TWENTY-FIRST ANNUAL REPORT

OF THE

SANITARY COMMISSIONER

FOR

MADRAS,

1884.

WITH

APPENDICES

CONTAINING

VACCINATION REPORT AND RETURNS AND VITAL STATISTICS
OF THE GENERAL POPULATION.

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ERRATUM.

Page 27, para. 76, line 13, *for* "at Madras and Thayetmyo," *read* "at Madras and Tonghoo."

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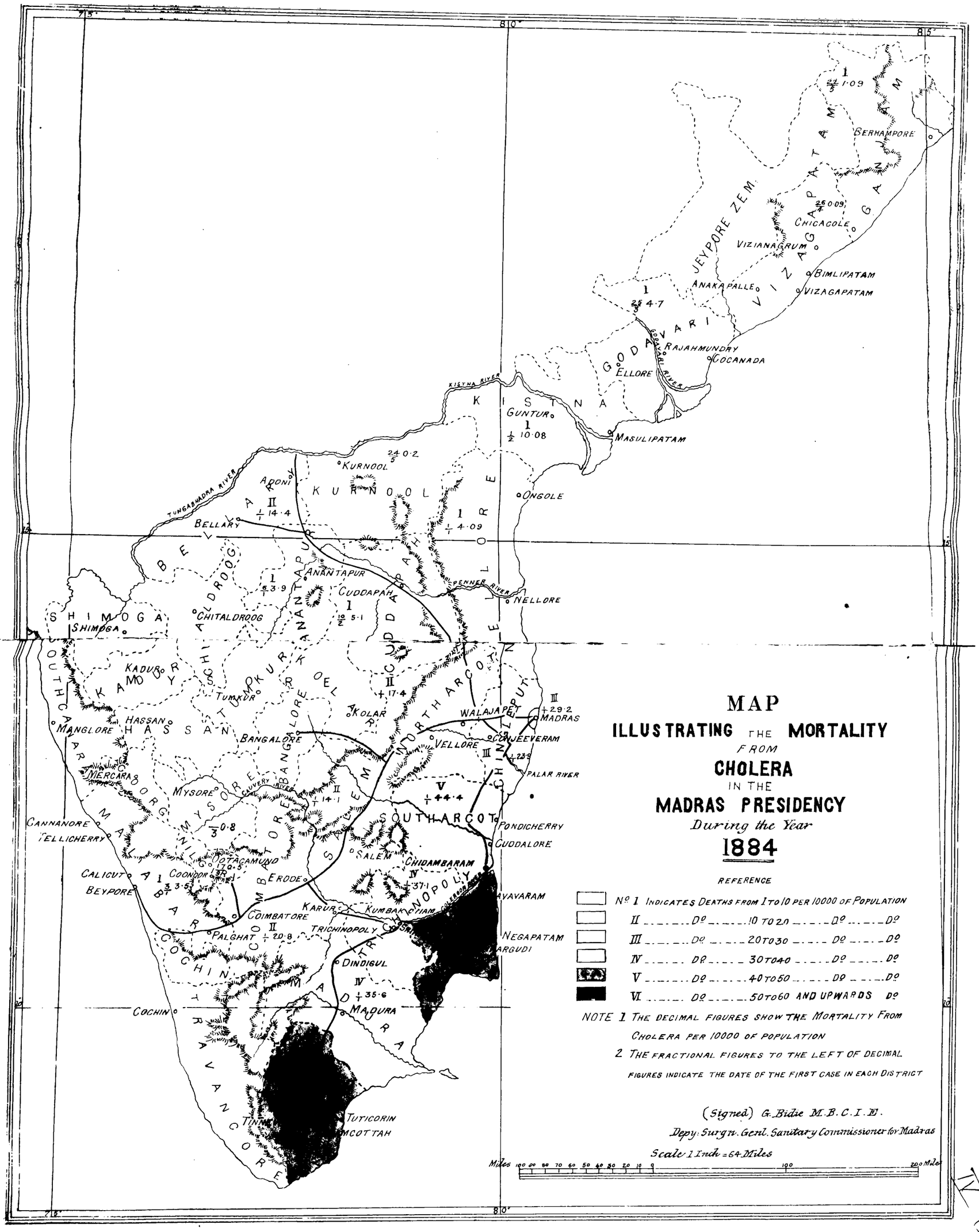
MAP
ILLUSTRATING THE MORTALITY
FROM
CHOLERA
IN THE
MADRAS PRESIDENCY
During the Year
1884
REFERENCE
No. 1 INDICATES DEATHS FROM 1 TO 10 PER 10000 OF POPULATION
II ..... Do ..... 10 TO 20 ..... Do ..... Do
III ..... Do ..... 20 TO 30 ..... Do ..... Do
IV ..... Do ..... 30 TO 40 ..... Do ..... Do
V ..... Do ..... 40 TO 50 ..... Do ..... Do
VI ..... Do ..... 50 TO 60 AND UPWARDS Do
NOTE 1 THE DECIMAL FIGURES SHOW THE MORTALITY FROM CHOLERA PER 10000 OF POPULATION
2 THE FRACTIONAL FIGURES TO THE LEFT OF DECIMAL FIGURES INDICATE THE DATE OF THE FIRST CASE IN EACH DISTRICT
(Signed) G. Bidie M.B.C.I.E.
Depy: Surgn. Genl. Sanitary Commissioner for Madras
Scale 1 Inch = 64 Miles
Miles 100 90 80 70 60 50 40 30 20 10 0 100 200 Miles
75°
80°
85°
15°
10°
BERHAMPORE
CHICACOLE
VIZIANAGRUM
BIMLIPATAM
VIZAGAPATAM
ANAKAPALLE
JEYPORE ZEM.
VIZAGAPATAM
RAJAHMUNDRY
COCANADA
ELLORE
GODAVARI
KISTNA RIVER
GUNTUR
MASULIPATAM
KURNOOL
ADONI
BELLARY
ONGOLE
TUNGABHADRA RIVER
ANANTAPUR
CUDDAPAH
PENNER RIVER
NELLORE
CHITALDROOG
SHIMOGA
KADUR
TUMKUR
KOLAR
WALAJAPET
MADRAS
CHINGLEPUT
CONJEEVERAM
VELLORE
PALAR RIVER
HASSAN
MANGLORE
BANGALORE
MERCARA
MYSORE
CUVERY RIVER
SOUTH ARCOT
PONDICHERRY
CUDDALORE
CANNANORE
TELLICHERRY
CALICUT
BEYPORE
COONOOR
OTTACAMUND
ERODE
SALEM
CHIDAMBARAM
COIMBATORE
KARUR
KUMBAKONAM
TRICHINOPOLY
PALGHAT
NEGAPATAM
DINDIGUL
MADURA
COCHIN
TUTICORIN
TINNEVELLY
TRAVANCORE
COCHIN

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Va VIII

Statement illustrating the Distribution, &c., of Cholera in the Madras Presidency during the year 1884, *to accompany the Cholera Map.*

1	2	3	4	5	6	7	8	9	10	
Districts.	Number of Circles of Mortality Registration.	Name of the Circle.	Population * for which Returns were received.	Date of First Case of Cholera in the Circle during the Year.	Date of Last Case of Cholera in the Circle during the Year.	Total Deaths from Cholera in the Circle during the Year.	Period of Maximum Intensity of Disease.	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Number of those Not affected by Cholera.
Ganjam.	1	Chicacole Taluk ...	165,521	...	...	...	...	297	...	297
	2	Berhampore do. ...	201,440	17th July ...	28th Dec....	47	September.	531	12	519
	3	Gumsoor do. ...	137,998	1st Dec. ...	14th Dec....	15	...	802	2	800
	4	M. T. Chicacole ...	18,302	...	...	...	...	1	...	1
	5	M. T. Berhampore ...	23,599	12th Nov....	12th Nov....	2	...	1	1	...
	6	Zemindaries	473,502	22nd May.	21st Oct. ...	48	September.	5,263	14	5,249
		Total ...	1,020,362	22nd May.	28th Dec. ...	112	Do. ...	6,895	29	6,866
Vizagapatam.	7	Sarvasiddhi Taluk	117,614	16th Dec....	16th Dec....	2	...	152	1	151
	8	Narsapatnam do.	86,946	..	...	...	...	178	...	178
	9	Anakápalle do.	109,157	25th Sept.	25th Sept.	1	...	144	1	143
	10	Vizagapatam do.	47,769	...	...	...	...	74	...	74
	11	Viravilli do.	154,266	...	...	...	...	238	...	238
	12	Bimlipatam do.	87,661	...	...	...	...	117	...	117
	13	Srungavarapukottah do.	106,887	...	...	...	...	178	...	178
	14	Vizianagrum do.	97,860	...	...	...	...	186	...	186
	15	Gajapatinagar do.	97,086	...	...	...	...	224	...	224
	16	Chípurupalle do.	107,992	26th April.	21st June...	6	April ...	268	1	267
	17	Sálúr do.	56,696	...	...	...	...	156	...	156
	18	Bobbili do.	98,734	...	...	...	...	178	..	178
	19	Pálkonda do.	128,181	12th July ...	12th July ...	1	...	362	1	361
	20	Párvatipur do.	85,000	...	...	...	...	208	...	208
	21	M. T. Vizagapatam ...	30,291	...	...	...	...	1	...	1
	22	M. T. Bimlipatam ...	8,582	...	...	...	...	1	..	1
	23	M. T. Vizianagrum ...	22,577	...	...	...	...	1	...	1
	24	M. T. Anakápalle ...	13,341	18th Sept....	8th Oct. ...	4	September.	1	1	...
	25	Agency Tracts ...	...	...	...	...	...	6,095	...	6,095
		Total ..	1,456,640	26th April.	16th Dec....	14	...	8,762	5	8,757
Godávari.	26	Rámachandrapuram Taluk	220,780	10th Sept....	28th Nov....	207	October ...	163	54	109
	27	Amalápuram do.	227,157	27th Sept. ..	22nd Dec....	182	November.	171	45	126
	28	Narsápur do.	200,153	7th April.	26th Dec....	72	Do. ...	139	23	116
	29	Bhimavaram do.	108,599	1st Sept....	26th Nov....	16	October ...	139	4	135
	30	Tanuku do.	188,306	25th Mar....	10th Dec. ...	112	Do. ...	175	18	157
	31	Ellore do.	124,216	20th April.	26th Dec. ...	78	September.	219	15	204
	32	Yernagúdem do.	159,364	16th Sept....	11th Dec....	35	Do. ...	192	6	186
	33	Rajahmundry do.	106,641	14th Sept....	13th Dec. ...	98	October ...	131	5	126
	34	Peddápuram do.	124,314	9th Sept....	9th Sept.	1	...	188	1	187
	35	Bhadráchalam do.	35,656	22nd Sept....	22nd Sept.	1	...	261	1	260
	36	M. T. Cocanada ...	30,441	15th Oct. ...	4th Nov....	9	October ...	1	1	...
	37	M. T. Rajahmundry ...	24,555	21st Sept....	19th Oct....	16	Do. ...	1	1	...
	38	M. T. Ellore	25,092	23rd Aug....	15th Nov....	6	November...	1	1	...
	39	Zemindaries	216,238	5th Sept....	19th Nov....	22	...	468	8	460
		Total ..	1,791,512	25th Mar....	26th Dec....	855	October ...	2,249	183	2,066
Kistna.	40	Répalle Taluk ...	184,340	10th Feb. ...	24th Nov....	86	March ...	148	25	123
	41	Bápatla do. ...	151,736	1st Feb....	30th Dec....	192	November...	114	35	79
	42	Guntúr do. ..	116,437	22nd Mar....	16th Sept....	38	April ...	113	8	105
	43	Palnád do. ..	125,799	11th May ...	22nd Sept.	9	August ...	97	2	95
	44	Narasaraopet do.	128,791	14th Aug....	21st Dec. ...	277	November...	114	28	86
	45	Gudiváda do. ...	99,233	21st Mar....	18th Oct. ...	78	August ...	203	17	213
	46	Sattenapalle do. ...	110,290	9th Aug. ..	21st Sept....	35	Do. ..	169	6	163
	47	Masulipatam do. ...	140,426	14th Feb. ...	11th Oct. ...	80	September.	189	19	170
	48	Nandigáma do. ...	107,288	24th Mar....	30th Sept.	479	August ...	172	67	105
	49	Bezváda do. ...	82,895	8th Feb. ...	5th Dec....	145	March ...	111	19	92
	50	Vinukonda do. ...	66,977	4th Nov....	6th Nov....	4	...	71	1	70
	51	M. T. Masulipatam ...	35,056	14th Mar....	Aug.	17	March ...	1	1	...
	52	M. T. Guntúr	19,646	...	...	...	...	1	...	1
	53	Zemindaries . ..	179,566	17th Mar....	18th Dec. ..	121	August ...	320	35	285
		Total ...	1,548,480	1st Feb....	30th Dec. ...	1,561	Do. ...	1,823	263	1,560
Nellore.	54	Gúdúr Taluk	83,190	1st Jan. ...	22nd Dec....	20	December...	164	7	157
	55	Rápúr do.	49,774	6th Nov....	6th Nov....	1	...	109	1	108
	56	Nellore do.	135,269	1st Jan. ...	29th Dec....	116	January ...	151	17	134
	57	Atmakúr do.	83,262	6th Jan. ...	23rd Feb....	28	February ...	110	3	107
	58	Kávali do.	60,650	...	...	...	...	78	...	78

* Including Europeans and Eurasians.

Statement illustrating the distribution, &c., of Cholera in the Madras Presidency, during the year 1884, *to accompany the Cholera Map*—(Continued).

