

MADRAS RECORD OFFICE.

Government of Madras.

Public **DEPARTMENT.**

G.O. No.	321	Press Mis.
Dated	16-3-	1870

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Department,
16th March 1870.

No. 74. Read the following letter from the Officiating Sanitary Commissioner for Madras, to the Chief Secretary to Government, Fort Saint George, dated Madras, 8th March 1870.

I have the honour to forward, for submission to Government, ten copies of the Report on the Vital Statistics of the City of Madras, during the 4th quarter of the past year.

No. 75. ORDER THEREON, 16th March 1870, No. 321.

The condition of the public health in the Town of Madras during the 4th quarter of 1869, as shown by the Statistical Report submitted by the Acting Sanitary Commissioner, is satisfactory.

2. The number of deaths was 3047, or 72·4 less than the average of the nine preceding 4th quarters. His Excellency the Governor in Council notices with satisfaction that the mortality by small-pox has been smaller than in any corresponding quarter for the previous nine years.

(True Extract.)

Chief Secretary.

To the Officiating Sanitary Commissioner for Madras.

„ Inspector-General of the Indian Medical Department.

„ President of the Municipal Commission for the Town of Madras.

Exd. J. Wright.

VITAL STATISTICS OF THE CITY OF MADRAS

FOR THE

FOURTH QUARTER OF 1869.

The deaths during the quarter amount to 3,047, or 72·4 less than the average of the nine preceding fourth quarters. "Special diseases" contribute 1,088, or 478·8 below the average, and all "other diseases" 1,959, or 406·2 above the average. The group of preventible diseases have therefore been less fatal than is usual in the fourth quarter of the year, as judged by the average of the nine past years. Compared with the quarter immediately preceding, there is a decrease of 270 deaths, and with the corresponding quarter of the year 1868 an increase of 444 deaths.

The following Table shows the deaths in corresponding quarters of previous years :—

I.—TABLE showing the average deaths in Madras during the fourth quarters of nine previous years ending 1868, contrasted with the mortality of the fourth quarter of 1869.

	Small-pox.	Measles	Fever.	Dysentery.	Diarrhoea.	Cholera.	Other Diseases.	Total.	Order of Salubrity.
Fourth Quarter 1860 ...	43	1	689	409	409	327	1,478	3,356	8
" 1861 ...	126	...	585	361	253	614	1,364	3,303	7
" 1862 ...	17	1	569	305	288	1,341	1,485	4,006	10
" 1863 ...	19	2	512	300	236	133	1,427	2,629	2
" 1864 ...	3	...	493	252	217	34	1,413	2,412	1
" 1865 ...	12	...	624	375	286	208	1,572	3,077	6
" 1866 ...	12	...	662	409	283	688	1,773	3,827	9
" 1867 ...	119	34	561	315	188	11	1,604	2,882	4
" 1868 ...	12	1	448	183	128	2	1,859	2,633	3
Total ...	363	39	5,143	2,909	2,288	3,358	13,975	28,075	
Average ...	40·3	4·3	571·4	323·2	254·2	373·1	1,552·8	3,119·4	
" 1869 ...	2	...	532	269	185	100	1,959	3047	5
Increase ...	...	...	...	...	...	...	406·2	...	
Decrease ...	38·3	4·3	39·4	54·2	69·2	273·1	...	72·4	

The death rate for the quarter by all diseases, calculated upon the estimated population, of 450,000 souls, is 6·77 per mille, equal to an annual death rate of 27·08.

The distribution of the 3,047 deaths amongst the different sections of the community is shown in the subjoined table, in which the deaths in each class are compared with the mortality of the nine previous fourth quarters.

Mortality amongst different classes of the community.

To
PUBLIC.
G.Ovt. of 18703 30/10/1870

THE OFFICiating SANITARY
COMMISSIONER FOR MADRAS.
DO.

Dated March, 1869.
Recd. End.

G. O., 16th March 1870, No. 321.

MARCH.
Nos. 74-75.

Reviewing the Report on the Vital Statistics
the City of Madras, for the 4th quarter of 1869

II.—DEATHS in Madras during the fourth quarter of 1869, among each class of the Inhabitants.

Diseases.	Europeans.		East Indians.		Hindoos.		Mahomedans.		Total.		General Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Small-pox	...	...	...	...	2	...	...	...	2	...	2
Measles	...	...	...	...	...	...	...	...	...	...	...
Fevers	2	1	4	13	232	240	21	19	259	273	532
Dysentery	2	...	1	5	116	111	24	10	143	126	269
Diarrhoea	3	3	4	9	64	85	5	12	76	109	185
Cholera	1	1	3	8	30	38	10	9	44	56	100
Total ...	8	5	12	35	444	474	60	50	524	564	1,088
Other diseases ...	24	15	22	45	809	740	154	150	1,009	950	1,959
Total ...	32	20	34	80	1,253	1,214	214	200	1,533	1,514	3,047
Mean Mortality of nine Fourth Quarters from 1860 to 1868.											
Special diseases...	8.8	3.3	18.1	18.0	680.9	650.5	85.1	98.1	792.9	769.9	1,562.8
Other diseases ...	18.0	8.0	25.9	25.3	681.5	551.8	125.4	120.8	850.8	705.9	1,556.7
Total ...	26.8	11.3	44.0	43.3	1,362.4	1,202.3	210.5	218.9	1,643.7	1,475.8	3,119.5
Increase	13.9	...	26.7	...	...	...	...	...	...	...	...
Decrease	...	...	...	...	97.7	15.4	...	...	...	...	72.5

The European population has suffered to the extent indicated by 52 deaths, being 13.9 above the nine years' average. This excess is apparent in both sexes; but is the greatest amongst females, and is attributable mostly, indeed almost entirely, to diseases other than the Zymotic or preventible class.

Amongst the East Indian community there have been 114 deaths, or 26.7 above the average of the quarter. This excess, as in the case of Europeans, is largest amongst females.

The proportion of deaths of males to females in these two classes is—Europeans, 100 males to 62.5 females; East Indians, 100 males to 235.3 females.

2,467 Hindoos have paid the debt of nature during the quarter, 1,253 males, and 1,214 females. These figures are below the average, by 97.7, of previous fourth quarters. The mortality amongst the sexes is nearly on a par, or 100 males to 96.8 females. The deaths by the special class of diseases are 413.4 below the nine years' average.

The deaths amongst the Mahomedan population are returned at 414, or 15.4 below the average. This decrease pertains to deaths by special diseases, which are 73 below the average. In "other diseases" there is an increase of 57.8.

The proportion of deaths in each sex is 214 males to 200 females, or as 100 is to 93.4.

The mortality of the last quarter of 1869 shows a general increase of 414 over that of the corresponding quarter of 1868. This increase occurs in the following special

diseases: fevers, dysentery, diarrhoea, and cholera, and in all other diseases. In small-pox there is a small decrease.

The following Table exhibits the details of increase and decrease.

III.—TABLE showing the number of deaths from "special diseases" and "other diseases" in the fourth quarter of 1869, compared with that of 1868.

Diseases.	1868.	1869.	Increase.	Decrease.
Small-pox	12	2	...	10
Measles	1	...	...	1
Fevers	448	532	84	...
Dysentery	183	269	86	...
Diarrhoea	128	185	57	...
Cholera	2	100	98	...
Total of special diseases	774	1,088	314	...
Other diseases	1,859	1,959	100	...
General Total	2,633	3,047	414	...

