

Number of
Date of issue 27-2-37
Initials of Reference

M.R.O. 1-20,000-16-10-2

MADRAS RECORD OFFICE.

Government of Madras.

Public DEPARTMENT

G.O. No.	623	Press
		Mis.
Dated	2-6-	1937

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Department,
2nd June 1870.

No. 1. Read the following letter from the Sanitary Commissioner for Madras, to the Chief Secretary to Government, Fort Saint George, dated Madras, 9th May 1870, No. 503 :—

I have the honour to forward, for submission to Government, the Report on Vital Statistics of the City of Madras for the First Quarter of 1870.

2. The Report is submitted in manuscript with reference to G. O., in Public Department, No. 417, dated 9th April 1870.

3. I have to solicit that seventy-five copies of the Proceedings of Government in which the Report may be embodied may be furnished to this office for distribution to the several officers to whom the Report is generally circulated.

Vital Statistics of the City of Madras for the First Quarter of 1870.

The public health in the City of Madras for the first quarter of 1870 may be said to have been satisfactory. The two diseases (cholera and small-pox) which cause the greatest fluctuations in the mortality of the people were not generally prevalent.

2. In regard to deaths from "all causes" the total was less by 356 than the mean of ten previous first quarters. The period in question stands fourth in order of "low death-rate" in the ten years. The total deaths in the quarter were 2731 against an average of 3087.

TABLE I.—Average Deaths in Madras during the First Quarters of Ten previous Years ending 1869, as contrasted with the Mortality of the First Quarter of 1870.

	Small-pox.	Measles.	Fevers.	Dysentery.	Diarrhoea.	Cholera.	Other Diseases.	Total.	Order of salubrity.
First Quarter, 1860.....	58	3	659	229	247	7	1,170	2,373	1
" 1861.....	204	16	508	318	165	164	1,434	2,809	5
" 1862.....	545	14	521	272	232	1,139	1,189	3,912	11
" 1863.....	33	6	524	338	265	1,279	1,338	3,783	10
" 1864.....	108	4	611	350	216	349	1,487	3,125	7
" 1865.....	6	...	444	272	246	247	1,379	2,594	3
" 1866.....	28	1	541	337	267	321	1,465	2,960	6
" 1867.....	98	5	697	484	277	600	1,554	3,715	9
" 1868.....	372	50	524	306	223	11	1,656	3,142	8
" 1869.....	16	3	476	191	108	...	1,672	2,466	2
Total...	1,468	102	5,505	3,097	2,246	4,117	14,344	30,879	...
Average...	146·8	10·2	550·5	309·7	224·6	411·7	1,434·4	3087·9	...
1870.....	2	3	608	227	156	61	1,674	2,731	4
Increase...	...	...	57·5	...	...	...	239·6	...	...
Decrease...	144·8	7·2	...	82·7	68·6	350·7	...	356·9	...

2nd June 1870.

TABLE II.—Showing the Deaths in Madras among each Class of the Inhabitants during the First Quarter of 1870.

	Euro-peans.		East Indians.		Hindoos.		Mahomedans.		Total.		General Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Small-pox.....	...	...	...	...	...	2	...	...	...	2	2
Measles.....	...	...	...	...	1	2	...	...	1	2	3
Fevers.....	1	...	8	3	267	264	23	42	299	309	608
Dysentery.....	1	1	2	3	80	96	23	21	106	121	227
Diarrhoea.....	2	1	2	3	69	67	5	7	78	78	156
Cholera.....	5	1	2	...	19	24	4	6	30	31	61
Total...	9	3	14	9	436	455	55	76	514	543	1,075
Other Diseases...	21	5	30	23	684	644	121	146	856	818	1,674
Total...	30	8	44	32	1,120	1,099	176	222	1,370	1,361	2,731
Mean Mortality of Ten First Quarters from 1860 to 1869.											
Special Diseases.	10.4	3.9	16.3	16.8	709.6	661.1	102.4	127.5	838.7	809.3	1648.0
Other do.	18.0	6.5	21.2	25.8	617.0	507.9	123.6	119.9	779.8	660.1	1439.9
Total...	28.4	10.4	37.5	42.6	1326.6	1169.0	226.0	247.4	1618.5	1469.4	3087.9
Increase..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Decrease...	0.8		4.1		276.6		75.4		.....		356.9

SMALL-POX.—Only two deaths from small-pox occurred in the quarter. This disease when