1	2	3	4	5	6	7	8	9	10	
Districts.	Number of Circles of Mortality Registration.	Name of the Circle.	Population * for which Returns were received.	Date of First Case of Cholera in the Circle during the Year.	Date of Last Case of Cholera in the Circle during the Year.	Total Deaths from Cholera in the Circle during the Year.	Period of Maximum Intensity of Disease.	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Number of those Not affected by Cholera.
Nellore (*Cont.*)	59	Udayagiri Taluk ...	48,043	2nd Jan....	9th Mar....	112	January ...	134	5	129
	60	Kandukúr do. ...	96,291	21st Nov....	29th Dec....	95	December...	165	15	150
	61	Kanigiri do. ...	50,174	...	...	...	...	184	...	184
	62	Ongole do. ...	141,806	19th July ...	29th Dec....	13	December...	167	7	160
	63	M. T. Nellore	27,505	3rd Jan....	18th Nov....	24	January ...	1	1	...
	64	M. T. Ongole	9,200	...	...	...	...	1	...	1
	65	Zemindaries	398,321	2nd Jan ...	29th Dec....	76	January ...	424	17	407
		Total ...	1,183,485	1st Jan....	29th Dec....	485	January ...	1,688	73	1,615
Madras.	66	Madras Town	405,848	1st Jan....	31st Dec. ...	1,142	September.	1	1	...
Chingleput.	67	Saidápet Taluk ...	204,580	1st Jan. ...	31st Dec. ...	663	January ...	274	105	169
	68	Chingleput do. ...	117,218	Do. ...	Do. ...	173	July ...	298	59	239
	69	Madurántakam do. ...	223,067	Do. ...	Do. ...	191	Do. ...	525	51	474
	70	Conjeeveram do. ...	148,374	Do. ...	Do. ...	558	Do. ...	363	94	269
	71	Tiruvallúr do. ...	143,324	Do. ...	Do. ...	278	November...	301	54	247
	72	Ponnéri do. ..	107,543	2nd Jan....	Do. ...	226	December...	241	32	209
	73	M. T. Conjeeveram ...	37,275	1st Jan. ...	Do. ...	259	July ...	1	1	...
		Total ...	981,381	1st Jan. ...	31st Dec. ...	2,348	September ..	2,003	396	1,607
South Arcot.	74	Cuddalore Taluk ...	254,978	1st Jan. ...	31st Dec. ...	1,721	January ...	222	129	93
	75	Villupuram do. ...	243,896	Do. ...	Do. ...	1,271	December...	285	131	154
	76	Chidambaram do. ...	245,413	Do. ...	Do. ...	1,995	January ..	429	267	162
	77	Tindivanam do. ...	264,261	5th Jan. ...	Do. ...	264	December...	505	58	447
	78	Kullakurchi do. ...	196,029	1st Jan. ...	Do. ...	506	January ...	368	84	284
	79	Tirukoilúr do. ...	206,489	Do. ...	Do. ...	757	Do. ...	343	126	217
	80	Tiruvannámalai do. ...	153,222	20th Jan. ...	Do. ...	222	December...	391	40	351
	81	Vriddháchalam do. ...	187,068	1st Jan. ...	Do. ...	832	January ...	305	116	189
	82	M. T. Cuddalore ...	43,545	Do. ...	Do. ...	211	December...	1	1	...
	83	M. T. Chidambaram ...	19,837	Do. ...	25th Dec. ..	290	July ...	1	1	...
		Total ..	1,814,738	1st Jan. ...	31st Dec. ...	8,069	January ..	2,850	953	1,897
Trichinopoly.	84	Trichinopoly Taluk ...	231,296	1st Jan. ...	31st Dec. ...	1,261	January ...	359	220	139
	85	Musiri do. ...	258,068	Do. ...	Do. ...	630	Do. ..	223	100	123
	86	Kulitalai do. ...	201,990	Do. ...	Do. ...	258	December...	246	50	196
	87	Perambalúr do. ...	172,281	Do. ...	30th Dec. ...	211	January ...	214	59	155
	88	Udayárpálaiyam do. ...	247,176	Do. ...	31st Dec. ..	1,465	September...	441	174	267
	89	M. T. Trichinopoly ...	84 449	Do. ...	Do. ...	566	December...	1	1	...
	90	M. T. Srírangam ...	19,773	Do. ...	Do. ...	126	January ...	1	1	...
		Total ..	1,215,033	1st Jan. ...	31st Dec. ...	4,517	January ..	1,485	605	880
Tanjore.	91	Tanjore Taluk ...	320,341	1st Jan. ..	31st Dec. ...	2,613	January ...	410	244	166
	92	Kumbakónam do. ...	320,625	Do. ...	Do. ..	3,985	Do. ...	506	351	155
	93	Máyavaram do. ...	215,950	Do. ...	Do. ...	2,463	July ...	342	207	135
	94	Shiyáli do. ...	114,041	Do. ...	Do. ...	1,066	Do. ...	191	157	34
	95	Nannilam do. ...	220,202	Do. ...	Do. ...	3,028	January ...	397	256	141
	96	Negapatam do. ...	163,012	Do. ...	Do. ...	3,763	July ...	323	276	47
	97	Mannárgudi do. ...	162,241	Do. ...	Do. ...	1,399	January ...	299	211	88
	98	Tiruturaipúndi do. ...	168,103	Do. ...	Do. ...	2,498	July ...	238	178	60
	99	Patukóta do. ...	244,717	2nd Jan....	Do. ...	772	August ...	840	92	748
	100	M. T. Tanjore	54,745	1st Jan.	30th Dec.	401	January ...	1	1	...
	101	M. T. Kumbakónam ...	50,098	Do. ...	31st Dec.	400	Do. ...	1	1	...
	102	M. T. Máyavaram ...	23,044	Do. ...	30th Dec.	197	Do. ...	1	1	...
	103	M. T. Negapatam ...	53,855	Do. ...	31st Dec.	784	Do. ...	1	1	...
	104	M. T. Mannárgudi ...	19,409	7th Jan.	20th Dec.	302	August ...	1	1	...
		Total ...	2,130,383	1st Jan.	31st Dec.	23,671	January ...	3,551	1977	1,574

* Including Europeans and Eurasians.

Statement illustrating the Distribution, &c., of Cholera in the Madras Presidency, during the year 1884, *to accompany the Cholera Map*—(Continued).

1	2	3	4	5	6	7	8	9	10	
Districts.	Number of Circles of Mortality Registration.	Name of the Circle.	Population * for which Returns were received.	Date of First Case of Cholera in the Circle during the Year.	Date of Last Case of Cholera in the Circle during the Year.	Total Deaths from Cholera in the Circle during the Year.	Period of Maximum Intensity of Disease.	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Number of those Not affected by Cholera.
Madura.	105	Madura Taluk ...	141,526	1st Jan. ...	31st Dec.	732	January ...	273	82	191
	106	Melúr do. ...	132,537	6th Jan. ...	Do. ...	224	December...	93	26	67
	107	Tirumangalam do. ...	203,693	1st Jan. ...	Do. ...	392	Do. ...	259	77	182
	108	Periyakulam do. ...	232,123	5th Jan. ...	Do. ...	787	Do. ...	86	45	41
	109	Dindigul do. ...	290,601	1st Jan. ...	Do. ...	496	Do. ...	208	76	132
	110	Palni do. ...	171,515	Do. ...	Do. ...	1,015	Do. ...	126	57	69
	111	Sattenandal Villages ...	1,161	28th June...	30th Dec.	11	August ...	4	1	3
	112	M. T. Madura	73,807	1st Jan. ...	31st Dec.	708	December...	1	1	...
	113	M. T. Dindigul ...	14,182	Do. ...	Do. ...	45	Do. ...	1	1	...
	114	Zemindaries	33,237	Do. ...	30th Dec.	203	January ...	2,920	3	2,917
		Total ...	1,294,382	Do. ...	31st Dec.	4,613	December.	3,971	369	3,602
Tinnevelly.	115	Otapidáram Taluk ...	253,516	Do. ...	Do. ...	310	January ...	375	91	284
	116	Tenkarai do. ...	283,110	Do. ...	Do. ...	2,961	Do. ...	147	147	...
	117	Tinnevelly do. ...	130,193	Do. ...	Do. ...	1,512	December.	121	104	17
	118	Srívilliputur do. ...	163,608	Do. ...	Do. ...	2,265	Do. ...	105	75	30
	119	Sankaranainárkoil do. ...	181,064	3rd Jan. ...	Do. ...	2,665	Do. ...	113	71	42
	120	Nángunéri do. ...	174,347	1st Jan. ...	Do. ...	1,061	Do. ...	227	127	100
	121	Ambásamudram do. ...	165,152	Do. ...	Do. ...	2,133	January ...	92	83	9
	122	Sátúr do. ...	150,886	Do. ...	Do. ...	376	Do. ...	214	73	141
	123	Tenkási do. ...	140,405	Do. ...	Do. ...	2,449	Do. ...	100	75	25
	124	M. T. Tinnevelly ...	23,221	Do. ...	30th Dec.	303	Do. ...	1	1	...
	125	M. T. Palamcottah ...	17,964	Do. ...	Do. ...	159	December.	1	1	...
	126	M. T. Tuticorin ...	16,281	Do. ...	31st Dec.	251	Do. ...	1	1	...
		Total ...	1,699,747	Do. ...	Do. ...	16,445	Do. ...	1,497	849	648
Kurnool.	127	Rámallakót Taluk	74,369	...	...	...	...	106	...	106
	128	Pattikonda do. ..	105,438	24th May ...	24th May ...	1	...	107	1	106
	129	Nandikótkur do. ...	72,741	...	...	...	...	113	...	113
	130	Nandyál do. ...	78,282	...	...	...	...	92	...	92
	131	Koilkuntla do. ...	76,296	...	...	...	...	85	...	85
	132	Sirvél do. ..	57,197	29th Oct. ...	22nd Nov	17	November.	87	3	84
	133	Cumbum do. ..	109,851	...	...	...	...	101	...	101
	134	Márkápur do. ...	84,048	...	...	...	...	86	..	80
	135	Bangampalle do. ...	30,754	...	...	...	...	64	...	64
	136	M. T. Kurnool ...	20,329	...	...	...	...	1	...	1
		Total ...	709,305	24th May ...	22nd Nov....	18	November.	836	4	832
Cuddapah.	137	Badvél Taluk.	82,445	...	...	...	...	118	...	118
	138	Proddutur do.	90,653	25th Nov. ...	27th Nov....	3	...	92	2	90
	139	Sidhout do.	59,076	17th May ...	27th Dec....	50	December...	79	9	70
	140	Pullampet do.	134,366	15th Nov....	31st Dec. ...	65	Do. ...	130	11	119
	141	Cuddapah do.	128,471	10th Feb. ...	26th Dec. ...	62	November...	146	9	137
	142	Jammalamadugu do.	91,958	17th July ..	15th Aug....	9	July ...	127	2	125
	143	Pulivendla do.	95,617	...	...	...	...	105	...	105
	144	Ráyachóti do.	92,541	...	...	...	...	93	...	93
	145	Kadiri do.	116,252	...	...	...	...	139	...	139
	146	Váyalpád do.	104,462	30th July ..	30th July ...	1	...	115	1	114
	147	Madanapalle do.	106,215	3rd July	5th Aug....	110	July ..	96	3	93
	148	M. T. Cuddapah ...	18,982	24th Feb.	29th Dec. ...	275	December..	1	1	...
		Total ...	1,121,038	10th Feb. ...	31st Dec. ...	575	December ..	1,241	38	1,203
Bellary.	149	Bellary Taluk ...	95,477	17th July ...	26th Aug....	14	August ...	161	4	157
	150	Hospet do. ...	84,986	1st Jan. ...	19th Aug....	121	July ...	124	15	109
	151	Kúdligi do.	74,690	8th May ...	3rd Nov...	50	May ...	146	12	134
	152	Hadagalli do.	75,572	30th Jan. ...	15th Aug....	364	Do. ...	145	47	98
	153	Harpanahalli do.	70,620	1st Jan. ..	14th Nov...	386	June ...	135	43	92
	154	Alur do.	65,586	Do. ...	4th Nov....	68	January ..	107	4	103
	155	Adóni do. ...	99,644	8th Oct. ...	9th Oct. ...	2	...	193	1	192
	156	Ráyadrug do.	83,799	26th July ...	26th July ...	1	...	148	1	147
	157	M. T. Bellary ...	53,460	6th July ..	4th Dec. ...	59	July ...	1	1	...
	158	M. T. Adóni	22,441	4th Dec. ...	Do. ...	2	...	1	1	...
	159	Zemindaries	10,532	26th June ...	...	1	...	23	1	22
		Total ...	736,807	1st Jan. ...	4th Dec. ...	1,068	June ...	1,184	130	1,054

* Including Europeans and Eurasians.

Statement illustrating the Distribution, &c., of Cholera in the Madras Presidency, during the year 1884, *to accompany the Cholera Map*—(Continued).

1	2	3	4	5	6	7	8	9	10	
District.	Number of Circles of Mortality Registration.	Name of the Circle.	Population * for which Returns were received.	Date of First Case of Cholera in the Circle during the Year.	Date of Last Case of Cholera in the Circle during the Year.	Total Deaths from Cholera in the Circle during the Year.	Period of Maximum Intensity of Disease.	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Number of those Not affected by Cholera.
Anantapur.	160	Anantapur Taluk ...	86,909	11th Dec. ...	28th Dec. ...	8		122	1	121
	161	Gooty do. ...	110,597	13th July ...	30th Dec. ...	18	August ...	153	8	145
	162	Tadpatri do. ...	98,964	14th Oct. ...	16th Dec. ...	89	November ...	96	7	89
	163	Penukonda do. ...	73,023	2nd Dec. ...	30th Dec. ...	5		99	3	96
	164	Dharmavaram do. ...	97,106	6th Jan. ...	31st Dec. ...	117	December ...	181	11	170
	165	Hindupur do. ...	73,270	...	...	...	...	98	...	98
	166	Madakasíra do. ...	55,113	11th July ...	14th July ...	2	...	150	2	148
	167	M. T. Anantapur ...	4,907	...	...	...	...	1	...	1
		Total ...	599,889	6th Jan. ...	30th Dec. ...	239	December ...	900	32	868
North Arcot.	168	Chittoor Taluk ...	171,907	2nd Jan. ...	31st Dec. ...	108	July ...	161	29	132
	169	Chendragiri do. ...	93,151	1st Jan. ...	Do. ...	115	October ...	137	41	96
	170	Palmanér do. ...	41,815	27th Jan. ...	25th Mar. ...	2		160	2	158
	171	Gudiyátam do. ...	154,646	1st Jan. ...	30th Dec. ...	586	January ...	247	80	167
	172	Vellore do. ...	132,725	Do. ...	31st Dec. ...	137	Do. ...	168	53	115
	173	Pólúr do. ...	106,818	3rd Jan. ...	29th Dec. ...	82	March ...	195	28	167
	174	Wandiwash do. ...	148,108	1st Jan. ...	Do. ...	92	January ...	375	28	347
	175	Arcot do. ...	147,388	1st Feb. ...	31st Dec. ...	288	Do. ...	302	61	241
	176	Wálajápet do. ...	188,790	1st Jan. ...	Do. ...	439	Do. ...	283	71	212
	177	M. T. Vellore ...	37,491	Do. ...	Do. ...	76	Do. ...	1	1	...
	178	M. T. Wálajápet ...	10,387	4th Jan. ...	17th Nov. ...	17	Do. ...	1	1	...
	179	Zemindaries ...	584,588	Do. ...	31st Dec. ...	637	December ...	1,637	99	1,538
		Total ...	1,817,814	1st Jan. ...	31st Dec. ...	3,179	January ...	3,967	494	3,473
Salem.	180	Salem Taluk ...	276,511	1st Jan. ...	30th Dec. ...	324	January ...	490	89	401
	181	Atúr do. ...	158,554	Do. ...	29th Sept. ...	456	Do. ...	179	85	94
	182	Námakal do. ...	254,577	Do. ...	27th Dec. ...	443	Do. ...	356	79	277
	183	Tiruchengód do. ...	191,328	Do. ...	25th Dec. ...	421	Do. ...	292	56	236
	184	Hosúr do. ...	131,770	Do. ...	23rd Nov. ...	49	Do. ...	746	6	740
	185	Kistnagiri do. ...	120,929	9th Jan. ...	31st Dec.	76	December ...	498	21	477
	186	Dharmapuri do. ...	135,826	6th Dec. ...	24th Dec. ...	7	...	563	2	561
	187	Tirupatúr do. ...	169,977	1st Jan. ...	31st Dec. ...	297	January ...	411	59	352
	188	Uttankarai do. ...	109,456	12th Jan. ...	Do. ...	22	December ...	436	15	421
	189	M. T. Salem ...	50,667	3rd Jan. ...	29th Dec. ...	167	February ...	1	1	...
		Total ...	1,599,595	1st Jan. ...	31st Dec. ...	2,265	January ...	3,972	413	3,559
Coimbatore.	190	Coimbatore Taluk ...	228,837	1st Jan. ...	31st Dec. ...	79	December ...	261	24	237
	191	Erode do. ...	185,805	Do. ...	22nd Dec. ...	210	January ...	193	34	159
	192	Satyamangalam do. ...	151,313	Do. ...	31st Dec. ...	118	December ...	185	23	162
	193	Polláchi do. ...	172,909	6th Jan. ...	30th Dec. ...	58	Do. ...	161	21	140
	194	Palladam do. ...	213,391	1st Jan. ...	31st Dec. ...	286	Do. ...	194	35	159
	195	Bhavání do. ...	94,123	Do. ...	Do. ...	84	January ...	62	16	46
	196	Kollegál do. ...	77,522	24th Dec. ...	24th Dec. ...	1	...	122	1	121
	197	Udamalpet do. ...	112,572	2nd Jan. ...	31st Dec. ...	864	December ...	89	47	42
	198	Karúr do. ...	167,950	1st Jan. ...	Do. ...	553	Do. ...	95	58	37
	199	Dhárápuram do. ...	195,232	Do. ...	Do. ...	1,052	Do. ...	82	57	25
	200	M. T. Coimbatore ...	38,967	Do. ...	29th Dec. ...	77	February ...	1	1	...
	201	M. T. Erode ...	9,864	2nd Jan. ...	26th Jan. ...	22	...	1	1	...
	202	M. T. Karúr ...	9,205	1st Jan. ...	31st Dec. ...	54	December ...	1	1	...
		Total ...	1,657,690	1st Jan. ...	31st Dec. ...	3,458	December ...	1,447	319	1,128
Nilgiris.	203	Nílgiri Taluk	72,196	December ...	27th Dec. ...	3	...	7	1	6
	204	Wellington Cantonment.	1,725	...	...	...	...	1	...	1
	205	M. T. Ootacamund ...	12,335	17th Sept.	19th Sept.	2	...	1	1	...
	206	M. T. Coonoor ...	4,778	...	...	...	...	1	...	1
		Total ...	91,034	17th Sept.	27th Dec. ...	5	...	10	2	8