The mortality of the quarter under report is the second highest of the four quarters, the highest being the third quarter. This excess of mortality in the third quarter is due entirely to cholera, the epidemic of which reached its zenith in that quarter. As regards diseases other than those classed as "special," the largest mortality occurred in the fourth quarter.

The following table gives the details of increase and decrease in each quarter.

IV.—TABLE showing the comparative death-rate of the first, second, third, and fourth quarters of 1869.

	First Quarter.	Second Quarter.	Third Quarter.	Fourth Quarter.	INCREASE IN FOURTH QUARTER COMPARED WITH			DECREASE IN FOURTH QUARTER COMPARED WITH		
					First Quarter.	Second Quarter.	Third Quarter.	First Quarter.	Second Quarter.	Third Quarter.
Small-pox	16	16	4	2	...	...	...	14	14	2
Measles	3	1	...	...	...	...	...	3	1	...
Fevers	476	483	524	532	56	49	8	...	...	...
Dysentery	191	169	259	269	78	100	10	...	...	...
Diarrhoea	108	146	229	185	77	39	...	...	...	44
Cholera	...	15	453	100	100	85	...	...	...	353
Total of special diseases	794	830	1,469	1,088	294	258	...	...	...	381
Other diseases	1,672	1602	1,848	1,959	287	357	111	...	...	...
General Total	2,466	2432	3,317	3,047	581	615	...	...	...	270

Mortality by "special diseases."

Small-pox.			
1860	43	1867	119
1861	126	1868	12
1862	17		
1863	19	Total...	363
1864	3		
1865	12	Average...	40.3
1866	12	1869.	2

The mortality by small-pox has been smaller than in any corresponding quarter for the previous nine years. This is shown in the margin. The deaths, it will be observed are only two. There has been, as was advanced in the two last quarterly reports as likely to occur, an unusual exemption from this disease during the year under report.

Measles.—No deaths are recorded from measles.

1860	...	...	689
1861	...	...	585
1862	...	...	569
1863	...	...	512
1864	...	...	493
1865	...	...	624
1866	...	...	662
1867	...	...	561
1868	...	...	448

Total... 5143

Average... 571.4
1869. 532

Fevers:—The deaths under the ambiguous term “fevers” have been 532, or 39.4 below the average of the nine previous years. I would refer to my remarks under this head in last quarter’s report. It will be many years before any advance can be made in the classification of “fevers.” It is very desirable that the extent to which enteric or typhoid fever prevails, should be ascertained. This specific fever is amongst the European section of the community, yearly acquiring larger importance as a cause of mortality. Till within recent periods it was overlooked, and even now, although generally recognized by the profession, so that a case occurring in the practice of Commissioned or Warrant medical officers would be diagnosed, the extent to which it prevails amongst the native community is not known, nor indeed has its existence, as a common cause of mortality, been satisfactorily established; and yet the native community especially live under those conditions which are held to give rise to this specific fever,—to wit, emanations from sewers, foul drains, and decomposing animal excreta.

In looking over the death certificates furnished by medical officers, I find one death in a Mahomedan returned as “Typhoid” fever, and one in a Hindoo as “Enteric,” another name, and a more scientific one for Typhoid. But for one native, who comes under treatment in our charitable dispensaries and hospitals for ordinary fevers hundreds suffer and die under the hands of native doctors, so that the admissions and deaths in public institutions cannot be accepted as any index to the extent to which the disease under consideration prevails amongst the masses.

The deaths by Dysentery are, as is shown in the marginal table, considerably below the average of the corresponding quarters of the previous nine years, and the mortality is the third lowest of the series; the lowest being in the year 1868.

Years.	Dysentery.	Diarrhoea.	Cholera.
1860	409	409	327
1861	361	253	614
1862	305	288	1,341
1863	300	236	133
1864	252	217	34
1865	375	286	208
1866	409	283	688
1867	315	188	11
1868	183	128	2
Total	2,909	2,288	3,358
Average	323.2	254.2	373.1
1869	269	185	100

Diarrhoea also has been less fatal than in any previous fourth quarters, except that of 1868. The deaths are 69.2 below the average.

The epidemic of Cholera, which had its origin in the second quarter, attained its climax in the third, and began to decline in that under report. The

deaths are 100, or 273.1 below the average of the previous nine fourth quarters.

The progress of the disease, as exhibited by the weekly deaths, is given below:—

Weeks.	1st.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.	10th.	11th.	12th.	13th.
Cholera	29	21	15	7	5	4	4	4	1	4	1	4	1

The declension of the disease may date from the third week of the quarter when the deaths were 15. From that time the numbers are small, and the cases may be termed sporadic rather than epidemic.

The following Table exhibits the incidence of the disease in the different districts of the city. In no district has mortality exceeded 1.3 per mille of the estimated population while the average mortality for the whole city is only 0.2 per mille.

V.—TABLE showing the deaths from Cholera in the different districts of the town of Madras, during the fourth quarter of 1869, arranged according to Weeks.

Districts.	Week ending 1st Oct.	Week ending 8th Oct.	Week ending 15th Oct.	Week ending 22nd Oct.	Week ending 29th Oct.	Week ending 5th Nov.	Week ending 12th Nov.	Week ending 19th Nov.	Week ending 26th Nov.	Week ending 3rd Dec.	Week ending 10th Dec.	Week ending 17th Dec.	Week ending 24th Dec.	Week ending 31st Dec.	Total.	Population.	Deaths per mille of Population.
Tondirapettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	17	16,865	1.0
Washerman's Pettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	18,460	0.2
Royapuram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	11	16,358	0.6
Monegar Choultry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	10,356	1.3
Caushode	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7	95,181	0.08
Peddoo Naick's Pettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	53,823	0.07
Big Paricherry	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	18,895	...
John Pereira's Gardens	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23,117	0.3
Fort Saint George	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	1,821	...
Mootteal Pettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1,547	...
Uttapalliam	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	7,326	...
Choolay	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3,089	1.2
Pursewaukun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5,536	0.9
Perambore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4,352	0.3
Gunpowder Mills	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,943	...
Viasarepaudy	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	14,984	0.2
Paranmettoo	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4,974	...
New Town	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8,926	...
Vepery	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	20,364	0.2
Poodooppettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	16,885	0.1
Egmore	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	19,210	0.2
Comaleeswarapuram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,826	...
Keilpankun	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,664	...
Chintadripettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2,611	...
Narasingapuram	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4,27,771	0.2
Nagatha Covel	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chetput	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Codumbankum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Nungumbakum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Mackay's Gardens	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Poodooppankum	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Triplacane	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Fisherman's Pettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Theroovateswaran Pettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Saint Thomé	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Royapettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Meersab's Pettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kistnampettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Alwarpettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Thenampettah	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Total	...	...	...	...	...	...	...	...	...	...	...	...	...	...	100	4,27,771	0.2