SMALL-POX.										
1860	...	...	...	...	...	...	...	...	...	53
1861	...	...	...	...	...	...	...	...	...	204
1862	...	...	...	...	...	...	...	...	...	545
1863	...	...	...	...	...	...	...	...	...	33
1864	...	...	...	...	...	...	...	...	...	108
1865	...	...	...	...	...	...	...	...	...	6
1866	...	...	...	...	...	...	...	...	...	28
1867	...	...	...	...	...	...	...	...	...	98
1868	...	...	...	...	...	...	...	...	...	372
1869	...	...	...	...	...	...	...	...	...	16
Total...										1,468
Average...										146.8
1870	...	...	...	...	...	...	...	...	...	2

it does prevail is usually most active in the months of January, February, and March. Its almost complete absence in the past quarter is a subject of congratulation ; but it is very questionable whether it be due wholly to the spread of vaccination. Small-pox is a disease that disappears now and then from communities, only to return with re-doubled force, when the time and season of its renewal has arrived. In this respect, and in regard to its partiality for a particular season of the year in which to manifest its activity, it seems to have strong affinities with cholera. The chief years of epidemic small-pox in the last decade were 1862 and 1868. The disease appears to have a maximum of prevalence once in about six years. For three years it may be said to be advancing, and about the same time in going back to a period of quiescence. The small-pox season of the year falling mostly in the first quarter, it may be predicted, from the results of 1869 and 1870, that the first quarter of the next year 1871 will begin to exhibit the normal progressive rise from minimum to maximum. In countries where vaccination is the rule, the seasonal fluctuations of small-pox are less evident to the observer ; but in India, at least over large districts of it, the natural history of the disease has not been very sensibly affected by the measures devised for its repression.

2nd June 1870.

CHOLERA.

1860...	...	...	...	7
1861...	...	...	...	164
1862...	...	...	...	1,139
1863...	...	...	...	1,279
1864...	...	...	...	349
1865...	...	...	...	247
1866...	...	...	...	321
1867...	...	...	...	600
1868...	...	...	...	11
1869...	...	...	...	0

Total... 4,117
Average... 411.7

1870... .. 61

CHOLERA.—The cholera mortality was low during the quarter. The total deaths only sixty-one. The epidemic of 1869 had nearly died out by the beginning of the year. A few dropping cases, however, continued, and in the month of January thirty-eight deaths occurred in the whole town ; but of this number twenty occurred in the small district of Royapettah. A cholera case had been received from a village at the Triplicane Hospital on 10th December, and the disease spread from this focus to a limited distance. In February there were fourteen deaths, and in March nine, but of the latter several occurred in connexion with a particular barrack occupied by Her Majesty's 45th Regiment in the Fort. The cholera deaths in February mostly occurred in

Black Town, and two patients in the Monegar Choultry were attacked. A soldier of Her Majesty's 45th died of cholera on the 10th February, but no other case occurred in the Fort until 2nd March (the day following a heavy and unusual rainfall) when the disease broke out in a room of the married-quarter barracks, and also in particular barrack-rooms occupied by the Regiment (D. and

K.) On the evacuation of these rooms, and removal to camp of the men inhabiting them, the epidemic made no further progress, nor did it extend to the civil population.

MEASLES.

1860...	...	...	...	3	1868...	...	...	...	50
1861...	...	...	...	16	1869...	...	...	...	3
1862...	...	...	...	14					
1863...	...	...	...	6					
1864...	...	...	...	4					
1865...	...	...	...	0					
1866...	...	...	...	1	1870...	...	...	...	3
1867...	...	...	...	5					

Total... 102
Average... 10.2

MEASLES.—Only three deaths occurred from measles which seems to have been the average number in this year.

FEVERS.

1860...	...	...	...	659	1868...	...	...	...	524
1861...	...	...	...	508	1869...	...	...	...	476
1862...	...	...	...	521					
1863...	...	...	...	524					
1864...	...	...	...	611					
1865...	...	...	...	444					
1866...	...	...	...	541	1870...	...	...	...	608
1867...	...	...	...	697					

FEVERS.—The fever mortality appears higher than usual, but considering the fact that natives return many other diseases under the name of fever, no safe deduction can be drawn from the figures. Malarious diseases may have been more active than usual, but the stational returns do not corroborate this view.

DIARRHŒA AND DYSENTERY.

Years.	Diarrhoea.	Dysentery.
1860...	247	229
1861...	165	318
1862...	232	272
1863...	265	338
1864...	216	350
1865...	246	272
1866...	267	337
1867...	277	484
1868...	223	306
1869...	103	191
Total...	2,246	3,097
Average...	224.6	309.7
1870...	156	227

DIARRHŒA AND DYSENTERY.—The deaths from these diseases were fewer than usual, as shown in the margin.