* Including Europeans and Eurasians.

VI C

Statement illustrating the Distribution, &c., of Cholera in the Madras Presidency, during the year 1884, *to accompany the Cholera Map*—(Continued).

1	2	3	4	5	6	7	8	9	10	
Districts.	Number of Circles of Mortality Registration.	Name of the Circle.	Population * for which Returns were received.	Date of First Case of Cholera in the Circle during the Year.	Date of Last Case of Cholera in the Circle during the Year.	Total Deaths from Cholera in the Circle during the Year.	Period of Maximum Intensity of Disease.	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Number of those Not affected by Cholera.
Malabar.	207	Chirakal Taluk ...	246,283	...	...	...	...	44	...	44
	208	Kóttayam do. ...	139,365	...	...	...	...	27	...	27
	209	Kurumbranád do. ...	261,024	...	...	...	...	57	...	57
	210	Calicut do. ...	148,877	...	...	...	...	38	...	38
	211	Ernád do. ...	296,143	12th Feb. ...	13th Feb. ...	2	...	52	2	50
	212	Ponáni do. ...	392,654	5th Feb. ...	19th Dec. ...	126	June ...	73	22	51
	213	Walawanád do. ...	308,102	18th Jan. ...	31st Dec. ...	133	March ...	64	22	42
	214	Pálghat do. ...	306,115	3rd Jan. ...	Do. ...	456	February ...	56	41	15
	215	Wynaad do. ...	88,091	...	...	...	...	13	...	13
	216	Cochin do. ...	1,463	...	...	...	...	1	...	1
	217	Anjengo do. ...	2,534	...	...	...	...	1	...	1
	218	Tangachéri do. ...	1,665	...	...	...	...	1	...	1
	219	M. T. Tellicherry ...	26,410	...	...	...	...	1	...	1
	220	M. T. Calicut	57,085	9th Feb. ...	18th Feb. ...	8	...	1	1	...
	221	M. T. Pálghat	36,339	9th Jan. ...	31st Dec. ...	52	March ...	1	1	...
	222	M. T. Cochin	15,698	11th Nov. ...	Do. ...	60	December ...	1	1	...
	223	M. T. Cannanore ...	26,386	...	...	...	...	1	...	1
		Total ...	23,54,234	3rd Jan. ...	31st Dec. ...	837	February ...	432	90	342

* Including Europeans and Eurasians

VI D

OOTACAMUND, 27th *July* 1885.

No. O-19.

From

DY. SURGEON-GENERAL G. BIDIE, M.B., C.I.E.,
Sanitary Commissioner for Madras,

To

THE HONORABLE E. F. WEBSTER,
Chief Secretary to Government,
Public Department.

SIR,

I have the honor to forward, for submission to Government, two unbound copies of the report on the working of the Sanitary department during 1884.

2. Two copies have been forwarded, as usual, direct to the Government of India, and two to the Sanitary Commissioner with the Government of India.

3. I regret the delay that has occurred in submitting the report, and will submit an explanation in another communication.

I have the honor to be,
Sir,
Your most obedient servant,
G. BIDIE, M.B., C.I.E.,
Deputy Surgeon-General,
Sanitary Commissioner for Madras.

From Deputy Surgeon-General G. BIDIE, M.B., C.I.E, Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Ootacamund, 29th July 1885, No. O-20.

I have the honor, in reply to G.O., Mis. No. 1738, dated 24th July 1885, to report to the Right Honorable the Governor in Council that the delay in submitting the annual sanitary report for 1884 was due to the late dates at which various documents were received from out-stations.

2. Thus the whole of the sanitary reports were not to hand till the 21st March, and the last of the returns did not reach the office till the 9th April. Some of these had to be sent back for correction, and were not returned till the 4th and 7th of May. One important document did not come to hand till the 17th May. Within a week of the last-named date (23rd May) the MSS. of the report was sent to press, and, considering the number of tabular statements which it contains, the printing was, I think, carried through with creditable despatch, a copy having been delivered at the Government office, Ootacamund, on the 27th instant.

3. I give in the margin the dates on which the sanitary report has been submitted to Government during each of the past ten years, and from this statement it will be seen that it has not on one occasion been ready on the date fixed by the Government of India, viz., the 1st June. It is not for one moment to be supposed that my predecessors have not, during these years, done their best to meet the wishes of Government, and it appears to me that, in the face of these figures, some relaxation of the present rule might be made, as it is not pleasant for the head of a department to feel that he has annually to incur the reprobation of Government for a delay that is apparently unavoidable.

Reports of		Dates of submission to Government.
1875	..	27th September 1876.
1876	..	2nd January 1878.
1877	..	30th September 1878.
1878	..	11th August 1879.
1879	..	23rd August 1880.
1880	..	30th July 1881.
1881	..	20th June 1882.
1882	..	25th June 1883.
1883	..	21st July 1884.
1884	..	27th July 1885.

4. I have therefore to suggest that the day of submission be postponed till the 1st July, as by extra exertion, which will not be spared, it may be possible to complete the report by that date.

TWENTY-FIRST ANNUAL REPORT

OF THE

SANITARY COMMISSIONER FOR MADRAS, 1884.

SECTION I.

METEOROLOGY OF THE YEAR.

Information given under SECTION V, GENERAL POPULATION.

SECTION II.

EUROPEAN ARMY.

Information given under SECTION VIII, SANITARY WORKS—MILITARY.

SECTION III.

NATIVE ARMY.

Information given under SECTION VIII, SANITARY WORKS—MILITARY.

SECTION IV.

JAILS.

Information given under SECTION IX, SANITARY WORKS—CIVIL.

NOTE.—These Sections (I to IV) have been thus shown in compliance with the orders of the Government of India (G.O., No. 135, dated 3rd February 1881).

SECTION V.

GENERAL POPULATION.

RAINFALL.

1. In Southern India the cereal crops are so entirely dependent on the rainfall, and public health so largely affected by the food supplies, that the amount and regularity of the periodical rains are matters of much interest and some anxiety. In 1884 the amount of rain registered throughout the Northern Circars was somewhat below the average, but not to such an extent as to affect the cost of grain. In Bellary and Anantapur, where the rainfall is normally small, only about half the usual amount was registered, and in Kurnool there was also a serious failure. In Cuddapah, another central and inland district, there was a slight decline. In Nellore and all the southern districts watered by the north-east monsoon rains the fall was considerably above the average, except in Salem and Trichinopoly, which show a slight decrease. In the moist domain of the south-west monsoon, viz., in Canara and Malabar, the amount was below the average. Taking the presidency as a whole, the only districts which suffered signally from deficient rainfall were Anantapur and Bellary, and, to some extent, Kurnool, but in the two first-named of these the usual rainfall is so small that any reduction must always involve serious results as regards crops. In some of the southern districts, on the other hand, the rainfall during the north-east monsoon was excessive, causing damage to crops, tanks, roads and railways.

Table showing the Comparison of Monthly Rainfall in the Madras Presidency during 1882, 1883, *and* 1884, *with the average of ten years ending* 1881, *exclusive of* 1876.

Districts.	Number 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.
Anantapur																											
Average of 5 years	7	...	...	0·15	0·4	0·21	0·4	0·20	0·6	3·31	4·1	2·91	5·1	2·77	5·3	3·69	7·1	4·82	7·4	5·56	7·5	1·89	3·5	0·06	0·3	25·57	41·7
1882		0·40	1·0	...	...	0·12	0·1	0·22	0·4	2·00	4·0	0·36	2·0	0·97	5·0	5·53	8·0	4·68	9·0	1·01	5·0	5·24	9·0	...	...	21·17	46·5
1883		...	...	...	...	0·40	1·6	0·73	0·9	0·71	2·0	3·08	5·6	1·62	4·6	6·30	11·3	0·38	1·6	7·40	10·9	1·21	3·0	0·44	1·4	22·27	42·9
1884		0·18	0·7	...	...	...	...	0·11	0·7	0·69	2·0	1·25	3·6	0·52	1·6	1·27	4·0	0·87	3·7	3·69	8·3	2·10	5·0	0·53	2·0	11·21	31·6
Bellary																											
Average of 5 years	8	...	...	0·04	0·1	0·23	0·4	0·66	2·1	2·94	4·7	3·04	6·3	3·26	7·0	3·97	8·9	5·13	8·6	5·59	8·6	1·38	2·5	0·28	0·4	26·52	49·6
1882		0·38	0·5	...	...	0·03	0·2	0·06	0·2	2·76	6·0	1·73	7·0	3·06	10·0	6·80	8·0	4·94	10·0	1·88	4·0	4·45	5·0	0·02	0·2	26·26	54·6
1883		0·01	0·1	...	...	0·51	1·1	0·98	2·6	1·11	3·1	1·19	5·5	2·22	9·0	5·70	13·0	0·69	3·8	6·34	11·3	1·44	3·1	...	...	20·25	52·6
1884		0·37	0·8	...	...	0·03	0·4	0·42	1·4	0·64	2·6	0·89	3·0	1·07	5·9	2·30	7·5	1·57	5·3	4·41	8·8	0·22	1·5	0·48	1·1	12·40	38·3
Canara																											
Average of 10 years	5	0·49	0·3	0·10	0·3	0·10	0·4	1·26	2·7	9·24	9·8	37·15	26·7	38·18	28·7	26·9	25·6	15·43	21·9	7·52	12·0	2·64	4·9	0·53	1·0	139·54	134·5
1882		1·22	2·8	...	...	0·01	0·2	0·28	0·8	9·84	9·6	36·93	27·2	58·45	31·0	19·38	23·0	12·97	19·4	11·72	14·6	2·12	5·8	0·28	0·4	153·21	134·8
1883		...	...	...	...	0·04	0·6	2·79	5·4	2·98	6·4	34·07	29·5	51·26	30·6	24·62	22·8	11·30	18·2	9·72	16·4	2·34	5·6	0·54	1·6	139·66	137·1
1884		0·02	0·4	...	...	...	...	0·35	1·6	1·24	4·4	21·15	21·2	29·51	29·0	38·53	30·4	15·56	26·0	5·40	14·2	2·44	4·8	0·19	1·4	114·39	133·4
Chingleput																											
Average of 10 years	7	0·48	1·0	1·15	0·5	0·31	0·5	0·33	0·3	3·49	2·2	2·12	4·5	3·55	7·2	5·37	9·5	6·13	7·7	7·92	9·3	1·16	10·8	3·02	4·7	45·47	58·2
1882		0·60	2·0	...	...	...	...	0·43	1·0	0·32	0·7	1·06	1·8	2·50	7·0	5·10	8·7	4·40	4·8	5·78	8·8	23·84	14·5	0·43	0·8	44·45	50·2
1883		0·04	0·3	...	...	...	...	...	...	...	0·3	3·34	5·9	5·17	9·4	3·44	6·6	2·41	3·0	15·12	14·0	9·82	10·9	8·17	5·4	47·71	55·8
1884		2·20	2·0	...	...	...	...	0·33	0·6	...	1·6	1·01	2·6	1·52	4·9	5·23	9·3	4·74	8·4	15·64	12·6	30·00	15·1	13·16	9·0	74·64	66·1
Coimbatore																											
Average of 10 years	10	0·13	0·3	0·36	0·7	0·54	1·6	1·84	3·2	3·31	6·2	1·55	4·2	1·71	5·1	2·13	4·8	2·94	6·1	5·70	9·6	4·53	7·6	1·67	2·7	26·41	52·1
1882		0·99	2·1	...	...	0·30	0·6	1·31	2·7	5·98	10·1	2·14	6·9	2·44	10·0	3·41	8·2	1·78	4·6	7·80	10·7	5·07	11·8	0·56	22·0	31·78	69·9
1883		...	...	...	...	0·38	2·0	1·01	2·8	3·82	7·3	3·09	4·0	2·04	4·6	4·87	8·3	8·01	2·1	9·96	14·9	5·19	9·8	2·53	3·1	45·90	58·9
1884		0·67	1·4	...	...	0·94	1·4	0·55	1·4	2·34	5·2	1·69	3·8	0·49	2·2	1·36	3·7	0·73	2·6	8·85	11·8	7·14	9·9	2·36	4·6	26·80	47·8
Cuddapah																											
Average of 10 years	11	0·09	0·2	0·18	0·4	0·29	0·5	0·28	0·6	3·15	3·8	2·58	4·8	3·13	6·0	4·20	7·4	6·38	8·8	6·39	8·0	3·58	5·3	0·59	1·3	30·84	47·1
1882		0·45	0·8	...	...	...	...	0·87	1·0	1·03	3·0	1·52	3·5	0·94	3·4	3·38	7·2	4·79	7·2	3·47	5·9	12·53	9·1	0·04	0·5	28·94	41·5
1883		...	...	...	...	0·38	0·7	0·94	1·3	0·63	1·5	3·45	6·3	2·38	6·5	6·61	9·1	2·90	3·7	11·05	11·4	2·98	4·5	3·47	1·9	34·79	46·9
1884		0·11	0·4	0·02	0·1	0·04	0·1	0·05	0·4	0·50	1·6	1·75	3·2	0·33	1·4	2·77	7·0	3·78	6·5	9·32	10·1	7·00	7·6	2·09	3·6	27·76	42·0
Ganjam																											
Average of 10 years	16	0·23	0·4	0·44	0·9	0·74	1·3	1·11	2·4	3·18	5·1	5·81	7·8	6·57	11·6	7·61	12·1	7·79	11·4	8·16	7·7	2·11	2·9	1·73	1·2	45·48	64·8
1882		0·33	0·6	0·06	0·3	0·05	0·3	1·58	4·3	3·51	6·9	2·43	6·0	8·16	12·5	6·51	11·9	7·62	12·4	4·55	7·6	3·72	6·1	0·74	1·3	39·26	70·1
1883		0·09	0·3	0·07	0·2	1·35	3·5	0·80	2·1	1·92	4·6	9·72	10·3	9·93	6·1	10·31	11·9	5·53	9·6	6·53	6·7	2·34	1·9	1·19	1·4	49·78	69·1
1884		0·04	0·3	1·97	2·3	0·16	0·8	0·76	2·4	1·17	3·5	5·08	9·6	6·75	11·4	5·45	12·0	12·29	16·1	5·31	7·4	0·08	0·4	0·23	0·7	38·32	66·4
Godávari																											
Average of 10 years	20	0·16	0·2	0·25	0·4	0·36	0·3	0·37	0·5	2·47	3·5	3·89	5·5	5·90	9·3	5·58	8·7	6·80	9·3	7·50	8·1	2·76	2·8	0·59	0·5	36·63	49·1
1882		...	...	...	...	0·08	0·2	0·18	0·4	1·47	2·0	3·28	5·6	2·23	3·9	3·31	5·1	13·29	10·7	3·59	4·9	9·57	7·0	2·16	0·7	39·09	40·1
1883		0·13	0·2	...	...	0·08	0·2	0·42	0·6	0·62	1·0	5·13	7·2	3·94	7·6	3·37	5·4	4·04	5·8	11·41	9·3	3·78	1·9	0·30	0·5	32·98	39·5
1884		0·52	0·8	0·37	0·6	0·08	0·2	0·42	0·6	0·78	1·3	3·28	5·0	7·88	11·2	8·52	8·9	9·19	9·5	3·39	5·1	0·25	0·7	0·04	0·2	34·72	44·1