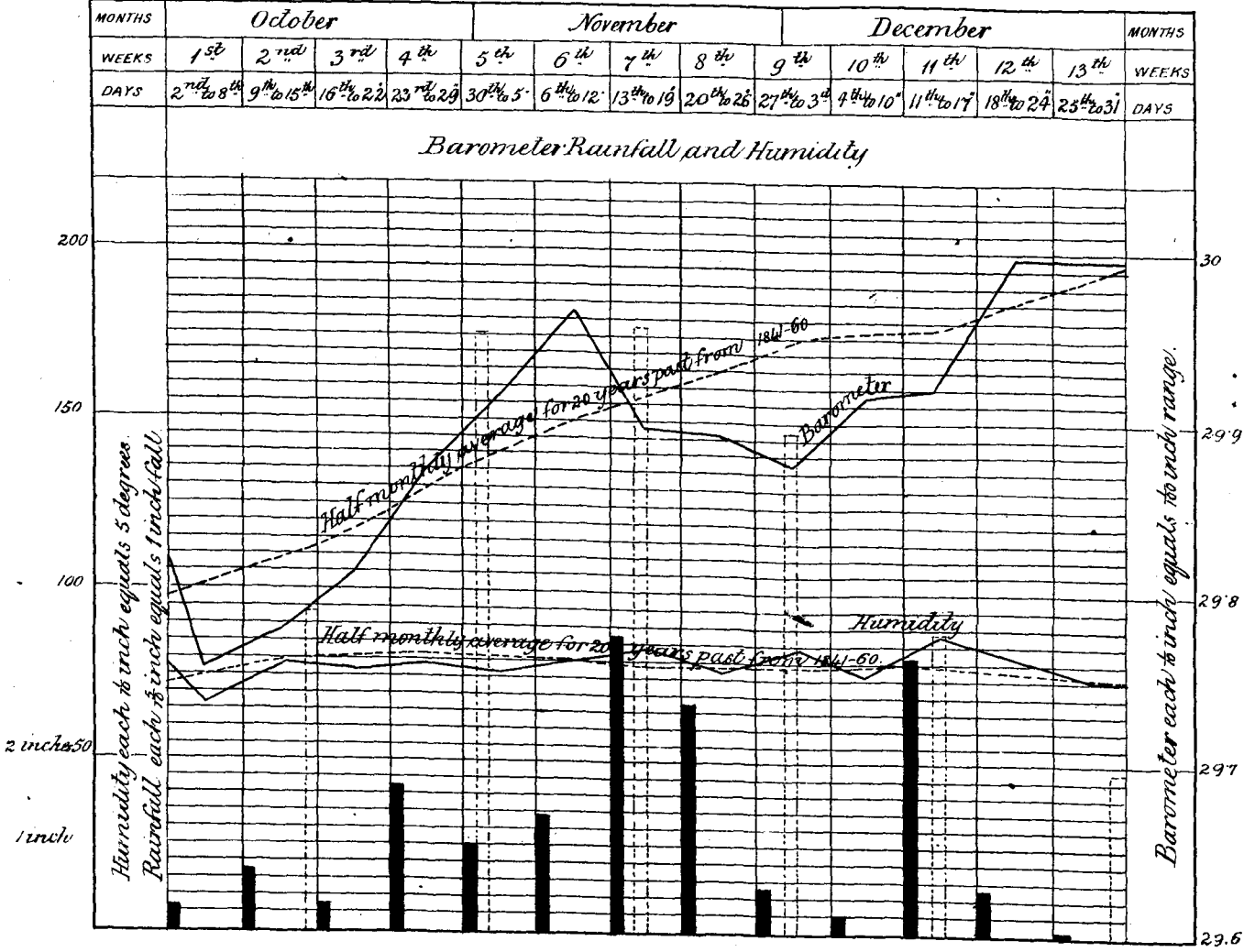
Of the 100 deaths, 73 occurred in October, 16 in November, and 11 in December. As regards the different sections of the community, 2 Europeans, 11 East Indians, 68 Hindoos, and 19 Mahomedans died. The per mille rate of mortality amongst Europeans and East Indians, classed together, is 0·75, amongst Mahomedans 0·28, and Hindoos 0·18.

VI.—TABLE showing the deaths from cholera during the fourth quarter of 1869, among each class of the Inhabitants.

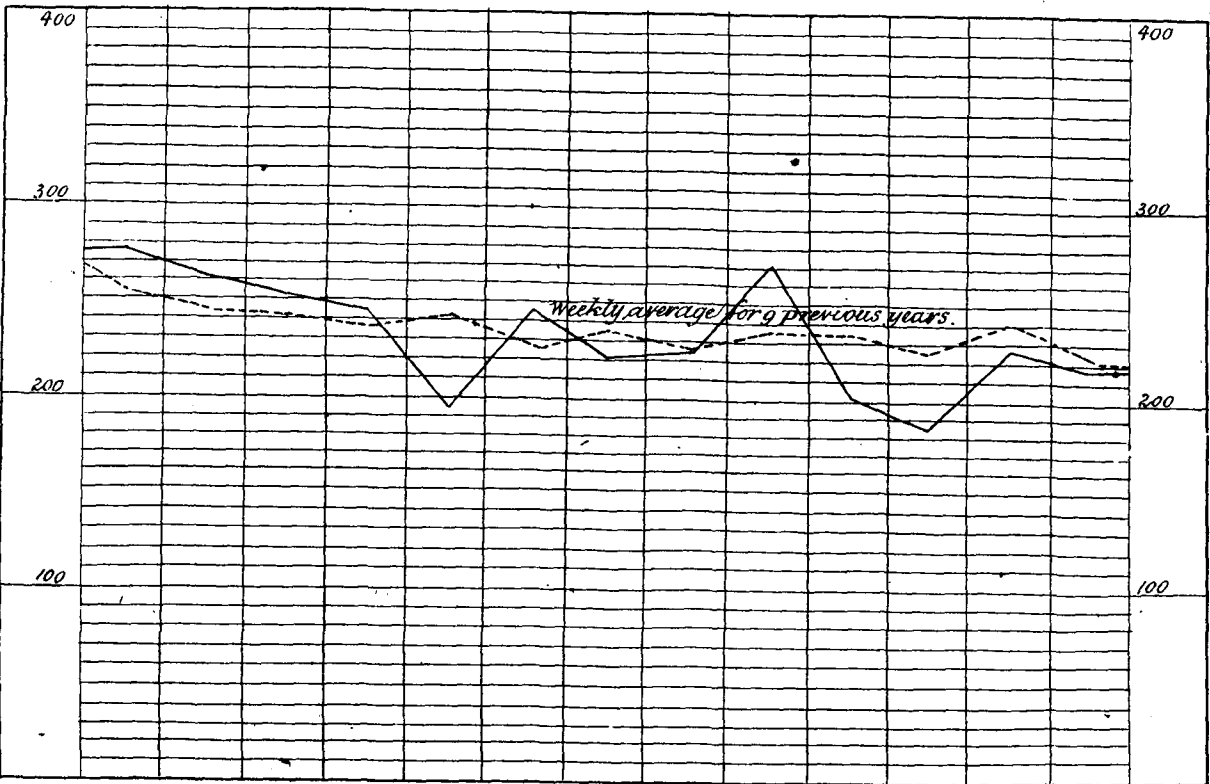
Race or Caste.	Population.	October.	November.	December.	Total.	Ratio per mille of Population.
Europeans ...	17,219	2	...	...	2	0·75
East Indians ...		6	...	...	11	
Hindoos ...	365,576	52	12	4	68	0·18
Mahomedans ...	67,205	13	4	2	19	0·28
Total...	450,000	73	16	11	100	0·22

I had hoped to have been able in this report to have given the result of the Census which the Municipal Commissioners proposed to make at the close of the year. That very desirable undertaking is however postponed by order of the Government of India till the year 1871. Another year must therefore elapse before any reliable vital statistics of Madras can be framed. Within the current year it may be possible to adopt measures to ensure greater accuracy of registration of births and deaths.