METEOROLOGICAL.—A considerable portion of the rains of the north-east monsoon fell in January, and at the winding up of the monsoon on March 1st. These rains, though too late for the crops, had the effect of replenishing tanks and wells which otherwise might have had a short supply. The only noticeable circumstance connected with the public health was the local outbreak of cholera in the Fort immediately following the rain of the 1st March. But the causes of cholera have been probably entirely local ; as the rain had no such influence on the half million of population outside the Fort. Before the rain of 1st March the winds had been unusually high and strong from the north and north-west.

The following table explains the chief meteorological phenomena of the quarter :—

—	Week ending 7th January.	Week ending 14th January.	Week ending 21st January.	Week ending 28th January.	Week ending 4th February.	Week ending 11th February.	Week ending 18th February.	Week ending 25th February.	Week ending 4th March.	Week ending 11th March.	Week ending 18th March.	Week ending 25th March.	26th to 31st March.	Total.
Small-pox... ..	...	...	...	...	...	...	...	...	...	2	...	...	..	2
Measles.....	...	...	1	...	...	...	...	1	...	1	...	...	...	3
Fevers... ..	51	48	51	55	41	45	42	56	48	45	59	37	30	608
Dysentery... ..	18	18	19	15	19	18	17	21	23	20	21	12	6	227
Diarrhoea... ..	4	16	15	11	24	13	13	10	9	11	11	9	10	156
Cholera.....	2	...	15	16	7	5	6	1	2	5	1	...	1	61
Other Diseases...	126	106	156	151	149	108	145	134	136	113	124	131	95	1,674
All Diseases... ..	201	188	257	248	240	189	223	223	218	197	216	189	142	2,731

Average of the First Quarters of Ten previous Years arranged according to Weeks.

Small-pox.....	5.7	5.5	6.1	8.5	7.3	6.6	11.9	12.5	12.8	13.9	15.3	16.3	24.4	146.8
Measles.....	0.2	0.3	0.8	0.5	0.7	1.6	0.7	1.2	0.6	0.7	1.2	0.9	0.8	10.2
Fevers... ..	45.7	43.6	44.9	42.9	41.9	45.0	44.1	39.0	43.6	40.6	41.3	39.6	38.3	550.5
Dysentery.....	24.5	26.9	25.1	23.9	24.5	23.3	24.2	22.4	23.2	24.7	22.5	23.4	21.1	309.7
Diarrhoea... ..	17.0	18.8	19.1	18.5	17.6	20.4	17.5	17.2	17.5	18.0	15.8	15.6	11.6	224.6
Cholera.....	29.7	28.1	33.4	45.4	40.0	36.9	33.6	36.1	36.2	29.6	29.0	21.1	12.6	411.7
Other Diseases. .	122.5	113.4	120.0	113.8	124.2	105.6	107.4	115.3	105.3	111.2	110.1	110.0	75.6	1434.4
All Diseases	245.3	236.6	249.4	253.5	256.2	239.4	239.4	243.7	239.2	238.7	235.2	226.9	184.4	3087.9

Mean Meteorological Observations for the past Quarter.

	Week ending 7th January.	Week ending 14th January.	Week ending 21st January.	Week ending 28th January.	Week ending 4th February.	Week ending 11th February.	Week ending 18th February.	Week ending 25th February.	Week ending 4th March.	Week ending 11th March.	Week ending 18th March.	Week ending 25th March.	26th to 31st March.	Average.
Barometer reduced to 32° F.....	29-917	29-837	29-943	29-952	29-934	29-867	29-918	29-961	29-902	29-883	29-848	29-910	29-836	29-900
Mean Maximum Temperature....	85.7	83.3	81.3	84.7	83.7	85.9	87.5	85.9	85.6	87.0	88.5	89.1	89.2	85.9
„ Minimum „	70.7	67.7	71.2	70.9	65.0	64.7	69.0	65.7	71.9	69.0	70.8	73.9	70.7	69.3
„ Temperature.	76.5	73.9	75.3	77.3	73.8	74.7	77.7	75.9	77.5	77.8	79.1	80.6	79.8	76.9
„ Humidity ...	76	74	89	76	72	72	76	70	78	77	77	75	73	75
Prevailing Wind..	N. by E.	N. by W.	E. by S.	N. E.	N. E. by N.	E. N. E.	N. E. by N.	N. N. E.	N. E. by N.	E. by S.	S. E. by E.	E. S. E.	S. E. by E.	E.
Mean Velocity in Miles... ..	179	181	153	191	112	79	136	169	168	85	182	152	131	148
Rainfall.....	...	0.22	6.33	...	...	...	...	0.01	1.76	...	...	...	...	2.32

Table showing the Mean half-monthly Meteorological condition of Madras for Twenty Years past.