Table showing the Comparison of Monthly Rainfall in the Madras Presidency during 1882, 1883, *and* 1884, *with the average of ten years ending* 1881, *exclusive of* 1876—(Continued).

Districts.		Number 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.
Kistna	Average of 10 years	9	0·33	0·4	0·10	0·2	0·59	0·6	0·32	0·5	2·25	3·5	3·61	6·2	4·50	9·1	6·07	10·4	5·84	9·7	7·24	8·8	3·17	3·8	0·27	0·6	34·29	53·8
	1882		...	...	...	...	...	...	...	...	...	...	...	...	3·83	7·8	8·49	11·2	3·63	6·8	12·44	8·1	2·72	0·9	38·96	56·4	94·0	137·0
	1883		0·06	0·2	...	...	...	...	0·07	0·2	0·27	1·2	5·36	8·3	3·93	9·4	4·64	7·3	4·79	7·2	9·31	11·9	4·78	2·6	0·05	0·2	33·26	48·5
	1884		0·67	1·2	0·08	0·3	0·14	0·3	0·11	0·6	1·31	2·0	3·32	6·3	6·93	11·8	4·46	10·4	7·74	11·7	6·49	8·4	1·17	1·9	0·31	1·5	32·73	56·4
Kurnool	Average of 10 years	9	0·02	0·1	0·03	0·1	0·24	0·3	0·39	0·8	2·14	3·9	3·32	6·4	4·28	8·1	5·01	8·8	7·05	9·8	4·78	7·2	1·19	2·7	0·23	0·3	28·68	48·5
	1882		...	...	...	...	0·01	0·1	0·23	0·9	1·08	3·2	1·61	4·7	2·90	9·8	3·62	6·9	6·05	10·1	3·18	6·2	6·25	6·0	0·36	0·3	25·27	48·8
	1883		...	...	...	...	0·55	0·9	0·56	1·2	0·34	0·7	5·36	7·3	4·69	10·6	6·58	11·8	2·99	4·4	7·92	10·7	1·51	2·1	0·36	0·6	30·86	50·3
	1884		0·38	1·2	...	...	...	...	0·13	0·3	0·57	1·4	1·02	3·2	1·93	6·3	3·33	8·9	4·39	9·7	4·78	8·3	1·55	4·1	0·30	1·4	18·38	44·8
Madras	Average of 10 years	1	0·50	2·1	0·90	0·7	0·29	0·8	0·41	0·8	4·00	2·8	1·84	10·4	3·91	13·5	4·68	15·4	5·05	13·5	10·66	14·6	16·32	16·6	5·00	8·7	53·56	99·9
	1882		0·27	2·0	...	...	...	...	...	...	0·05	1·0	4·00	8·0	3·27	16·0	3·62	17·0	1·87	11·0	7·47	15·0	29·25	20·0	0·16	3·0	50·20	94·0
	1883		0·24	3·0	0·07	1·0	...	...	0·04	1·0	0·05	1·0	2·31	12·0	6·38	19·0	2·98	11·0	0·56	6·0	22·18	21·0	14·92	12·0	10·90	7·0	60·54	92·0
	1884		2·14	3·0	...	...	...	...	1·62	1·0	0·53	1·0	0·96	4·0	3·55	16·0	1·59	11·0	5·56	14·0	15·03	17·0	33·49	19·0	14·41	13·0	78·88	98·0
Madura	Average of 10 years	11	0·65	1·3	0·68	1·2	0·88	1·4	1·68	2·6	2·05	3·2	1·01	2·1	1·25	2·6	2·06	4·4	2·41	4·6	5·71	8·8	6·43	8·7	3·24	4·2	28·03	45·1
	1882		1·18	2·3	0·20	0·4	0·27	0·8	1·72	2·8	2·56	5·2	0·57	2·4	0·29	1·3	3·15	6·2	1·24	2·8	4·96	8·5	7·36	12·7	3·12	5·9	26·62	51·3
	1883		0·16	0·6	2·92	2·1	0·23	1·2	1·05	2·2	3·36	4·8	0·94	1·5	1·20	2·8	2·06	4·5	1·39	2·9	10·04	15·5	7·23	10·0	3·19	5·2	35·77	53·3
	1884		0·35	1·4	...	...	0·14	0·5	0·50	1·4	1·87	3·0	0·64	1·9	0·55	1·4	1·67	3·3	1·63	4·5	12·66	13·1	6·61	12·2	7·43	8·7	34·07	51·4
Malabar	Average of 10 years	14	0·32	0·4	0·26	0·9	0·62	1·1	3·40	5·6	9·94	10·8	31·09	25·2	27·03	24·9	16·43	21·7	10·36	16·6	8·40	13·3	4·52	7·6	1·08	2·2	113·45	130·3
	1882		1·37	2·3	...	0·1	0·19	0·9	1·55	3·5	14·82	10·9	42·37	24·7	54·09	30·9	14·62	20·4	8·99	17·8	12·45	14·6	5·43	11·1	0·86	1·1	156·26	138·1
	1883		0·09	0·2	0·01	0·1	1·82	3·2	3·37	7·1	7·01	13·3	28·06	27·1	33·45	28·1	18·83	21·5	4·64	10·7	11·84	16·0	7·23	7·3	1·26	2·6	117·61	137·2
	1884		...	...	0·02	0·2	0·23	0·7	1·76	4·6	4·01	6·4	17·57	19·5	21·70	28·3	24·24	22·5	12·44	22·7	7·25	13·9	5·67	10·1	0·59	1·9	95·53	130·8
Nellore	Average of 10 years	16	0·34	0·5	0·40	0·2	0·33	0·5	0·18	0·5	2·22	2·3	1·52	3·5	2·58	5·6	3·34	6·3	4·03	6·6	9·28	8·4	9·60	8·0	2·37	2·9	36·19	45·3
	1882		1·26	1·5	...	...	...	...	0·21	0·3	0·52	1·1	1·45	3·1	1·38	5·0	2·03	3·5	1·86	4·3	5·36	6·1	18·19	8·8	2·05	1·1	34·31	34·8
	1883		0·04	0·2	...	...	0·06	0·3	0·33	0·3	0·07	0·3	2·41	4·8	2·30	5·3	2·43	4·3	2·00	3·5	20·98	14·4	6·29	6·6	2·39	1·9	39·30	41·9
	1884		0·75	1·5	...	...	0·07	0·1	0·30	0·4	0·11	0·6	1·58	2·4	0·82	3·0	2·54	6·1	3·36	7·1	12·54	10·4	15·07	9·8	4·30	5·1	41·52	46·6
North Arcot.	Average of 10 years	17	0·34	0·3	0·71	0·3	0·49	0·4	0·44	0·9	4·06	4·3	2·62	4·6	3·20	5·9	5·80	9·1	7·20	8·7	6·84	9·0	6·48	7·5	1·71	3·2	39·89	54·2
	1882		1·25	2·4	...	...	0·03	0·1	0·83	1·6	2·41	4·9	1·40	3·1	1·85	5·9	6·82	9·9	3·80	5·9	3·70	5·6	19·55	12·1	0·12	0·5	41·77	52·1
	1883		0·01	0·1	...	...	0·02	0·1	0·22	0·6	2·25	4·6	3·77	5·4	3·46	6·9	5·93	8·4	3·80	3·8	10·93	12·8	7·60	8·4	5·49	4·3	43·48	55·4
	1884		0·45	0·7	0·04	0·1	0·04	0·2	0·21	0·2	0·63	1·4	1·82	3·3	1·73	3·6	4·99	7·8	3·75	6·2	12·52	11·0	12·82	11·2	9·73	6·1	48·73	51·8
Nilgiris	Average of 5 years	7	0·54	1	0·68	1	3·06	4	3·01	6	6·01	13	5·53	13	5·68	14	6·26	16	6·12	14	9·95	17	10·09	16	4·66	8	61·49	123·0
	1882		2·81	4	...	...	0·17	2	6·27	7	9·19	10	12·27	18	17·65	29	5·69	20	3·71	13	9·53	18	7·08	16	...	...	74·37	137·0
	1883		0·46	4	0·31	1	3·43	7	2·20	6	5·18	11	6·26	13	10·56	17	9·58	18	2·06	6	9·46	18	7·74	12	5·18	8	62·42	121·0
	1884		0·41	1	0·03	1	0·18	1	1·87	4	3·59	8	6·72	12	8·29	17	12·86	19	8·04	17	19·31	19	8·08	16	3·29	7	72·67	122·0

GENERAL.

Table showing the Comparison of Monthly Rainfall in the Madras Presidency during 1882, 1883, *and* 1884, *with the average of ten years ending* 1881, *exclusive of* 1876—(Continued).