Diagram showing the Mortality by all diseases, and special diseases, as influenced by atmospheric pressure, Rainfall and Humidity.
 4th Quarter 1869

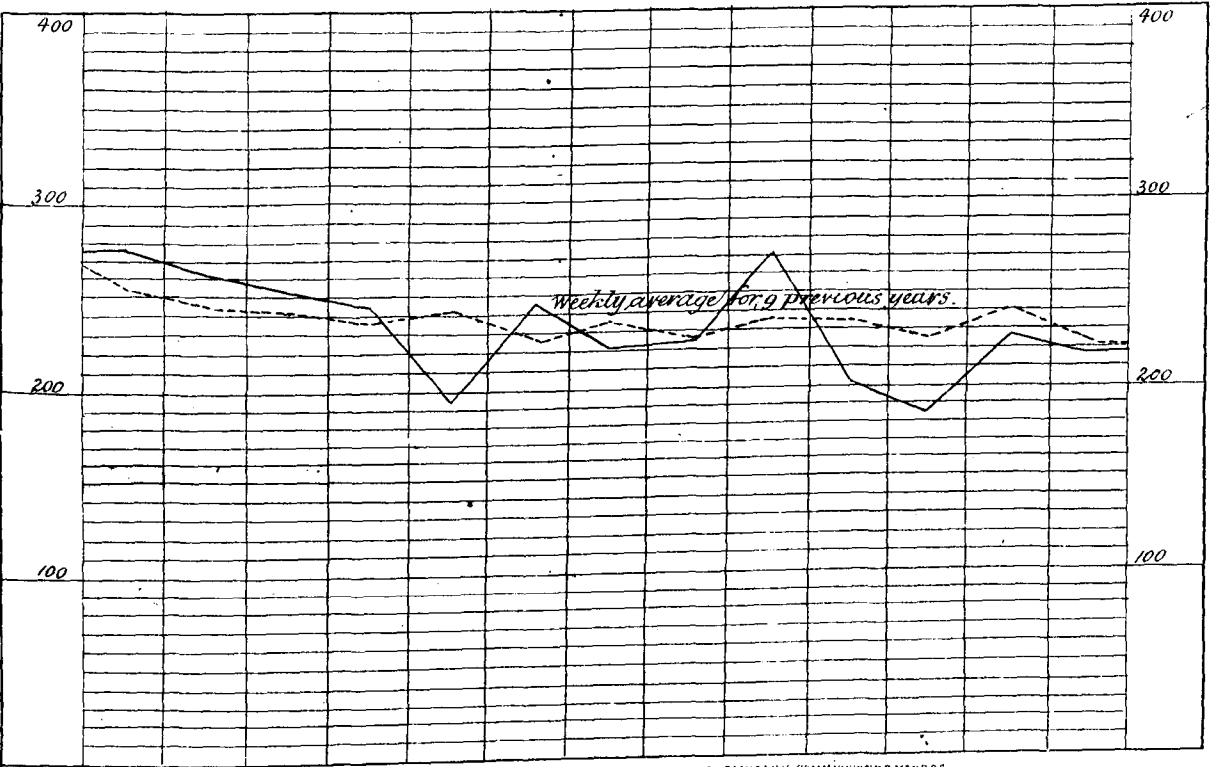


Curves of Mortality by all diseases.



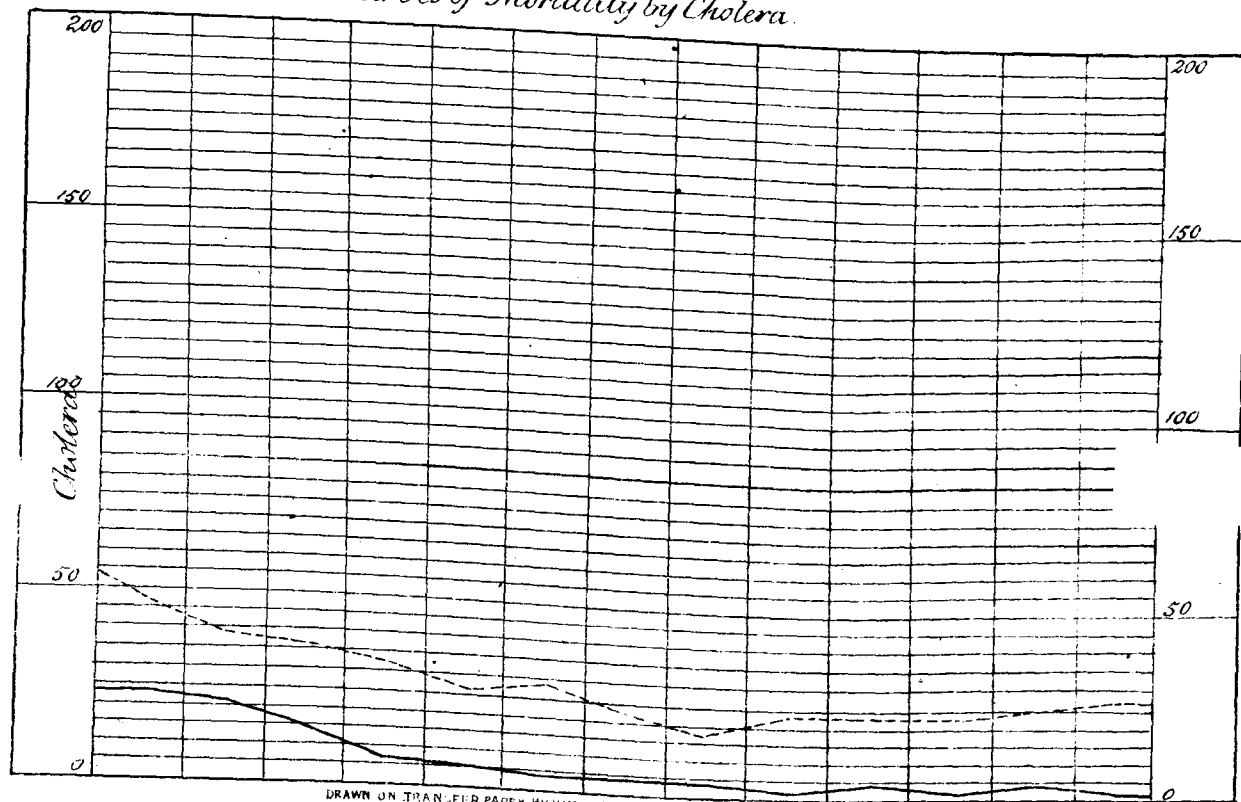
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 LITHO BY R. J. BALDREY, GOVT. LITHO PRESS, FORT ST. GEORGE MADRAS 1870

Curves of Mortality by all diseases.