	Half-month ending 15th January.	Half-month ending 31st January.	Half-month ending 14th February.	Half-month ending 28th February.	Half-month ending 15th March.	Half month ending 31st March.	Average.
Barometer reduced to 32° F.....	30.004	29.991	29.981	29.958	29.920	29.886	29.956
Mean Maximum Temperature.....	82.4	82.6	83.5	85.0	85.6	87.2	84.3
„ Minimum „.....	68.0	67.1	67.6	68.7	7.0	73.2	69.2
„ Temperature.....	75.1	75.0	75.9	77.2	78.4	80.1	76.9
„ Humidity.....	76	74	73	75	73	76	74
Prevailing Wind.....	N. E.	N. E. by E.	E.	E. S. E.	S. E.	S. S. E.	E. by S.
Mean Velocity in Miles.....	166	140	136	135	140	153	145
Rainfall.....	0.60	0.29	0.20	0.02	0.14	0.34	1.59

2nd June 1870.

BIRTHS IN MADRAS.—The births are still very incompletely registered, the total for the quarter being only 817 fewer by 274 than in the corresponding quarter of the preceding year. The subject of registration of births, &c., in regard to the measures for ensuring greater accuracy, is now under the consideration of the President of the Municipal Commission and myself.

(Signed) W. R. CORNISH, F.R.C.S.,
Sanitary Commissioner for Madras.

TABLE showing the Births in Madras among different Classes of the Inhabitants, in the First Quarter ending 31st March 1870.

Division.	—	BORN ALIVE.										STILL-BORN.										Total Births.			
		Europe-ans.		East In- dians.		Hindoos.		Mahome- dians.		Total.		Total of both Males and Females.	Europe-ans.		East In- dians.		Hindoos.		Mahome- dians.		Total.		Total of both Males and Females.		
		M	F	M	F	M	F	M	F	M	F		M	F	M	F	M	F	M	F					
1	Tondiarpettah...	...	...	1	1	11	...	9	7	4	19	14	33	1	...	...	...	...	...	...	...	...	...	...	33
	Washerman's Pettah...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Monegar Choultry...	...	...	2	2	1	4	4	...	4	3	1	10	11	21	...	...	...	1	...	...	1	...	1	22
	Royapooram...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Cashmode...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total...		2	2	2	5	16	...	13	10	5	30	25	55	...	...	...	1	...	...	1	...	...	1	...	56
2	Peddoo Naick's Pettah...	...	...	1	...	16	...	30	...	...	17	30	47	...	...	...	...	...	...	...	...	...	...	...	47
	Big Parocherry...	...	...	6	4	...	...	...	...	6	4	10	...	...	...	...	...	...	...	...	...	...	...	...	10
	John Pereira's Garden...	...	...	1	...	1	...	...	...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	2
Total...		...	...	8	4	17	...	30	...	...	25	34	59	...	...	...	...	...	...	...	...	...	...	...	59
3	Fort Saint George...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Mootteal Pettah...	1	2	8	8	22	...	15	...	...	31	25	56	...	2	...	...	...	...	2	...	...	2	...	58
Total...		1	2	8	8	22	...	15	...	...	31	25	56	...	2	...	...	...	...	2	...	...	2	...	58
4	Choolay...	...	...	...	...	29	35	1	1	30	36	66	...	...	...	...	1	...	1	...	...	...	1	...	67
	Pursewalkum...	...	...	2	3	50	45	2	4	54	52	106	1	...	...	3	1	...	4	1	...	5	...	111	
	Gunpowder Mills...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Perambore...	2	...	...	...	21	14	5	3	28	17	45	...	1	...	1	...	1	1	...	2	...	47	...	
	Viasarapaudy...	1	...	1	...	8	7	...	...	8	9	17	...	...	...	...	...	...	...	...	...	...	...	...	17
Total...		2	1	2	4	108	101	8	8	120	114	234	1	...	1	...	3	2	...	1	5	3	8	...	242
5	Pareamettoo...	...	...	...	...	3	6	...	...	3	6	9	...	...	...	...	...	...	...	...	...	...	...	...	9
	New Town...	...	...	3	...	1	...	...	...	4	...	4	...	...	...	...	...	...	...	...	...	...	...	...	4
	Vepery...	1	...	3	1	8	11	1	6	13	18	31	...	1	...	1	...	...	...	...	...	2	...	33	
	Poodoopettah...	...	...	1	2	7	5	...	...	8	7	15	...	...	...	...	...	1	1	...	...	...	...	15	
	Egmore...	3	4	15	9	77	63	2	1	97	77	174	...	...	2	10	9	...	10	11	...	21	...	195	
	Comaleeswarapuram...	...	...	...	...	1	...	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	2	
	Keilpankum...	...	...	...	...	5	3	...	...	5	3	8	...	...	...	...	...	...	...	...	...	...	...	8	
	Chetput...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
Total...		4	4	22	12	102	89	3	7	131	112	243	...	1	2	10	10	...	11	12	...	23	...	266	
6	Chintadripettah...	...	...	1	...	9	10	...	...	9	11	20	...	...	...	...	...	...	...	...	...	...	...	...	20
	Narasingapuram...	...	...	1	...	...	1	...	...	1	1	2	...	...	...	...	...	...	...	...	...	...	...	...	2
	Codumbaukum...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Nungumbaukum...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Mackay's Garden...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total...		1	1	...	...	9	11	...	...	10	12	22	...	...	...	...	...	...	...	...	...	...	...	...	22
7	Triplicane...	...	...	...	...	19	16	4	11	23	27	50	...	...	...	...	...	1	...	1	...	1	...	1	51
	Poodoopankum...	...	...	...	...	...	3	...	...	...	3	3	...	...	...	...	...	...	...	...	...	...	...	3	
	Fisherman's Pettah...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Theroovateeswarampettah...	...	...	...	...	2	2	...	...	2	2	4	...	...	1	...	...	1	...	...	1	...	1	5	
Total...		...	...	...	...	21	21	4	11	25	32	57	...	...	...	1	...	...	1	1	1	...	2	...	59
8	Saint Thomé...	1	...	4	...	9	9	1	3	15	12	27	...	...	...	1	...	...	...	...	1	...	1	...	28
	Alwarpettah...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Royapettah...	...	1	2	1	4	5	2	...	8	7	15	...	...	...	...	1	...	1	...	...	...	1	...	16
	Meer Saib's Pettah...	...	...	...	4	2	1	...	...	5	2	7	...	...	...	...	...	1	...	1	...	...	1	...	8
	Kistnampettah...	...	...	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1
Total...		1	1	6	1	18	16	5	4	30	22	52	...	...	...	1	1	1	1	2	...	3	...	55	
General Total...		10	11	49	34	313	296	30	35	402	376	778	1	...	4	2	14	14	1	3	20	19	39	...	817

