.8
44	45,208	Zemindaries ...	...	...	...	...	...	...	...	8.9
45	1,351,194	Cuddapah District ...	623,405	627,789	1,251,194	10,970	15.8	16.4	16.1	1.4
46	1,324,919	Talangs (R. C.)	623,071	629,848	1,252,919	10,693	15.6	16.1	15.3	1.4
47	16,275	Total {Municipal Towns	8,329	7,946	16,275	274	32.3	35.7	34.2	...
48	1,688,098	Bellary District ...	860,173	807,833	1,668,006	17,205	20.00	20.6	20.3	2.5
49	1,656,573	Talangs (R. C.)	807,871	759,002	1,566,873	15,773	19.1	20.2	19.8	2.2
50	86,137	Total {Municipal Towns	44,768	41,369	86,137	1,273	28.4	28.8	28.6	8.2
51	14,996	Zemindaries ...	7,534	7,462	14,996	159	21.1	21.8	21.4	0.2
52	5,015,278	North Arcot District ...	2,507,678	2,507,600	5,015,278	23,019	22.5	21.7	22.1	0.2
53	1,301,127	Talangs (R. C.)	623,401	627,746	1,251,147	15,143	22.9	22.02	22.5	1.2
54	50,125	Total {Municipal Towns	23,070	26,155	50,125	573	29.9	19.4	21.5	1.4
55	654,006	Zemindaries ...	333,370	320,639	654,006	7,303	21.5	21.5	21.5	...
56	1,066,995	Salem District ...	527,502	509,493	1,036,995	23,736	24.3	22.8	23.3	1.6
57	1,916,933	Talangs (R. C.)	950,550	966,423	1,916,973	22,956	24.1	22.1	23.1	1.8
58	50,072	Total {Municipal Towns	24,942	25,070	50,072	750	31.2	29.7	30.5	5.43
59	1,763,274	Coimbatore District ...	874,075	889,299	1,763,374	10,718	18.08	12.06	12.7	...
60	1,717,763	Talangs (R. C.)	874,075	889,299	1,763,374	10,718	18.08	12.06	12.7	...
61	45,511	Total {Municipal Towns	...	...	...	...	...	...	17.6	4.3
62	40,501	Neigherry District ...	22,305	22,305	44,610	476	23.7	21.3	21.02	3.32
63	36,461	Talangs (R. C.)	20,369	16,192	36,561	281	13.8	14.6	14.2	0.8
64	13,040	Total {Municipal Towns	6,923	6,117	13,040	284	41.02	38.8	40.03	10.23
65	918,362	South Canara District ...	458,638	459,724	918,362	8,766	20.6	19.1	19.8	5.4
66	888,050	Talangs (R. C.)	444,541	443,483	888,024	8,472	20.6	19.07	19.8	5.6
67	29,712	Total {Municipal Towns	15,188	14,524	29,712	294	23.4	20.2	21.8	1.5
68	2,261,250	Malabar District ...	1,134,989	1,126,261	2,261,250	23,327	20.5	19.07	19.3	4.0
69	2,129,933	Talangs (R. C.)	1,073,713	1,056,220	2,129,933	21,317	19.7	18.4	19.09	4.19
70	123,317	Total {Municipal Towns	61,176	62,141	123,317	1,358	34.4	30.3	32.4	0.9
71	30,935,577	Total Madras Presidency	15,221,079	15,063,763	30,284,842	277,153	18.2	17.8	17.7	0.8