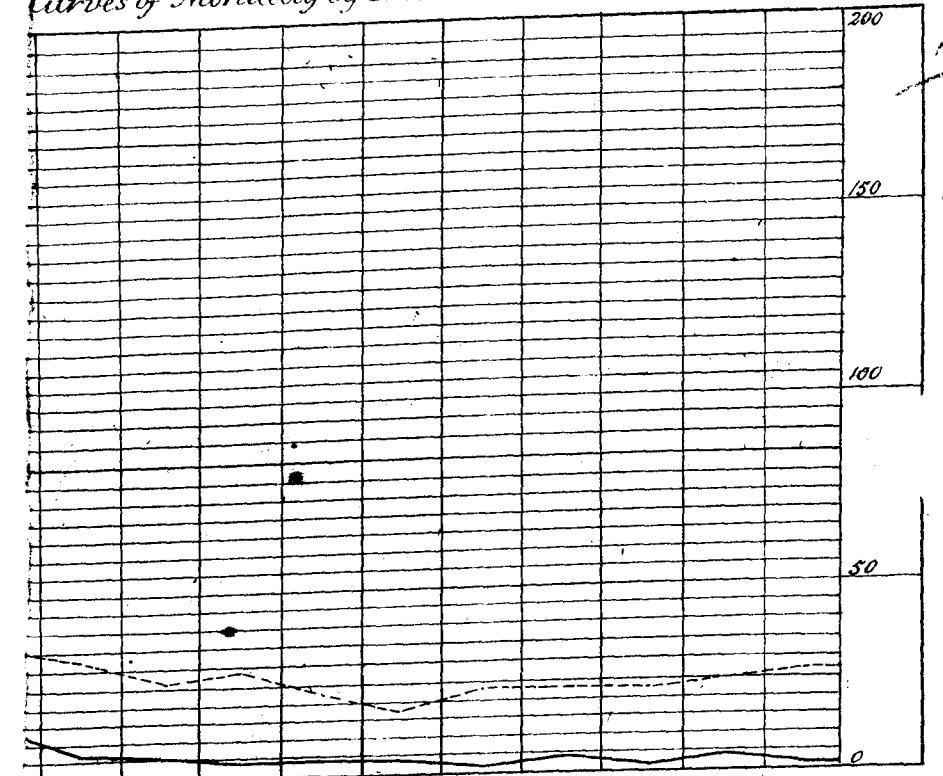
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Curves of Mortality by Cholera.



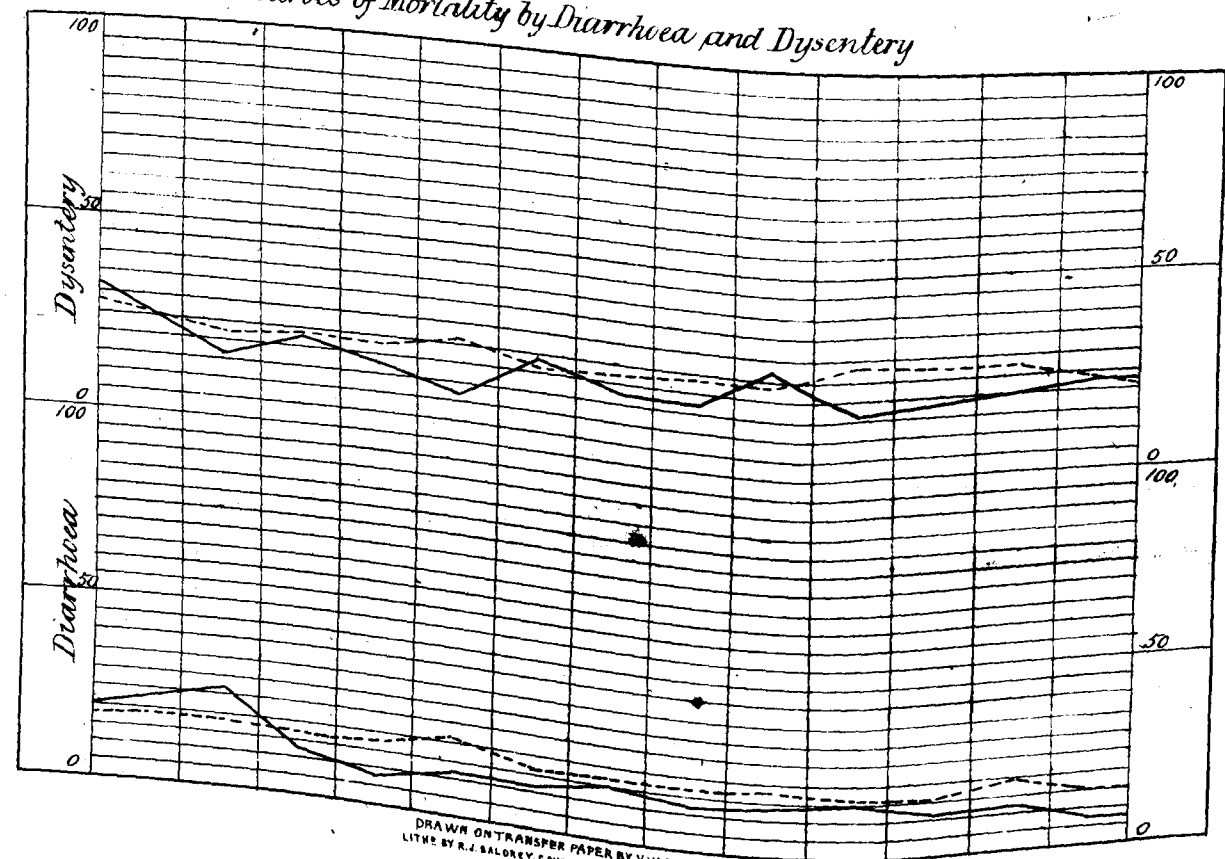
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Curves of Mortality by Cholera.



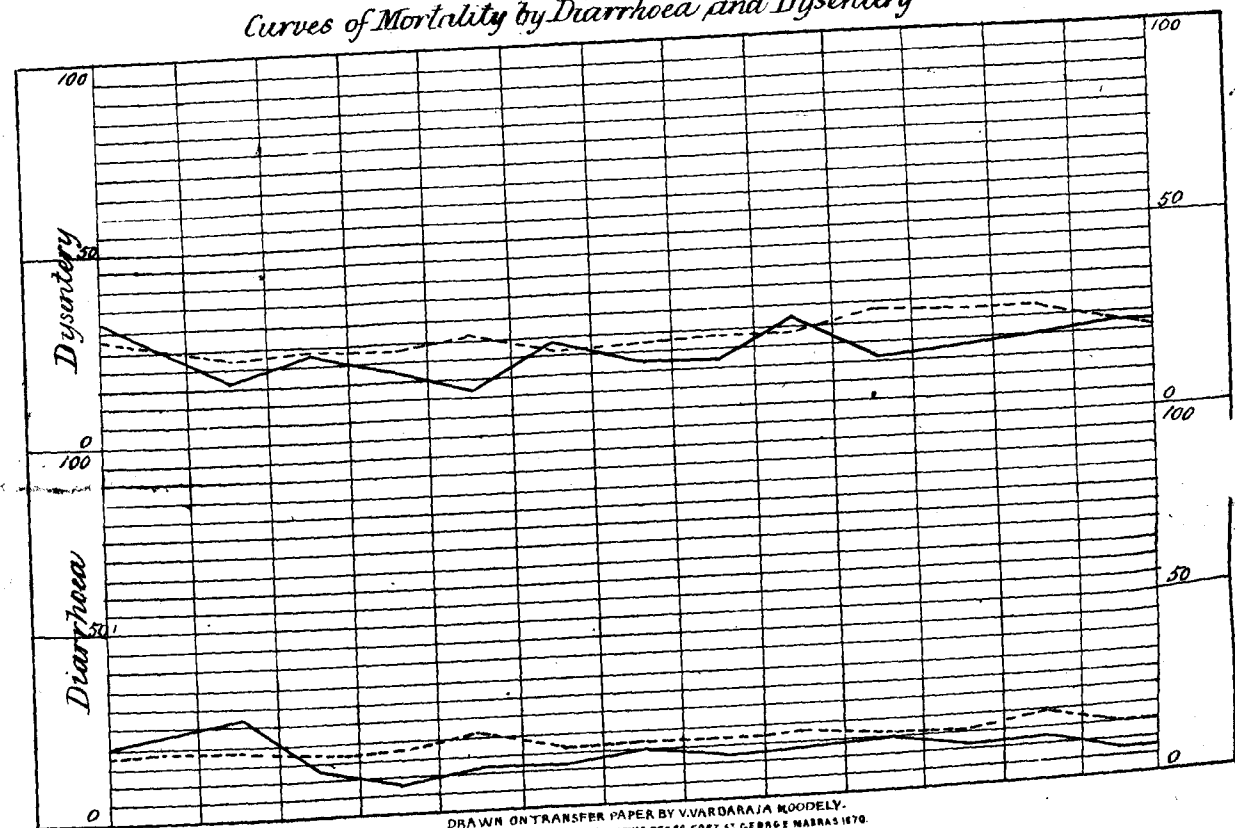
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Curves of Mortality by Diarrhoea and Dysentery