Districts.		Number 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.
Salem	Average of 10 years	10	0·22	0·2	0·34	0·5	0·73	0·8	1·33	2·3	4·94	6·3	2·12	3·9	3·29	5·6	4·98	7·6	6·36	8·9	6·81	8·9	4·10	6·1	0·98	2·2	36·10	53·3
	1882		0·96	0·2	...	...	0·27	0·6	1·45	2·0	7·14	8·8	0·80	2·5	2·78	6·7	9·52	10·9	3·44	4·8	4·59	7·9	10·16	11·9	0·29	0·9	41·40	59·7
	1883		...	...	...	...	0·79	1·6	1·17	2·4	4·61	8·1	1·86	4·2	2·72	6·4	7·51	9·2	2·02	3·3	10·04	12·3	6·82	8·1	3·07	3·4	40·61	59·0
	1884		0·18	0·7	...	...	0·62	0·6	0·40	1·1	3·09	5·8	2·78	4·6	0·90	1·9	5·18	7·6	1·99	5·7	8·96	11·3	4·71	10·4	5·00	4·3	33·71	54·0
South Arcot.	Average of 10 years	9	0·39	0·7	0·84	0·6	0·27	0·4	0·73	0·7	3·28	3·2	1·75	3·5	3·11	5·7	5·07	8·3	6·83	8·7	6·66	9·2	9·14	10·2	3·32	5·5	41·39	56·7
	1882		2·17	3·7	0·01	0·1	0·06	0·2	...	...	0·62	0·9	1·97	3·2	2·97	6·1	6·93	10·4	3·70	5·8	4·44	6·3	11·94	13·0	0·92	2·8	36·29	56·0
	1883		0·01	0·1	...	...	...	...	0·09	0·4	1·50	2·4	2·37	5·6	3·07	6·9	5·64	7·3	2·97	4·8	13·84	13·8	7·31	9·2	3·92	5·0	40·78	55·7
	1884		1·16	1·8	...	...	...	...	0·12	0·2	1·12	1·7	1·26	2·6	0·49	1·8	5·36	7·9	3·97	6·9	14·57	12·6	26·31	16·0	20·46	7·8	74·82	59·3
Tanjore	Average of 10 years	9	1·18	2·0	1·00	1·1	0·37	0·5	1·31	1·8	2·41	2·8	1·47	2·8	2·30	4·3	4·30	7·0	4·98	8·0	7·54	10·4	10·95	12·5	6·47	7·6	44·28	60·8
	1882		1·49	3·8	...	...	0·06	0·1	0·14	0·6	3·48	4·8	1·21	3·0	0·92	2·3	7·26	10·9	2·74	4·8	5·04	7·7	15·44	15·2	6·04	8·8	43·90	61·3
	1883		0·13	0·8	0·47	1·5	...	...	0·35	0·5	1·03	2·8	4·09	5·2	1·26	2·6	3·21	4·9	2·35	3·2	12·49	13·9	10·00	10·7	4·52	8·6	39·90	54·7
	1884		0·42	1·6	...	...	...	...	0·08	0·1	1·25	1·3	0·67	1·0	0·84	2·1	2·87	5·0	3·05	5·0	15·44	15·0	20·58	16·2	15·95	14·8	61·15	62·1
Tinnevelly	Average of 10 years	11	1·33	1·8	1·08	2·0	1·64	2·6	1·78	3·3	1·73	3·3	0·74	1·8	0·68	1·8	0·79	2·2	1·22	2·6	4·30	7·0	8·16	11·3	3·74	5·1	27·19	44·8
	1882		2·45	3·5	0·67	1·3	0·38	0·1	1·56	2·8	1·47	4·5	2·65	5·5	1·42	4·6	1·45	2·8	0·38	1·0	4·97	8·2	5·17	8·1	3·99	6·2	26·56	49·5
	1883		0·41	1·6	3·60	3·5	1·60	2·5	0·92	1·5	5·47	2·8	1·25	2·9	1·79	3·5	1·17	2·7	0·08	0·3	6·91	11·0	6·71	10·5	4·65	6·1	34·56	48·9
	1884		0·66	1·4	...	...	1·01	1·4	1·29	2·5	1·08	2·1	0·53	0·8	0·10	0·7	0·36	1·6	0·75	2·0	8·40	12·6	14·85	13·6	6·05	7·5	35·08	46·2
Trichinopoly	Average of 10 years	4	0·41	0·8	0·58	0·8	0·32	0·6	1·43	2·1	3·24	4·6	1·11	2·3	2·24	3·5	3·98	6·1	4·82	7·3	7·33	11·0	6·71	9·2	2·59	4·8	34·76	53·1
	1882		2·19	3·0	...	...	...	0·4	1·73	2·4	5·47	7·4	0·85	1·4	0·46	1·6	5·36	7·6	3·25	3·8	5·26	10·2	9·66	14·0	1·51	3·2	35·73	54·6
	1883		...	...	...	...	...	...	...	...	3·21	4·6	2·72	3·8	1·44	2·6	4·16	4·6	2·75	3·6	10·37	14·8	8·72	11·0	1·82	3·6	35·41	49·0
	1884		0·48	1·8	...	...	...	...	...	...	3·20	4·3	0·63	1·2	0·11	0·8	1·52	4·8	0·99	4·3	10·59	11·2	7·30	13·7	9·10	8·0	33·92	50·1
Vizagapatam.	Average of 10 years	15	0·20	0·4	0·44	0·8	0·65	0·7	0·87	1·6	3·82	5·1	4·74	6·8	6·07	10·0	6·57	10·4	7·05	10·4	7·62	8·3	2·38	3·2	2·45	1·0	42·86	58·7
	1882		0·02	0·2	...	0·1	0·06	0·1	0·69	1·9	7·91	7·1	1·82	4·0	6·01	12·1	5·45	10·0	10·52	13·1	4·07	5·9	8·08	7·9	1·07	1·1	41·74	63·4
	1883		0·08	0·3	...	...	0·69	1·9	0·71	1·4	1·36	2·7	4·49	8·5	5·08	9·9	9·38	12·1	4·27	8·0	7·35	8·1	1·09	1·5	0·89	1·2	35·39	55·6
	1884		0·50	0·8	0·45	0·7	0·40	0·5	1·14	1·7	1·63	3·1	3·22	6·1	4·69	8·8	7·28	11·5	10·27	14·5	3·88	6·1	0·17	0·4	0·57	1·0	34·20	55·2
Total	Average of 10 years	226	0·38	0·6	0·49	0·6	0·60	0·9	1·06	1·9	3·77	4·9	5·52	7·1	6·15	8·9	6·13	9·9	6·12	9·6	7·15	9·7	5·90	7·5	2·12	3·1	45·39	64·7
	1882		0·99	1·8	0·04	0·1	0·08	0·3	1·02	1·8	3·77	5·3	5·62	6·8	8·06	10·2	6·04	10·2	5·20	8·5	5·42	8·5	10·57	10·6	1·22	2·8	48·06	66·5
	1883		0·08	0·5	0·34	0·4	0·57	1·3	0·84	1·8	2·26	3·8	6·33	8·4	7·27	9·8	6·79	9·9	3·27	5·2	10·96	13·1	5·77	6·9	2·92	3·3	47·42	64·7
	1884		0·58	1·1	0·09	0·2	0·19	0·4	0·57	1·2	1·46	2·9	3·58	5·6	4·57	7·8	6·53	9·6	5·30	9·5	9·47	11·3	9·44	9·1	5·30	5·0	47·08	63·6

RAINFALL.

PRICES OF FOOD.

2. The grains that form the chief articles of food in Southern India are rice, cholum (*Sorghum vulgare*) and ragi (*Eleusine coracana*). The two latter being dry crops, are more immediately dependent on seasonable and sufficient rain than rice, which is often raised by water brought from remote districts by rivers, or by irrigation from tanks capable of storing up the rainfall of more than one year. The accompanying tables show the quantity of any one of the staple food-grains which could be bought in each district for a rupee during the several months of the year, as also the average cost of grain for a period of ten years. At the present day, however, the price of grain in a district is becoming more a measure of the accessibility of the locality than of the amount of local supplies, as coast navigation, canals and railroads gradually make good the deficiency in one from the abundance in another district, and tend to equalize prices. Looking at the average cost of the precarious dry crops, the year was one of plenty, as, except in some few instances, the quantities of cholum and ragi procurable for a rupee were above the average, and rice too was generally cheap, the only districts in which the prices of the last-named ranged above the average having been Godávari, Kistna and Nellore. The usual diagrams illustrative of the relation between the prices of food and rainfall are appended.

Table showing the Average Quantities of Food Grains, in seers of 80 tolas, procurable for a Rupee in the Madras Presidency during 1882, 1883, and 1884, compared with the average of the previous ten years ending 1881, exclusive of 1877.

Districts.	Second-sort Rice.													Cholum.												Ragi.											
	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.																																					
Average of 10 years.	19·0	19·0	19·2	19·5	19·1	19·8	18·7	18·2	18·5	18·9	19·0	19·0	18·9	28·2	30·2	30·5	28·6	27·3	26·6	25·8	25·8	25·8	25·7	25·8	25·7	27·0	33·2	31·8	31·5	31·6	31·2	30·8	30·0	32·0	34·7	34·4	32·8	32·1
1882	20·8	21·4	20·7	20·3	21·8	20·4	20·2	20·2	20·6	20·5	20·4	19·7	20·6	31·1	35·4	35·4	38·2	33·7	28·1	25·3	23·9	26·9	25·5	38·0	37·5	36·5	36·0	36·4	36·3	34·5	33·0	33·1	34·4	38·0	37·5	38·1	35·9
1883	22·3	22·3	22·1	21·0	21·0	21·0	20·1	20·0	20·2	20·2	20·6	20·6	20·9	32·6	32·1	35·1	36·8	31·1	32·0	27·4		22·8	23·6	29·0	33·3	39·7	39·2	38·6	38·2	38·1	37·7	37·9	39·4	41·5	40·1	38·9	39·0
1884	20·5	19·7	20·7	20·1	19·3	18·6	18·5	15·2	15·0	15·7	16·2	16·9	18·0	27·0	35·4	32·3	33·1	32·3	33·9	34·4	26·5	26·5	31·1	30·5	38·5	37·0	35·6	36·1	36·1	34·2	33·0	24·6	27·4	31·4	31·9	30·4	33·0
VIZAGAPATAM.																																					
Average of 10 years.	15·6	15·9	16·5	16·4	16·2	15·7	15·8	15·4	15·2	15·0	15·0	15·2	15·6	26·9	27·9	28·3	30·2	28·1	25·4	25·2	25·2	26·3	25·7	25·4	24·2	26·9	26·1	27·0	28·6	28·2	27·9	28·6	28·9	29·2	28·5	28·2	27·8
1882	16·4	16·8	16·1	15·7	15·8	15·6	15·1	14·7	14·8	15·2	15·1	15·8	15·6	30·9	30·5	29·5	28·0	27·8	25·1	23·7	23·8	23·5	23·8	24·5	24·4	24·8	26·7	26·4	27·9	27·9	28·6	28·9	29·2	28·5	28·2	27·8	27·0
1883	16·6	17·2	17·4	16·1	15·7	15·2	15·0	14·9	15·2	15·9	16·5	16·6	16·0	27·4	25·9	26·3	27·2	26·4	27·1	28·7	30·1	30·5	32·6	28·7	28·7	27·0	26·1	26·4	28·3	27·2	26·9	26·7	26·7	26·5	26·7	26·1	26·4
1884	16·9	17·8	17·4	17·5	17·4	17·2	16·8	15·9	14·5	14·8	14·8	14·7	16·3	31·0	32·6	32·4	33·5	32·7	31·3	29·9	28·8	26·5	25·8	25·8	25·2	25·4	25·9	25·7	26·4	26·2	25·9	25·8	25·8	25·7	25·7	25·5	25·4
GODAVARI.																																					
Average of 10 years.	17·8	17·7	17·8	18·3	17·5	17·9	17·7	16·6	17·1	17·5	16·4	16·6	17·4	29·7	30·3	30·8	31·9	31·1	30·7	29·5	29·1	29·1	29·1	28·8	28·9	29·0	32·1	31·5	32·7	32·3	32·4	31·9	30·9	31·4	30·2	28·8	30·5
1882	19·5	20·1	20·0	19·4	18·9	18·6	18·3	17·5	18·1	18·2	18·5	18·4	18·8	35·6	38·3	38·4	37·9	37·1	30·4	35·2	33·3	33·6	33·3	33·6	35·4	34·7	33·7	35·4	34·7	32·9	30·6	32·6	33·3	34·0	34·4	33·9	33·1
1883	18·8	18·7	17·1	15·6	15·3	15·5	15·4	15·1	15·0	15·1	15·4	16·1	16·6	34·5	34·7	32·0	30·9	30·3	29·6	29·7	28·9	28·4	28·1	28·2	30·3	31·2	30·7	30·5	31·0	31·2	29·9	29·9	29·7	30·1	30·0	31·1	30·1
1884	16·2	16·0	15·8	16·4	16·4	16·4	16·4	16·3	16·0	16·0	16·1	16·2	15·8	28·0	28·2	28·8	29·0	28·9	29·8	28·9	28·8	28·8	28·8	28·5	28·1	28·2	32·1	32·4	32·6	33·5	32·8	32·6	33·3	32·2	33·5	32·8	32·6
KISTNA.																																					
Average of 10 years.	14·9	15·5	15·7	15·7	15·6	15·2	15·0	14·8	14·8	14·5	14·2	14·4	15·0	22·7	23·4	23·5	23·4	23·0	22·5	22·0	22·1	23·2	22·6	21·8	22·6	22·7	27·4	28·2	28·6	29·2	29·8	29·5	28·1	28·3	27·6	27·0	25·7
1882	17·4	18·5	17·9	17·4	16·4	16·5	16·2	15·9	16·0	15·9	16·5	15·3	16·6	33·1	33·4	35·4	30·5	28·7	28·6	27·8	29·4	29·6	29·5	29·1	30·4	37·9	38·6	38·3	37·7	36·9	36·2	34·8	34·0	33·9	33·9	33·1	32·2
1883	17·6	15·6	15·5	14·7	13·6	13·9	13·9	13·7	13·8	13·4	13·5	13·6	14·4	28·4	26·1	24·3	26·1	27·2	27·9	26·1	24·3	23·1	23·6	23·9	23·1	23·2	24·8	33·0	33·3	33·5	30·4	28·7	27·6	28·7	28·7	27·9	26·8
1884	13·9	14·4	14·6	14·4	14·6	14·4	14·1	14·2	14·0	13·9	14·2	14·4	14·2	23·3	23·8	23·2	23·5	23·3	22·4	22·4	23·1	23·0	23·3	23·4	23·1	23·0	30·8	30·3	30·2	30·3	30·2	30·2	30·6	30·3	30·6	31·4	31·2
NELLORE.																																					
Average of 10 years.	15·1	14·9	14·9	14·9	15·1	15·1	15·6	15·4	15·4	14·7	14·7	14·5	15·0	23·9	24·4	25·1	25·4	25·4	25·5	25·2	25·2	24·5	24·4	24·8	26·7	26·4	27·9	27·9	28·6	28·9	29·2	28·5	28·2	27·8	27·0	26·0	27·7
1882	17·7	18·2	18·2	18·4	17·9	17·9	17·8	17·6	17·3	16·8	17·1	16·2	17·6	31·2	33·1	33·6	34·8	35·0	34·4	33·6	32·1	31·3	31·3	31·1	32·1	35·1	36·1	39·3	36·7	36·7	35·8	36·2	35·7	35·5	35·5	33·7	35·8
1883	15·8	15·3	14·8	14·6	14·5	14·5	14·3	14·6	14·4	14·3	14·1	15·0	14·7	28·0	27·0	26·8	26·8	26·1	24·9	24·1	24·2	24·0	23·7	23·6	23·9	25·2	32·3	30·3	29·8	29·8	30·1	29·3	28·8	28·1	27·2	26·7	26·8
1884	15·0	15·0	14·9	14·9	14·8	14·8	14·6	14·6	14·6	14·6	14·8	14·8	14·8	23·5	22·4	23·7	24·1	24·3	24·3	24·5	24·3	24·3	23·7	23·7	23·8	23·8	27·0	27·3	27·6	27·3	27·5	28·0	28·5	28·3	27·8	27·2	27·0
CUDDAPAH.																																					
Average of 10 years.	13·9	14·0	14·2	14·4	14·9	15·1	14·8	15·1	14·6	14·2	14·0	13·8	14·4	23·7	23·8	24·5	24·5	25·0	24·6	24·1	23·7	23·8	22·3	22·4	22·4	23·7	26·0	26·2	26·7	27·7	28·3	27·6	26·5	26·2	25·7	25·9	25·7
1882	15·4	16·3	15·7	15·8	15·8	15·6	15·2	15·0	15·2	15·1	14·6	15·2	15·4	32·7	26·1	35·1	34·7	34·8	34·0	31·0	30·5	30·7	31·8	32·1	37·3	37·4	37·2	37·2	37·2	36·0	34·2	33·6	34·1	34·7	35·2	36·4	35·9
1883	15·3	15·4	15·7	15·4	15·7	15·7	15·7	15·5	15·5	15·4	15·7	15·6	15·6	32·7	32·9	30·7	30·2	30·9	30·9	30·7	30·8	31·1	31·7	32·8	34·0	31·6	35·7	36·6	35·9	35·7	35·8	35·9	35·3	35·3	34·8	34·8	37·3
1884	16·5	15·9	15·9	15·6	15·7	15·9	16·0	15·5	15·5	15·4	15·5	15·4	15·7	33·7	33·0	32·0	31·9	31·7	30·2	29·6	28·3	27·6	27·9	27·3	30·4	37·6	35·7	35·8	35·6	36·4	35·5	34·6	33·8	31·8	31·4	33·0	32·1

Table showing the Average Quantities of Food Grains, in seers of 80 tolas, procurable for a Rupee in the Madras Presidency during 1882, 1883, *and* 1884, *compared with the average of the previous ten years ending* 1881, *exclusive of* 1877—(Continued).