2nd June 1870.

No. 2. ORDER THEREON, 2nd June 1870, No. 693.

From the Report on the Vital Statistics of the Town of Madras for the first quarter of 1870, it appears that the public health was in a satisfactory condition, the deaths from all causes being less by 356 than the mean of ten previous quarters.

2. It is stated that, of the thirty-eight deaths from cholera which occurred in the month of January, twenty were in the Royapettah District.

3. This fact will be brought to the notice of the Municipal Commissioners with a view to their making immediate special inquiry into the condition of the drains and the conservancy arrangements of this part of the town.

(True Extract.)

Chief Secretary.

to the Sanitary Commissioner.

President of the Municipal Commission for the Town of Madras.

Inspector-General of the Indian Medical Department.

Public Department

PROCEEDINGS of the MADRAS GOVERNMENT.

Read the following letter

from the
Sanitary Commissioner
(Dated 9 May 1870 No 583)

Order thereon No 693. 2 June 70

From the report
on the vital statistics of
the town of Madras for
the first quarter of 1870,
it appears that the Public
Health was in a satisfac-
tory condition, the deaths
from all causes being
less by 356 than the mean
of ten previous quarters.
2. It is stated that
of the thirty-eight deaths
from Cholera which oc-
curred in the month of
January, twenty were in
the Royapettah District

Govt. of 1870 Madras.

PUBLIC.

THE SANITARY COMMISSIONER.

to.

do.

do.

Printed by J. J. J.

Head.

Printed.

G. O. 2nd June 1870, No. 693.

JUNE
Nos. 1-2.

Reviewing the Report on the Vital Statistics of
the Town of Madras for the first Quarter of 1870.

3. This fact will be brought to the notice of the Municipal Commission - ens with a view to their making ^{immediate} special enquiry into the condition of the drains and the Conservancy arrangements of this part of the Town.

The Sanitary Commission
Presd. ~~London~~ ^{London} Council,
Sept 4/6
Capt. Genl. L. M. D. Dept.

for the Hon of Secy 3

40-40

Vol. of 18 1890.

To Public
Mandatory Commission
for

Dated June 2 } 1890, No. 693
Recd.

Nos. 1. 2.

Receiving the Report on
the vital statistics of the
town of Hartford for the 12
months of 1890.