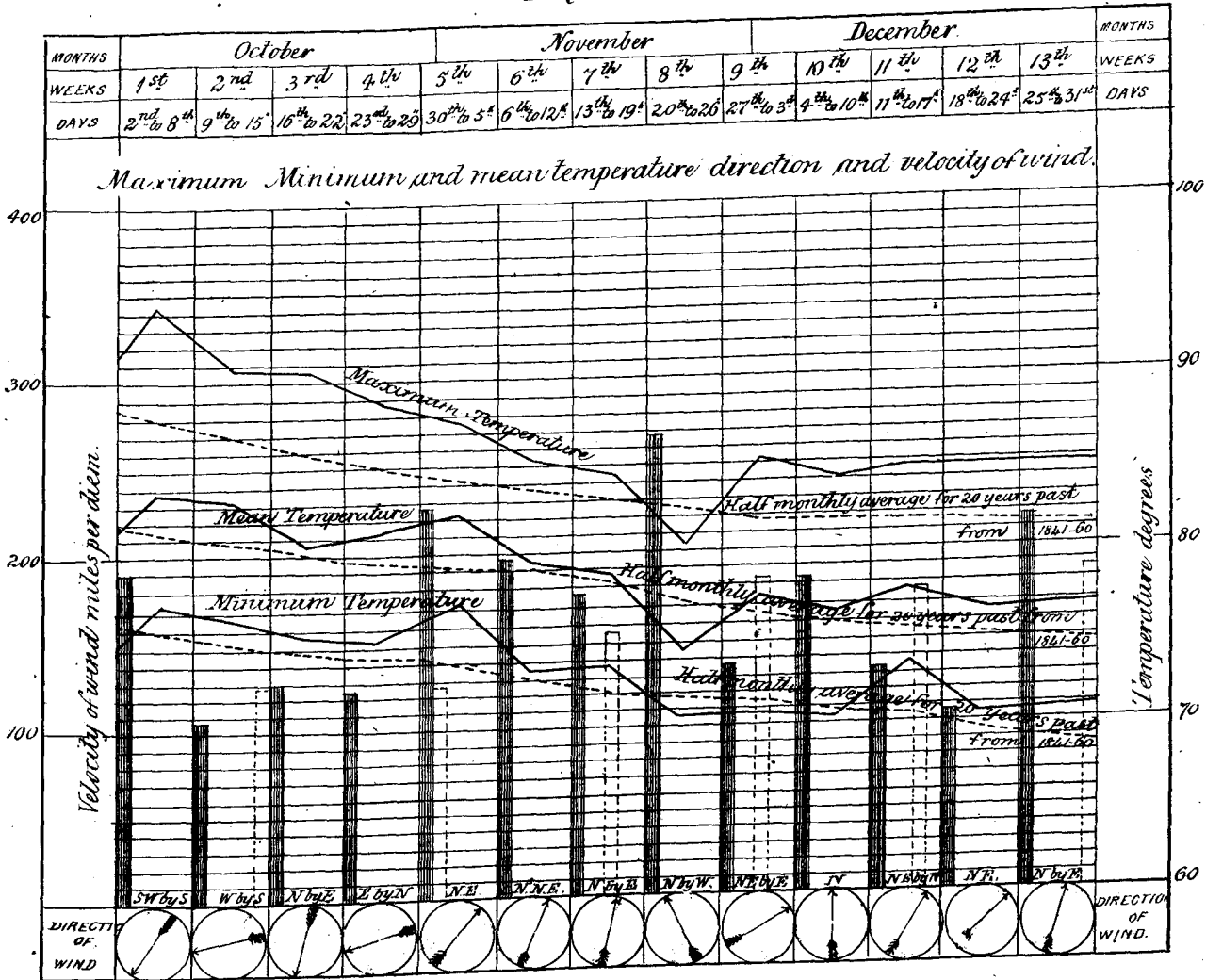
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Curves of Mortality by Diarrhoea and Dysentery