Districts.	Second-sort Rice.													Cholum.													Ragi.											
	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.
Anantapur.																																							
Average of 10 years.	Information not available.													Information not available.													Information not available.												
1882	24·6	15·9	16·1	15·9	15·9	15·7	15·4	15·3	15·2	15·3	15·1	14·9	16·3	40·0	34·0	33·8	34·2	33·4	32·6	32·4	33·0	33·7	36·3	36·2	36·7	34·7	42·6	36·1	35·0	33·0	33·1	32·3	31·8	32·6	35·2	40·5	37·6	38·5	35·7
1883	15·0	15·5	15·6	15·7	15·3	15·6	15·6	15·7	16·2	16·5	16·6	17·2	15·9	36·0	36·7	35·6	37·8	38·6	36·7	35·8	36·4	38·6	38·3	40·3	39·9	37·5	37·6	38·4	39·1	38·4	38·6	37·2	37·5	37·7	39·4	39·7	42·2	42·4	39·0
1884	17·6	16·9	16·7	16·7	17·4	17·5	16·8	16·8	15·0	14·1	14·3	13·9	16·1	38·1	35·7	43·3	34·9	36·5	35·3	33·1	30·8	24·6	23·4	24·0	21·9	31·8	42·2	39·6	38·5	37·7	38·8	38·3	36·0	34·2	27·9	27·0	28·2	26·1	34·5
Bellary.																																							
Average of 10 years.	14·0	14·2	14·1	14·5	14·6	14·8	14·5	14·3	14·3	14·0	13·5	13·6	14·2	25·9	25·6	27·2	26·7	26·4	25·8	25·4	26·4	24·9	25·2	25·9	25·9	25·9	29·0	29·2	29·2	30·6	30·0	29·8	28·7	27·7	27·9	28·4	29·3	29·6	29·1
1882	14·7	14·6	14·3	12·9	13·2	13·1	13·1	12·9	13·3	13·6	13·7	13·7	13·6	32·8	32·4	32·8	31·4	29·2	29·0	30·3	31·8	36·0	39·0	37·3	39·5	33·4	36·2	35·7	35·2	34·3	31·6	32·2	33·5	34·5	39·0	42·8	44·5	42·8	36·9
1883	14·3	14·5	15·7	14·3	13·6	14·0	13·9	13·8	13·9	14·1	14·4	14·8	14·3	38·3	38·8	37·4	36·3	36·5	34·3	35·4	36·0	37·2	37·3	39·4	39·6	37·2	43·1	43·6	41·9	41·7	44·1	38·6	38·5	38·1	40·0	39·6	41·3	41·9	40·7
1884	14·9	14·9	14·8	14·8	14·7	14·6	14·3	14·4	14·0	13·2	13·5	12·8	14·3	37·0	34·9	34·0	34·2	34·9	33·4	32·7	31·9	26·8	24·0	24·4	20·5	30·7	40·8	38·5	38·5	39·0	38·7	36·9	34·7	35·3	30·9	27·2	29·1	23·1	34·4
Kurnool.																																							
Average of 10 years.	13·0	12·7	12·8	13·0	13·0	12·9	12·9	12·8	12·8	12·3	12·2	12·3	12·7	24·8	25·1	25·4	25·2	25·2	24·3	23·7	23·2	23·2	23·2	25·0	25·0	24·4	25·0	25·9	26·1	26·7	27·2	26·6	25·9	25·4	24·4	24·5	24·0	25·1	25·6
1882	12·6	12·9	13·2	13·1	13·0	12·6	12·8	12·7	12·8	12·6	12·8	12·7	12·8	34·9	35·3	34·7	32·9	31·1	28·3	29·0	29·8	31·7	33·4	34·5	34·4	32·5	37·7	34·0	37·1	32·4	35·0	33·3	32·9	27·6	32·9	34·2	36·1	35·8	34·1
1883	12·9	13·1	12·9	12·9	12·9	12·8	12·8	12·8	13·0	13·0	13·3	13·8	12·9	34·7	35·7	34·0	32·9	32·4	31·6	32·6	33·4	33·1	34·4	35·4	36·7	33·9	35·2	37·8	30·2	32·4	34·6	34·3	32·6	29·6	30·1	26·9	31·1	33·7	32·4
1884	13·8	13·8	13·6	13·5	13·8	13·6	13·3	13·2	12·8	12·8	13·0	12·6	13·8	34·8	32·8	30·0	29·6	30·0	28·1	27·9	26·7	24·7	26·1	27·3	23·2	28·4	31·8	31·3	30·1	31·7	33·7	30·0	28·8	28·8	25·0	26·5	26·4	26·1	29·2
Madras.																																							
Average of 10 years.	12·0	12·8	12·5	13·7	13·7	13·3	12·8	13·0	12·9	12·7	12·6	12·7	12·8	19·3	19·4	19·3	19·9	19·2	19·4	19·1	19·4	19·0	19·4	18·4	19·5	19·3	22·9	24·2	21·9	23·5	23·6	23·2	23·2	23·6	24·2	23·9	23·7	24·1	23·5
1882	15·3	15·8	15·9	16·0	16·1	15·2	15·1	15·6	15·2	14·9	13·5	14·3	15·2	23·0	23·0	24·4	24·4	24·4	23·6	23·7	23·7	23·7	23·7	23·7	25·2	23·9	29·7	29·8	29·7	29·0	29·1	29·0	28·1	29·1	29·1	29·4	29·4	29·1	29·2
1883	15·4	16·2	15·9	16·2	15·8	15·8	15·7	15·7	15·3	15·7	15·8	14·3	15·6	24·5	23·8	23·0	23·0	21·6	22·3	23·0	23·8	23·0	23·8	23·8	25·2	23·4	29·7	29·4	29·4	28·4	28·1	28·1	25·7	26·0	24·3	27·0	29·4	29·1	27·9
1884	15·5	16·2	16·6	15·8	15·8	15·5	14·7	15·5	14·5	14·3	13·5	13·8	15·1	24·5	23·8	23·0	23·8	23·8	23·8	24·5	24·5	24·5	24·3	23·8	21·6	23·8	29·8	29·4	29·4	29·1	29·1	28·8	29·4	28·8	29·1	29·4	29·4	28·4	29·2
Chingleput.																																							
Average of 10 years.	15·2	15·7	16·0	16·3	16·5	16·0	15·3	14·8	14·7	14·5	14·7	14·5	15·3	19·8	21·1	20·0	19·9	20·6	20·2	19·2	20·3	21·0	19·7	20·5	20·1	20·2	23·8	23·6	23·4	24·0	24·2	23·6	22·9	23·1	23·7	24·7	24·7	23·9	23·8
1882	17·2	17·8	18·1	18·0	17·8	17·1	16·3	15·8	16·1	16·1	14·8	15·2	16·7	27·1	...	...	...	...	25·3	25·3	21·8	24·9	24·9	22·5	20·2	24·4	28·5	28·5	29·0	29·9	28·8	28·0	27·4	27·8	27·9	27·9	28·1	28·9	28·4
1883	15·9	16·6	17·0	17·0	16·6	16·4	16·1	15·9	15·8	15·4	16·5	17·0	16·3	...	...	23·5	...	...	...	...	27·1	...	27·2	27·9	27·9	26·7	29·2	29·1	28·0	27·6	27·6	26·8	27·0	27·0	26·6	28·5	29·6	30·4	28·1
1884	17·3	18·1	17·8	18·2	17·6	16·9	15·3	15·5	15·6	15·3	15·8	15·6	16·6	27·9	27·9	24·6	25·4	24·6	23·0	...	...	24·9	22·3	18·7	18·7	23·8	31·3	30·2	28·8	28·7	28·9	28·6	26·7	27·3	27·8	27·8	29·5	28·4	28·7
North Arcot.																																							
Average of 10 years.	15·8	15·9	16·0	16·4	16·5	16·0	15·9	15·7	15·9	15·6	15·7	15·5	15·9	23·5	24·4	24·9	25·3	25·0	25·4	25·0	25·7	25·6	25·2	24·1	23·8	24·8	27·5	27·0	27·0	28·2	28·9	26·7	27·1	26·6	27·2	28·4	28·1	27·1	27·5
1882	18·3	18·6	18·5	18·8	18·7	18·3	17·7	17·4	17·2	16·6	16·5	15·1	17·6	31·7	31·9	32·2	33·1	32·4	31·5	30·6	33·1	32·8	33·5	31·2	30·4	32·0	34·4	34·1	33·7	34·1	35·3	33·7	33·1	33·0	32·3	33·2	32·9	33·2	33·6
1883	17·1	17·3	17·4	17·1	17·4	16·9	16·5	16·6	16·6	16·5	17·1	18·4	17·1	29·3	29·7	29·4	29·7	28·5	30·0	29·6	34·0	35·9	35·1	35·1	35·1	31·8	33·5	33·7	33·1	33·0	32·6	31·9	32·1	33·2	32·6	33·2	34·1	35·3	33·2
1884	18·8	17·0	17·1	17·0	17·2	17·3	16·5	16·7	16·1	15·9	16·0	15·8	16·8	34·7	33·6	32·3	31·0	30·3	29·1	30·6	31·5	30·9	30·6	28·2	27·5	30·8	35·4	34·8	34·3	34·4	34·8	33·8	33·2	33·3	33·0	32·8	33·7	31·7	33·7

Table showing the Average Quantities of Food Grains, in seers of 80 tolas, procurable for a Rupee in the Madras Presidency during 1882, 1883, *and* 1884, *compared with the average of the previous ten years ending* 1881, *exclusive of* 1877—(Continued).

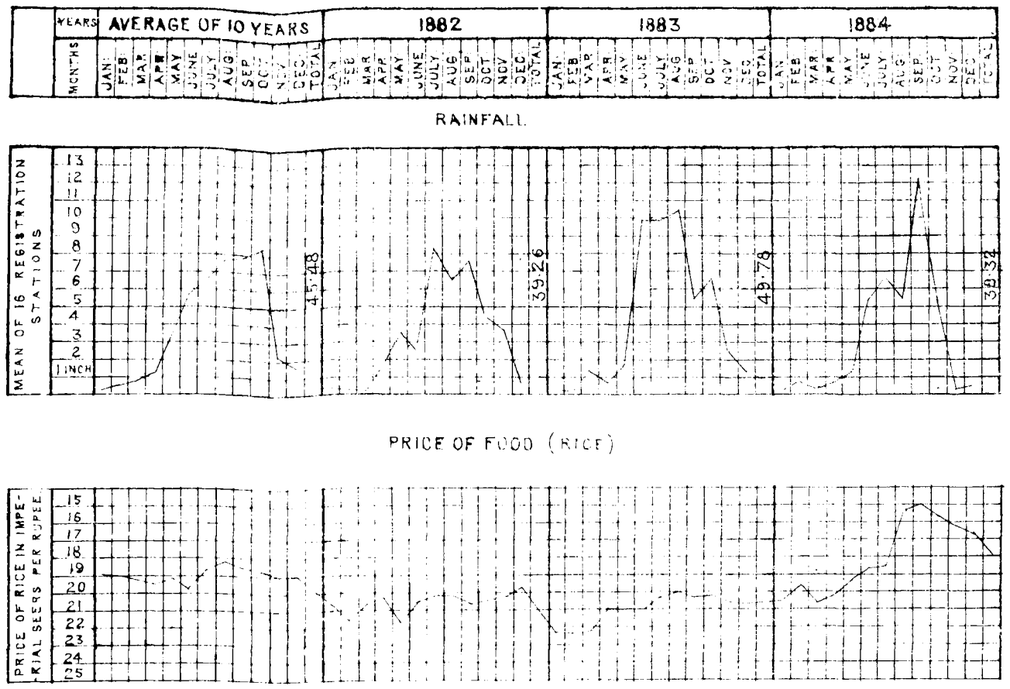
Districts.	Second-sort Rice.													Cholum.													Ragi.											
	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.
South Arcot.																																							
Average of 10 years	15·7	16·1	16·7	16·9	16·5	16·2	15·5	15·1	15·2	15·0	15·1	15·0	15·7	30·9	31·8	32·0	30·1	28·2	28·3	27·2	25·7	24·5	25·9	27·7	26·6	28·2	30·2	29·7	28·9	28·1	27·9	27·2	25·8	25·6	27·5	29·7	29·2	28·5	28·2
1882	16·8	20·0	20·0	20·1	19·1	18·0	17·6	17·1	17·1	17·1	17·7	17·6	18·2	31·2	39·0	38·8	37·6	36·3	35·6	35·3	32·8	31·0	32·2	38·0	44·1	35·9	33·9	35·4	35·4	34·6	34·3	33·2	32·5	32·6	31·6	36·5	37·6	37·4	34·8
1883	18·2	19·1	20·3	19·5	18·3	18·1	17·7	17·5	17·5	16·9	17·6	18·7	18·3	32·9	42·1	40·9	40·7	36·7	36·0	32·3	31·5	36·8	34·8	35·9	40·3	37·6	37·2	38·2	37·1	34·9	33·5	32·5	32·1	34·3	35·1	35·2	37·4	37·9	35·5
1884	19·1	20·0	17·6	17·0	16·8	16·6	15·5	14·7	15·0	15·0	14·1	13·9	16·3	37·8	41·6	36·1	36·5	36·1	35·0	33·2	29·2	29·3	28·8	29·1	29·0	33·4	38·6	38·2	31·2	30·1	31·5	31·7	30·0	29·3	31·0	31·1	31·9	29·2	32·0
Tanjore.																																							
Average of 10 years	14·5	15·1	15·2	15·5	15·2	14·8	14·2	13·6	13·7	14·1	15·1	13·9	14·6	24·6	23·7	23·4	25·7	25·9	24·3	22·2	21·9	22·3	24·9	25·4	24·9	24·1	28·6	28·3	28·7	28·2	27·6	26·8	25·8	25·3	26·1	29·3	28·5	28·5	27·6
1882	18·0	19·3	20·3	20·4	19·8	19·2	18·7	17·5	17·2	19·3	19·2	18·9	18·9	34·3	34·9	34·9	33·8	36·9	34·5	33·3	31·4	31·2	34·3	35·0	32·4	33·9	39·8	40·5	40·8	41·0	40·9	37·0	36·5	34·3	33·3	36·1	36·8	37·3	37·9
1883	18·8	19·6	21·1	21·2	19·7	18·8	18·8	18·5	18·3	19·0	18·7	19·6	19·3	32·8	34·7	35·3	34·5	34·8	31·0	30·4	30·4	32·0	33·8	33·9	29·3	32·7	37·0	36·7	40·8	37·3	36·1	34·7	34·3	34·8	36·8	39·7	40·0	38·1	37·2
1884	19·9	19·1	18·4	17·0	16·0	15·3	13·8	13·3	13·5	13·7	12·8	11·9	15·4	34·4	34·3	36·5	33·4	30·9	27·1	25·8	23·0	21·3	20·9	23·0	20·0	27·5	37·5	39·9	37·5	32·8	32·3	31·0	28·8	27·4	23·5	28·2	25·7	21·6	30·5
Trichinopoly.																																							
Average of 10 years	14·4	14·6	14·8	14·9	14·9	14·3	14·0	13·7	13·8	14·0	14·0	13·6	14·2	32·0	36·1	33·1	35·4	34·6	31·3	30·1	28·3	26·9	27·8	27·3	27·4	30·8	29·7	29·4	28·2	28·3	27·6	26·8	26·5	25·5	26·5	27·5	28·7	28·1	27·7
1882	17·3	18·1	18·3	18·1	17·8	17·3	16·3	15·4	15·6	16·0	16·6	17·3	17·0	49·6	46·7	57·3	58·1	58·1	48·1	48·5	43·3	43·2	44·9	43·4	43·7	48·7	37·1	36·6	38·0	37·8	36·3	35·3	34·8	32·9	34·1	36·6	37·9	38·2	36·5
1883	17·3	17·1	18·1	18·2	17·4	16·4	16·1	16·4	16·8	17·1	17·7	18·2	17·2	48·6	49·6	50·6	60·9	58·2	48·1	46·3	47·3	45·6	45·5	48·8	52·8	50·2	37·9	38·8	39·1	38·2	35·8	35·9	36·6	36·6	36·9	36·9	38·2	40·0	37·5
1884	18·8	18·6	17·2	17·0	16·8	16·1	14·6	13·9	13·3	12·6	12·9	12·4	15·3	59·7	59·7	61·8	58·1	57·3	47·8	43·8	40·7	35·9	33·8	34·3	31·4	47·2	39·5	38·6	37·1	36·3	34·1	33·7	32·3	30·3	29·6	27·9	28·2	26·9	32·9
Madura.																																							
Average of 10 years	12·8	13·3	13·6	13·8	13·9	13·4	13·0	12·7	12·6	12·4	12·6	12·7	13·0	30·4	30·4	30·7	30·4	31·0	29·0	28·8	27·5	27·3	26·5	26·1	29·7	28·9	28·0	27·7	27·4	28·6	28·3	27·5	26·3	26·2	26·6	27·0	26·7	28·8	27·4
1882	15·6	16·5	16·9	17·1	17·0	16·6	16·6	16·3	16·0	15·8	15·4	16·6	16·4	38·9	40·8	38·5	40·1	39·1	40·2	41·0	42·1	42·1	38·2	37·5	45·3	40·3	38·7	38·0	36·7	37·0	35·5	35·4	35·0	35·6	35·8	35·6	37·6	39·6	36·7
1883	17·5	17·6	18·5	18·4	18·6	18·5	17·8	18·1	16·9	16·5	17·1	17·4	17·7	44·2	50·0	46·3	47·6	48·2	48·0	47·6	44·2	42·9	41·6	41·2	42·3	45·1	41·8	43·0	41·6	41·0	41·1	41·0	41·7	39·9	39·1	38·6	40·7	42·9	41·0
1884	18·5	18·7	17·2	16·9	16·8	15·6	13·7	13·4	13·0	12·4	12·4	11·8	15·0	42·1	37·0	35·6	34·3	36·7	34·8	30·4	27·5	26·5	25·5	25·2	23·0	31·5	41·9	40·6	37·1	37·2	36·1	34·2	29·8	28·0	28·6	27·6	26·6	24·9	32·7
Tinnevelly.																																							
Average of 10 years	11·8	11·9	12·5	12·7	12·5	11·7	11·1	11·5	11·5	12·0	12·0	11·9	11·9	22·0	22·1	21·3	23·1	22·9	22·4	21·6	21·2	21·9	22·6	22·0	21·9	22·0	25·7	24·6	24·2	24·6	24·1	23·1	22·1	22·1	23·0	23·8	23·1	25·1	23·8
1882	15·0	15·9	16·5	17·0	17·0	16·6	16·3	16·1	16·6	17·6	18·2	18·5	16·8	29·1	30·5	30·5	30·8	30·9	27·4	29·8	30·8	32·2	32·3	32·6	34·0	30·9	33·1	34·1	34·0	34·0	31·6	28·0	29·1	29·8	32·2	32·8	33·5	36·6	32·4
1883	18·8	19·4	19·8	19·4	19·3	17·8	17·2	17·3	17·2	16·8	17·0	17·0	18·1	35·5	31·8	31·6	31·5	38·1	36·3	36·3	31·9	31·2	32·8	31·2	32·6	34·7	38·6	37·7	38·1	38·8	38·3	37·7	36·3	35·3	35·9	35·3	35·9	37·2	37·1
1884	16·7	16·8	15·3	15·5	15·3	13·3	12·2	11·6	11·8	11·9	11·9	11·7	13·7	31·6	33·1	30·3	29·6	28·9	24·5	23·5	19·9	20·1	20·5	20·5	19·7	25·2	37·3	33·5	31·1	31·6	30·4	28·0	25·3	22·1	22·8	23·0	24·1	22·9	27·7
Coimbatore.																																							
Average of 10 years	13·1	13·3	13·5	13·6	13·1	13·2	12·9	12·8	12·8	12·9	13·0	13·0	13·1	21·1	21·3	22·3	22·1	21·8	22·0	21·9	22·8	22·2	22·8	22·1	22·1	22·0	27·0	27·0	27·3	27·9	26·8	26·8	26·1	26·9	27·6	27·9	27·5	28·4	27·3
1882	15·5	15·9	16·0	15·8	15·6	14·8	14·7	14·3	14·3	14·9	15·4	15·6	15·2	31·2	31·7	31·1	31·6	30·9	30·0	30·4	30·0	29·1	29·8	29·7	30·6	30·5	37·1	36·3	31·9	36·3	36·5	31·7	33·7	32·7	33·1	34·9	33·3	37·1	35·1
1883 ..	16·7	15·8	16·6	16·4	16·0	15·8	15·5	16·1	15·5	15·8	16·2	16·6	16·1	30·0	32·0	32·1	31·8	30·3	29·2	29·3	29·2	29·5	29·1	29·1	30·5	30·3	36·7	36·6	37·3	37·3	36·1	31·8	31·8	35·0	36·2	35·6	36·3	37·7	36·2
1884 ..	17·0	16·1	16·2	16·0	15·5	15·0	14·1	13·5	13·4	13·7	14·1	13·5	14·8	31·2	29·2	28·3	29·1	27·6	26·5	23·8	21·9	22·2	21·1	21·4	20·8	25·2	35·8	34·6	35·0	34·7	34·2	32·6	29·7	27·2	26·5	25·5	26·8	25·3	30·6

Table showing the Average Quantities of Food Grains, in seers, of Set-aside, purchase for a Rupee in the previous ten years ending 1881, and 1882, 1883, and 1884, compared with the average of the choice of 1877 — Continued.

Districts.	Second-sort Rice. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	Ragi. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.	Cholum. January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Average.
NILGIRIS.																																							
Average of 10 years.	9·8	9·9	9·9	10·0	10·0	9·8	9·8	9·6	9·7	9·8	9·3	9·4	9·7	18·6	16·3	16·7	16·3	15·3	16·1	16·7	17·0	17·2	17·4	16·6	16·6	18·7	18·3	18·1	18·6	18·7	18·1	18·0	18·1	18·0	18·0	18·1	18·0	18·3
1882 ...	11·4	11·8	11·9	11·8	11·6	11·4	11·2	11·3	11·0	11·0	10·8	11·4	11·4	22·9	22·3	21·4	19·2	20·0	19·3	19·7	19·8	19·6	22·6	20·2	20·8	22·5	22·5	21·9	21·8	21·0	20·3	20·1	20·2	21·2	21·3	21·8	21·3	21·2
1883 ...	12·0	12·3	11·6	11·6	12·0	12·2	12·1	12·4	12·4	12·6	11·1	11·9	12·0	23·1	23·4	23·1	22·6	23·3	22·6	23·3	23·1	22·8	23·3	23·0	23·0	23·6	23·3	23·1	22·6	22·4	22·3	22·1	22·8	23·3	23·1	23·0	23·6	23·0
1884 ...	12·3	12·0	12·0	11·9	10·9	12·0	11·4	11·2	10·4	10·7	10·5	10·7	11·3	24·0	22·1	21·0	20·2	19·6	21·3	20·6	20·0	17·1	17·5	19·9	19·9	21·3	22·7	22·6	22·1	21·7	21·7	21·9	22·1	21·9	21·9	21·9	21·1	21·1
SALEM.																																							
Average of 10 years.	14·8	14·7	14·6	14·5	14·9	14·2	13·7	13·5	13·5	13·9	14·5	14·4	14·3	24·6	25·2	24·7	25·0	25·1	25·5	25·1	24·8	24·3	24·9	26·6	28·8	28·9	28·3	28·3	28·4	28·7	28·5	28·4	28·7	28·8	28·8	28·6	28·4	28·5
1882 ...	16·3	17·3	16·8	16·9	16·7	16·4	15·7	14·8	15·2	15·9	16·1	16·5	16·2	29·0	30·0	29·1	30·9	31·7	32·9	33·6	33·5	32·2	32·3	33·5	33·5	31·7	31·9	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8
1883 ...	18·0	17·8	17·3	17·1	16·4	16·1	16·1	16·1	16·1	16·5	17·2	17·9	16·9	29·5	31·3	31·6	32·1	30·6	31·9	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8
1884 ...	18·9	17·7	17·1	16·8	16·9	16·6	15·9	15·4	15·4	15·1	15·3	14·7	16·3	31·5	33·0	30·9	32·4	31·8	31·9	30·2	29·1	27·5	28·1	26·1	30·1	37·0	35·2	33·7	34·1	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8	31·8
SOUTH CANARA.																																							
Average of 10 years.	13·8	14·0	14·1	13·9	13·6	13·3	13·3	13·2	13·2	13·3	13·3	13·4	13·5	22·5	21·3	21·6	20·3	20·5	20·9	20·5	19·7	19·7	19·9	19·6	19·9	21·2	21·2	20·7	20·2	20·0	19·6	19·4	19·2	19·2	19·2	19·6	19·3	19·3
1882 ...	16·5	16·8	17·3	17·7	16·9	15·7	15·3	13·9	13·4	12·6	13·0	14·7	15·3	21·3	21·8	21·2	20·1	19·7	21·9	22·9	22·3	22·2	22·3	22·7	22·7	21·8	21·1	21·2	22·2	22·7	22·7	22·8	22·3	22·1	21·6	21·5	21·5	21·6
1883 ...	16·7	17·0	16·6	14·8	14·1	13·8	13·6	13·4	13·9	15·0	14·9	14·3	15·0	21·1	21·2	21·3	22·7	22·8	22·2	22·3	22·3	22·2	22·7	22·7	22·7	21·1	21·2	21·3	22·3	22·3	22·3	22·3	22·3	22·3	22·3	22·3	22·3	22·3
1884 ...	15·4	14·0	13·9	13·7	13·9	13·7	13·4	13·5	14·0	14·8	14·8	14·6	14·1	22·8	22·7	22·9	23·1	21·5	21·6	21·8	21·8	21·8	21·8	21·8	21·8	22·8	22·7	22·9	23·1	21·5	21·6	21·8	21·8	21·8	21·8	21·8	21·8	22·0
MALABAR.																																							
Average of 10 years.	12·8	12·6	12·7	12·8	12·6	12·5	12·3	12·3	12·7	13·0	12·9	12·7	12·6																										
1882 ...	15·4	15·7	15·9	15·5	17·0	14·5	14·1	14·0	14·3	15·1	15·2	15·5	15·1																										
1883 ...	16·1	16·4	15·9	15·7	15·6	15·5	15·4	15·9	16·2	16·0	15·2	15·2	15·5																										
1884 ...	15·3	14·4	13·7	13·6	13·5	13·1	12·5	12·3	12·9	13·7	13·8	13·5	13·5																										

DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE) IN THE DISTRICTS OF GANJAM AND VIZAGAPATAM FOR 3 YEARS ENDING 1884 COMPARED WITH AVERAGE OF 10 YEARS.

GANJAM



VIZAGAPATAM

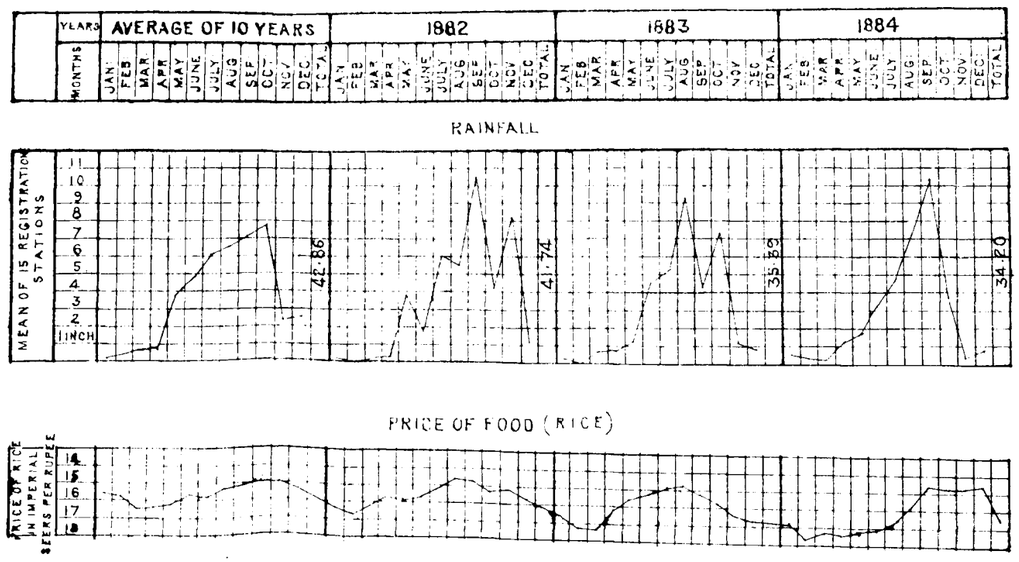
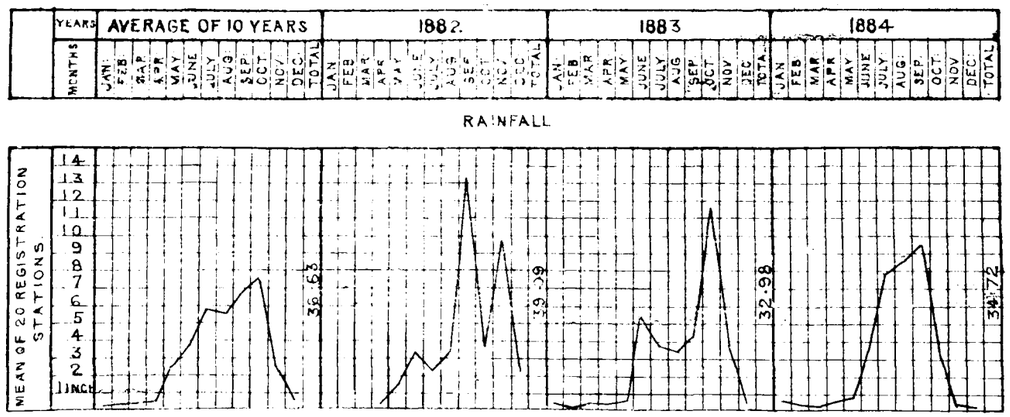
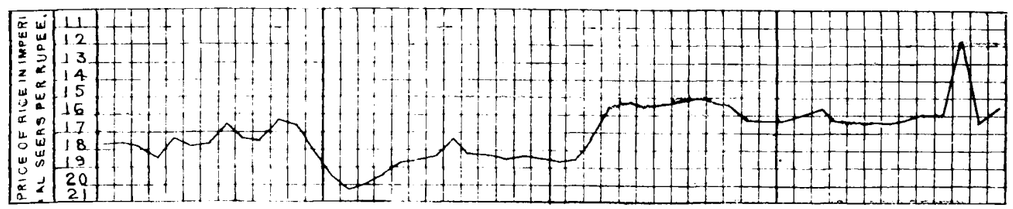


DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE.) IN THE DISTRICTS OF GODAVARI & KISTNA FOR 3 YEARS ENDING 1884. COMPARED WITH AVERAGE OF 10 YEARS.