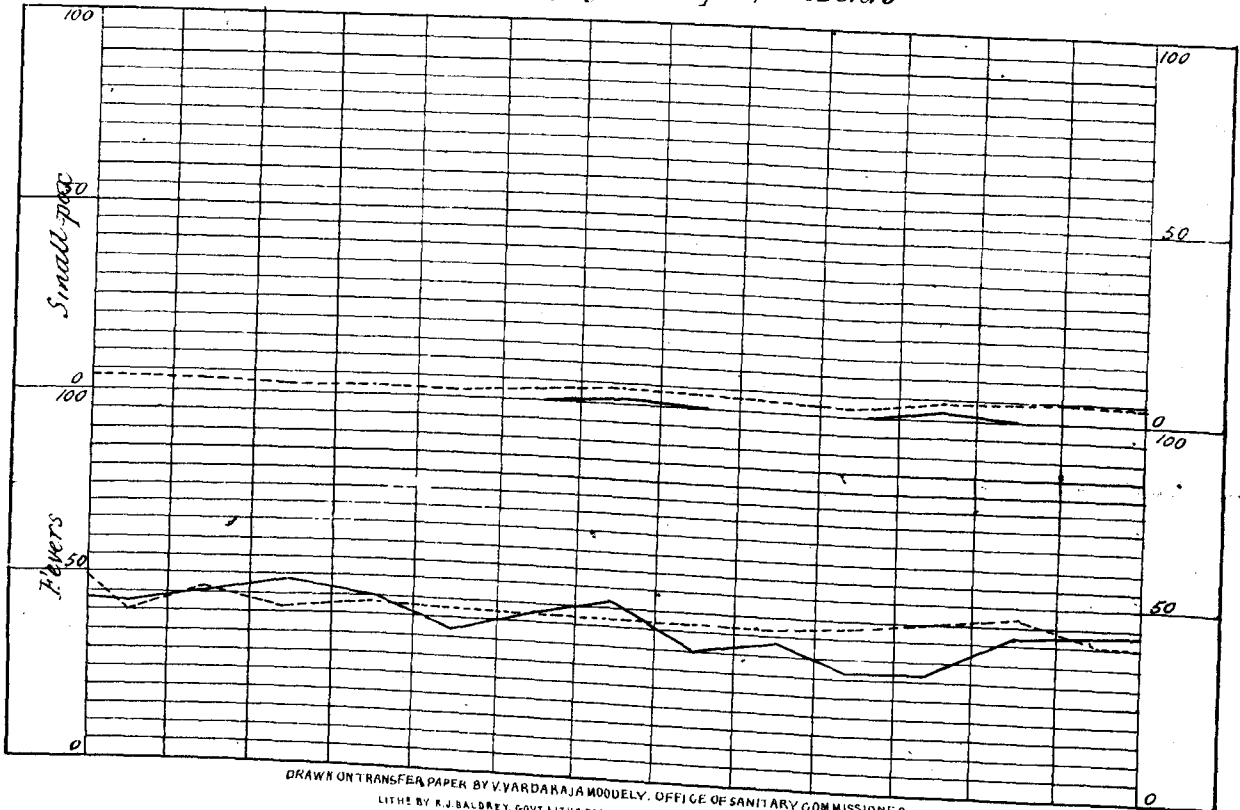


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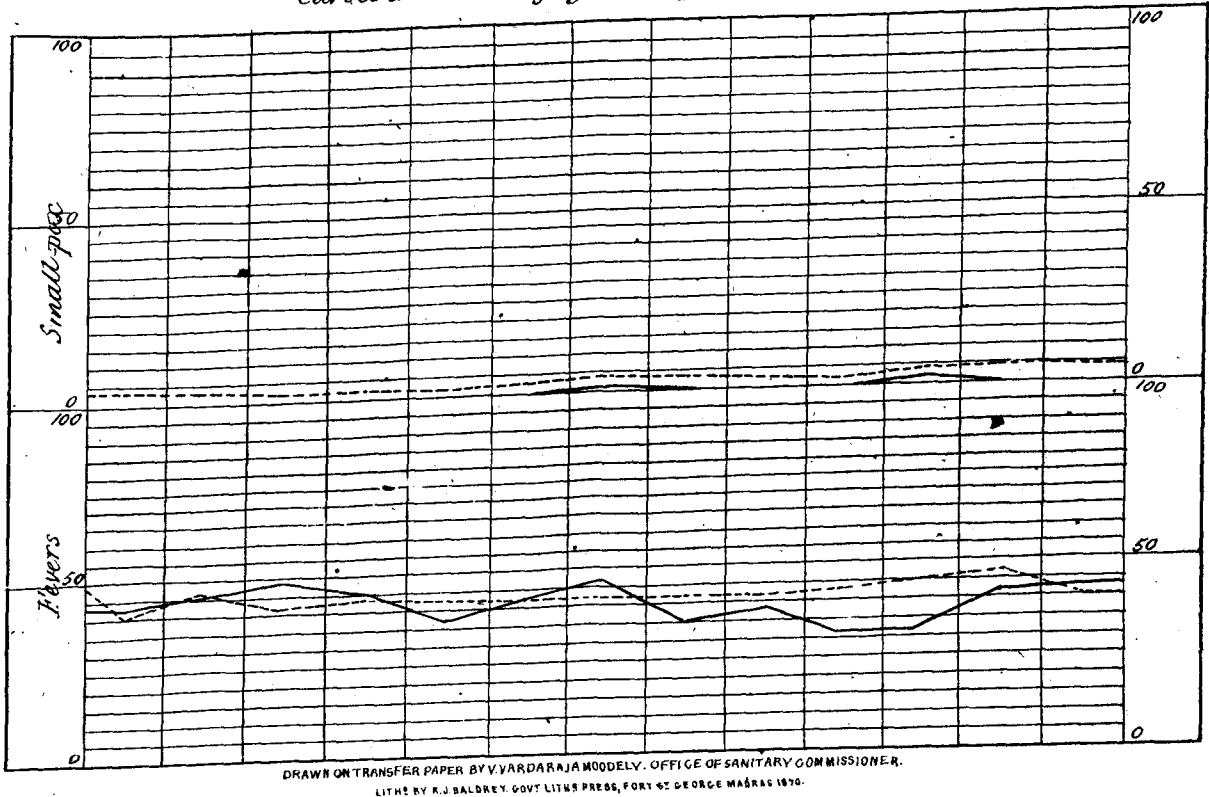
Diagram of Mortality by all diseases and special diseases as influenced by temperature and direction & velocity of wind
4th Quarter 1869.



Curves of Mortality by Small-pox and Fevers



Curves of Mortality by Small-pox and Fevers



VIII.—MEAN Meteorological Observations for the past (fourth) Quarter of 1869.

	Week ending 1st October.	Week ending 8th October.	Week ending 15th October.	Week ending 22nd October.	Week ending 29th October.	Week ending 5th November.	Week ending 12th November.	Week ending 19th November.	Week ending 26th November.	Week ending 3rd December.	Week ending 10th December.	Week ending 17th December.	Week ending 24th December.	Week ending 31st December.	Average.
Barometer reduced to 32° F. ...	29-770	29-756	29-776	29-810	29-870	29-911	29-963	29-899	29-893	29-878	29-912	29-920	29-969	29-970	29-878
Mean Maximum Temperature	89-6	94-3	90-9	90-7	89-0	87-4	85-3	84-5	80-3	85-1	84-0	84-9	84-9	84-9	86-8
Minimum " ...	74-8	77-1	76-9	75-8	75-4	77-1	73-7	73-8	70-9	70-8	70-2	73-9	70-3	70-9	73-7
" Temperature ...	81-4	83-7	83-4	80-9	81-1	81-4	78-8	77-8	74-6	77-4	76-2	77-6	76-5	76-7	79-1
" Humidity ...	79	67	78	77	79	76	79	84	79	84	77	88	81	75	78
Prevailing Wind	W. by S.	S.W. by S.	W. by S.	N. by E.	E. by N.	N. E.	N. N. E.	N. by E.	N. by W.	N. E. by E.	N.	N. E. by N.	N. E.	N. by E.	E. by S.
Mean Velocity in Miles	175	190	108	129	122	229	196	189	267	138	182	131	105	219	170
Rain-fall ...	0-39	0-25	0-73	0-22	1-62	1-08	1-38	3-43	2-69	0-51	0-20	3-24	0-28	0-01	16-03

TABLE showing the Mean half-monthly Meteorological condition of Madras for Twenty years past.

	Half month ending 15th October.	Half month ending 31st October.	Half month ending 15th November.	Half month ending 30th November.	Half month ending 15th December.	Half month ending 31st December.	Average.
Barometer reduced to 32° F. ...	29-822	29-871	29-914	29-950	29-957	29-996	29-918
Mean Maximum Temperature	86-5	84-6	83-0	81-9	81-5	81-2	83-1
Minimum " ...	75-0	74-3	72-1	71-4	70-8	68-9	72-0
" Temperature ...	80-4	79-2	77-4	76-5	75-7	74-8	77-3
" Humidity ...	81	81	79	78	79	75	78-8
Prevailing Wind	S. by E.	E. N. E.	N. N. E.	N. N. E.	N. N. E.	N. E. by N.	N. E. by E.
Mean Velocity in Miles	126	128	156	181	178	186	159
Rain-fall ...	3-89	7-01	6-94	5-96	3-48	1-94	29-22

BIRTHS IN MADRAS.

Registration of births makes little progress. The returns for the quarter under report show 1,167 births, of which 1,112 were "born alive" and 55 "still-born." These figures give a per mille rate to the estimated population of 2-5 for the quarter, equal to an annual birth rate of 10-0 per mille.

These figures show that registration was not so generally effected during this quarter as in the previous one, when the rate was in the proportion of 12-08 per annum against a death rate, calculated for the same period, of 29-48 per mille. For the quarter under report the figures give the annual ratios of 10-0 births, and 27-08 deaths.

	Males.	Femal	Total.
Born alive { Europeans ...	19	19	38
{ East Indians ...	54	50	104
{ Hindoos ...	449	427	876
{ Mahomedans ...	49	45	94
Total ...	571	541	1,112
Still-born { Europeans ...	1	...	1
{ East Indians ...	22	21	43
{ Hindoos ...	7	4	11
{ Mahomedans ...	...	...	...
Total ...	30	25	55
General Total ...	601	566	1,167

The proportion of live to still-birth is 1,112 to 55, equal to 4-95 still, to each 100 live births. Amongst Europeans, the 38 children were all born alive.

The East Indian community had only one still-birth out of 105 births registered. The Hindoo community had 43 children born dead out of 919 births, or in the proportion of 4-679 per cent. Mahomedans have registered 105 births, 11 of which were "still-born," or in the ratio of 10-476 to all births.

Of the total 1,112 live births recorded, 571 are males, and 541 females; and the still-born are 30 males and 25 females. Taking both classes, the proportion of births of male to female children, is as 100 to 94-19.

Registration of births has been so recently introduced into the City of Madras, that no profitable commentary can be made upon the above figures.

METEOROLOGY.

IX.—TABLE showing the Births in Madras among different Classes of the Inhabitants, in the Fourth Quarter ending 31st December 1869.

Division.	Districts.	BORN ALIVE.										STILL BORN.										Total of both Males and Females.	Total Births.
		Europeans.		East Indians.		Hindoos.		Mahomedans.		Total.	Total of both Males and Females.	Europeans.		East Indians.		Hindoos.		Mahomedans.		Total.	Total of both Males and Females.		
		M	F	M	F	M	F	M	F			M	F	M	F	M	F	M	F				
1	Tondiarpettah	1	1	1	1	1	1	1	1	1	2											2	
	Washerman's Pettah					6	7	3	5	9	13	31						1	1		1	22	
	Monegar Choultry	3	2	4	7	1				12	5	17										17	
	Royapooram																						
	Cashmode																						
	Total	3	2	4	14	9	3	5	22	18	40						1	1		1	41		
2	Peddoo Naick's Pettah	1	1	1	55	38			56	39	95											95	
	Big Paricherry	1	3	3	6				10	3	13											13	
	John Pereira's Gardens		1							1	1											1	
	Total	2	1	3	61	38			66	43	109											109	
3	Fort St. George				3	17	14	17	18	1		35	35	70		1		1	1		2	1	3
	Mootteal Pa																			2	1	3	
	Uttapollie																						
	Total				3	17	14	17	18	1		35	35	70		1		1	1		2	3	
4	Chirasewalkum					20	23	2	1	22	24	46										46	
	Rampowder Mills				2	2	48	47	1	1	51	50	101				2	1		2	1	3	
	Perambore	2	1	2	15	23	14	5	32	30	62						2		1	2	3	2	
	Viasarapaudy					3	4			3	4	7										5	
	Total	2	3	4	86	97	17	7	108	108	216						4	1	1	2	5	3	
5	Pareamettoo				1	10	3	1	11	4	15						1		1	2		17	
	New Town				5	2			5	2	7											7	
	Vepery	1	2	1	13	13	2	5	17	28	40											40	
	Poodoopettah		1	1	5	1			5	3	8											8	
	Egmore	5	9	14	10	133	152	3	3	160	174	334					12	14	3	15	14	29	
	Comaleeswarapuram					5	6		5	6	11											11	
	Keilpaukum	1		2		2	2		3	4	7						1			1		1	
	Chetput																						
	Total	7	12	20	19	173	177	6	8	206	216	422					13	15	3	1	16	32	
6	Chintadripettah				2	2	16	12		18	14	32					1			1		33	
	Narasingapuram				2	1	4	2	2	8	5	13										13	
	Codunbalkum																						
	Nungunbalkum	2	1					3		2	4	6										6	
	Mackay's Gardens																						
	Total	2	1	4	3	20	17	2	2	28	23	51					1			1		52	
7	Triplacane				1	36	37	12	16	48	54	102					2	1	2	1	4	2	
	Poodoopaukum					5	5		1	5	6	11					1			1		1	
	Fisherman's Pettah																						
	Theroovateeswarampettah					5	3	1		6	3	9						1			1	1	
	Total				1	46	45	13	17	59	63	122					3	2	2	1	5	3	
8	St. Thomé	3	2		1	15	14	1	2	19	19	38								1		1	
	Alwarpettah																						
	Royapettah				4		11	6	4	2	19	8	27					1			1		
	Meer Saib's Pettah					2	4	2	1	4	5	9										9	
	Kistnampettah					1				1	1	2										2	
	Thanampettah				1		3	2		4	2	6										6	
	Total	3	2	5	1	32	26	7	6	47	35	82								2		2	
	General Total	19	19	54	50	449	427	49	45	571	541	1112					1		22	21	7	4	

Atmospheric pressure.

The mean reduced atmospheric pressure for the quarter is 29.873 inches, or .050 below the 20 years' average.

Mean temperature.

The approximate mean temperature is 79° 1, which is 1° 8 above the average of 20 years. The mean maximum temperature is 86.8, or 3° 7 above the average, and the mean minimum 73.7, or 1° 1 in excess.

Humidity.

The mean humidity is represented by 78, saturation being 100. This is 1 below the 20 years' average.

Rain-fall.

The rain-fall is 16.03 inches, or 13.19 below the average of 20 years.

The mean direction and velocity of the wind is represented by E. by S. direction, with a velocity of 170 miles against a 20 years' mean of N. E. by E. (direction) and 159 (velocity).

The mean features of the quarter as compared with 20 years' average, are, therefore, a somewhat diminished atmospheric pressure, an increase of temperature, a slightly reduced humidity, a deficient rain-fall, and a prevailing wind, having a southward tendency with a velocity rather above the average.

J. L. RANKING, Surgeon Major,
Sanitary Commissioner for Madras.

VITAL STATISTICS
OF THE
CITY OF MADRAS,
FOR THE
FOURTH QUARTER OF 1869.

Public Department

Proceedings of the Madras Government

Read the following letter
from the Offg. Sanitary Com-
missioner for Madras.

(Received 8th March 1870. N^o 255)

Order thereon 16th March 1870. N^o 321

The condition of the
public health in the Town
of Madras during the 4th
quarter of 1869 as shown by
the Statistical Report sub-
mitted by the Acting
Sanitary Commissioner, is
satisfactory.

2. The number of deaths
was 3047 or 72.4 less than
the average of the nine pre-
ceding fourth quarters.
His Excellency the Governor
in

in Council ~~noticed~~ with
much satisfaction that the
mortality by Small Pox
has been smaller than
any corresponding quar-
ter for the previous nine
years.

W.H.

To.

The Offg. Sanitary Commissioner
for Madras

Inspector General, Indian
Medical Dept.

President of the Municipal
Commission, Madras.

Sept 29/13