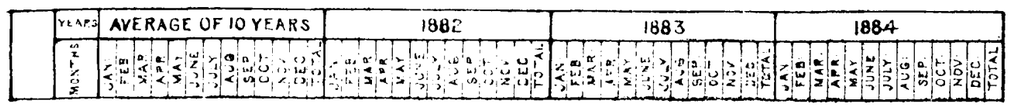
1C B

GODAVARI





KISTNA



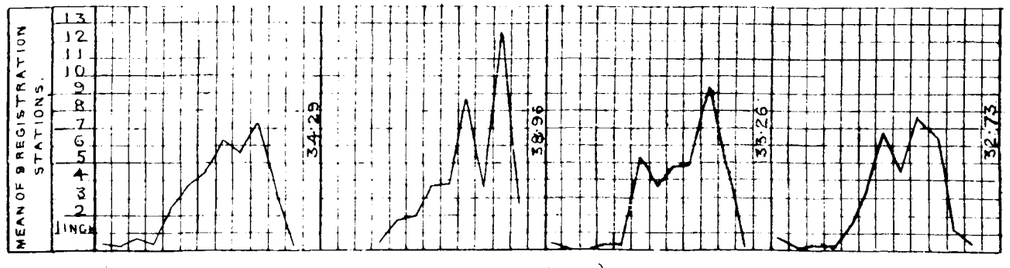
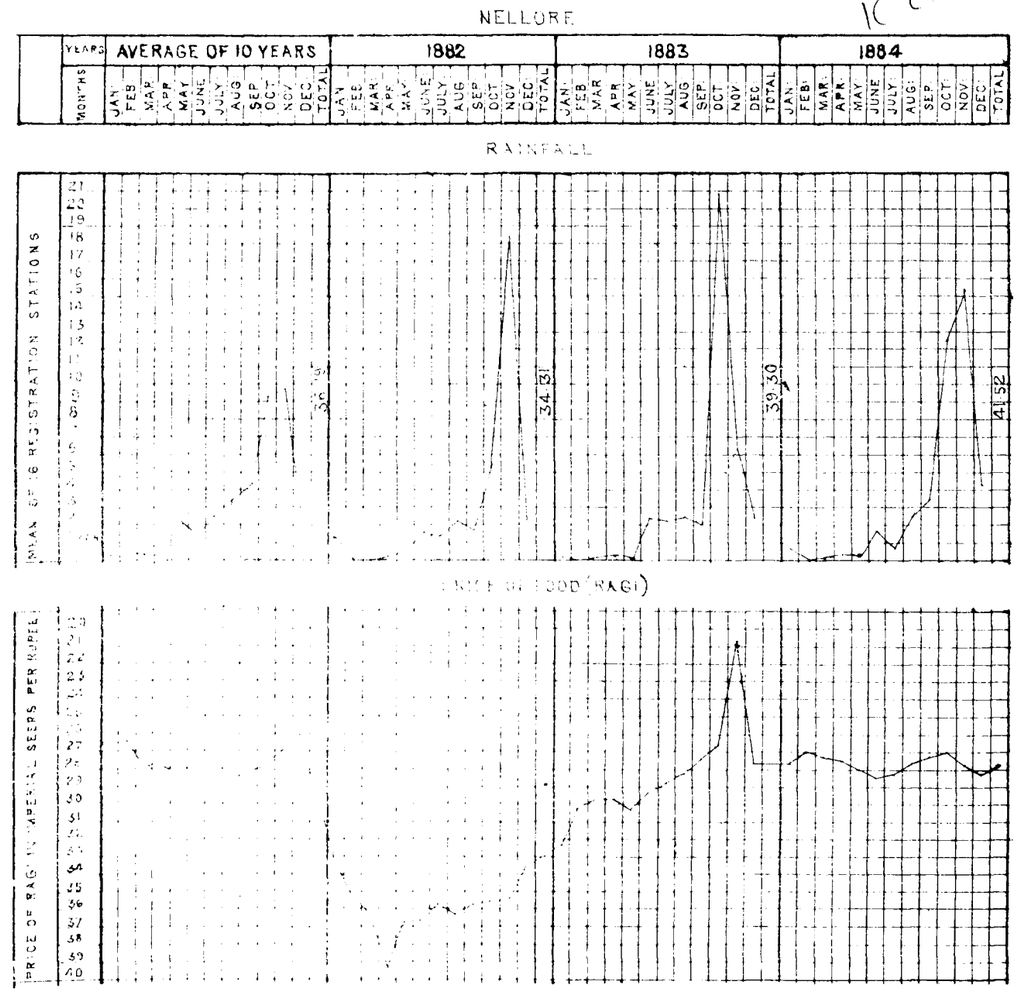


DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RAGI) IN THE DISTRICTS OF NELLORE & NILGIRI FOR 3 YEARS ENDING 1884 COMPARED WITH AVERAGE OF 10 YEARS.

NELLORE



NILGIRI

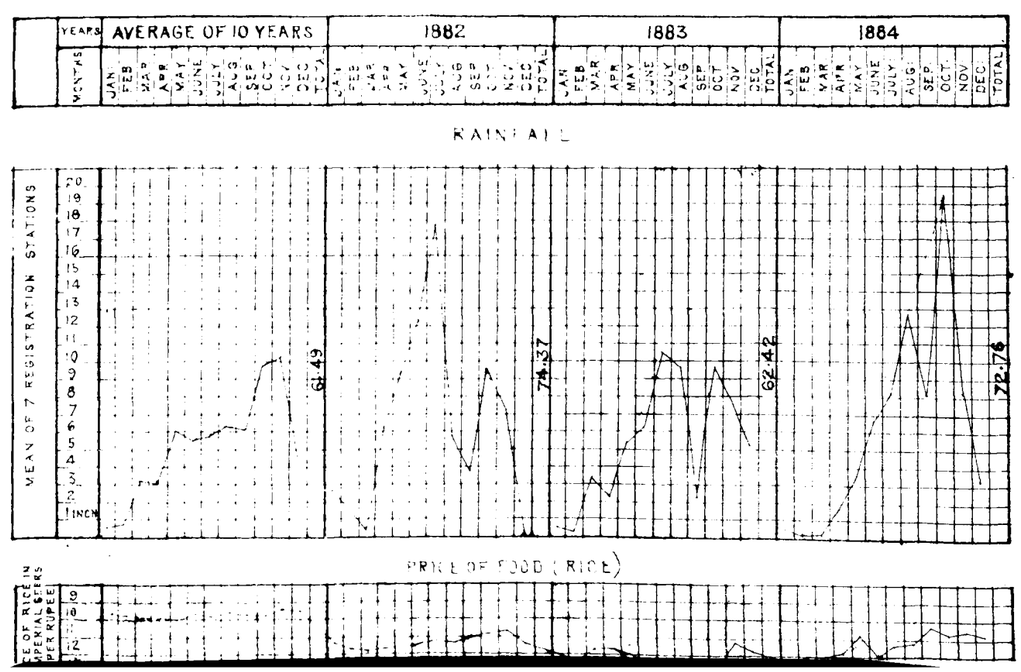
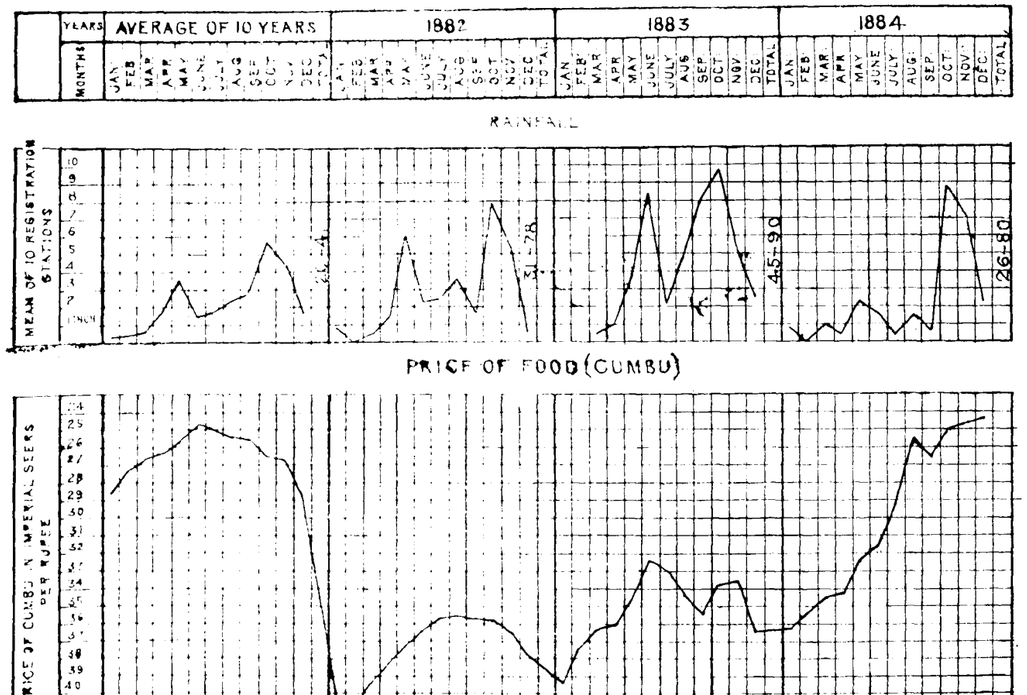


DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (CUMBU) IN THE DISTRICTS OF TINNEVELLY & COIMBATORE FOR 3 YEARS ENDING 1884. COMPARED WITH AVERAGE OF 10 YEARS.

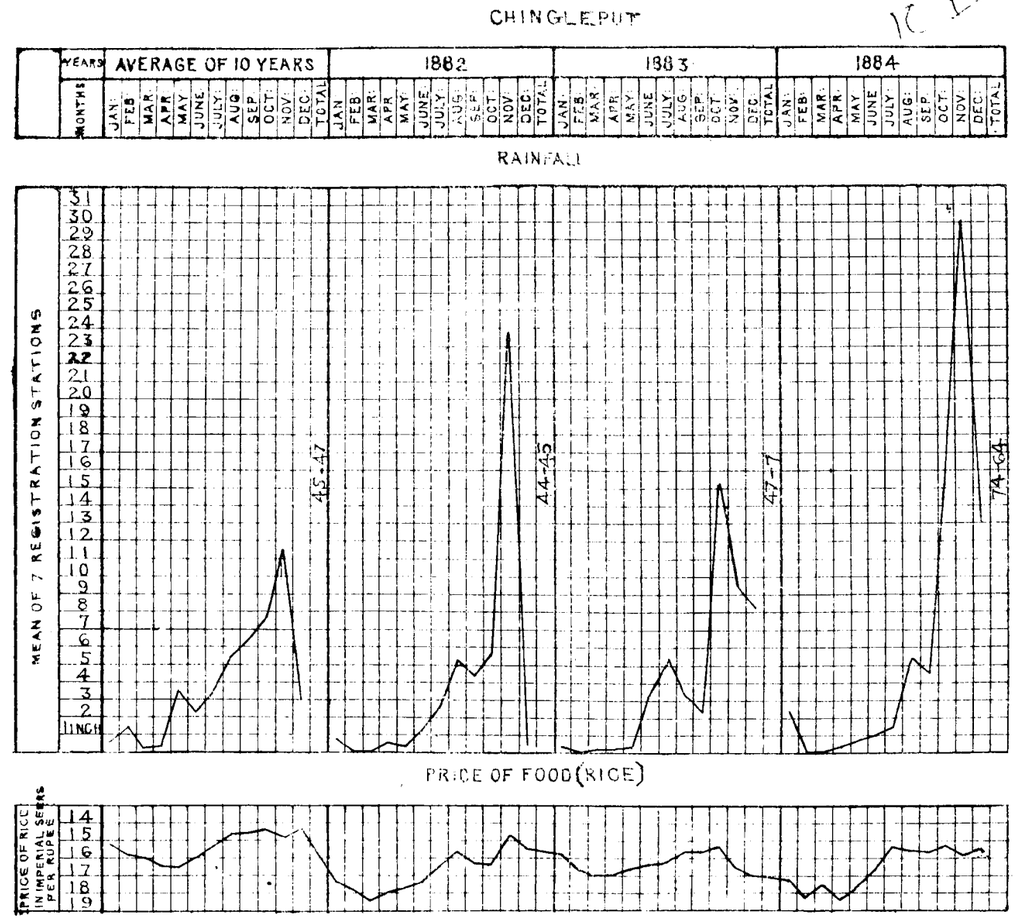
COIMBATORE



TINNEVELLY

DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE) IN THE DISTRICTS OF CHINGLEPUT & SOUTH ARCOT FOR 3 YEARS ENDING 1884 COMPARED WITH AVERAGE OF 10 YEARS.

CHINGLEPUT



SOUTH ARCOT

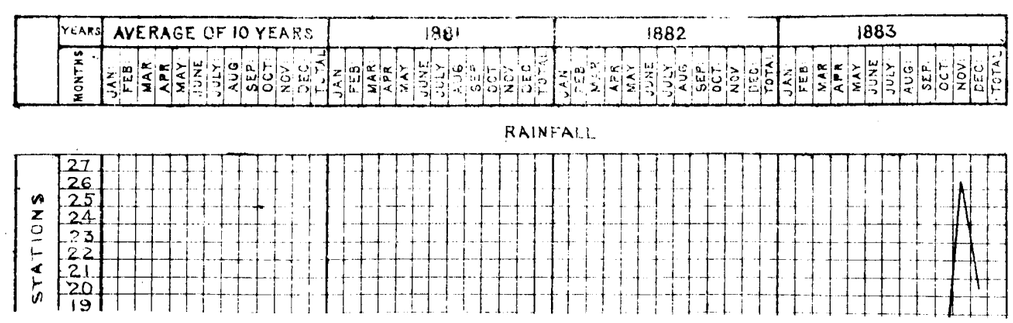


DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE.) IN THE DISTRICTS OF SOUTH CANARA FOR 3 YEARS ENDING 1884. COMPARED WITH AVERAGE OF 10 YEARS.

SOUTH CANARA

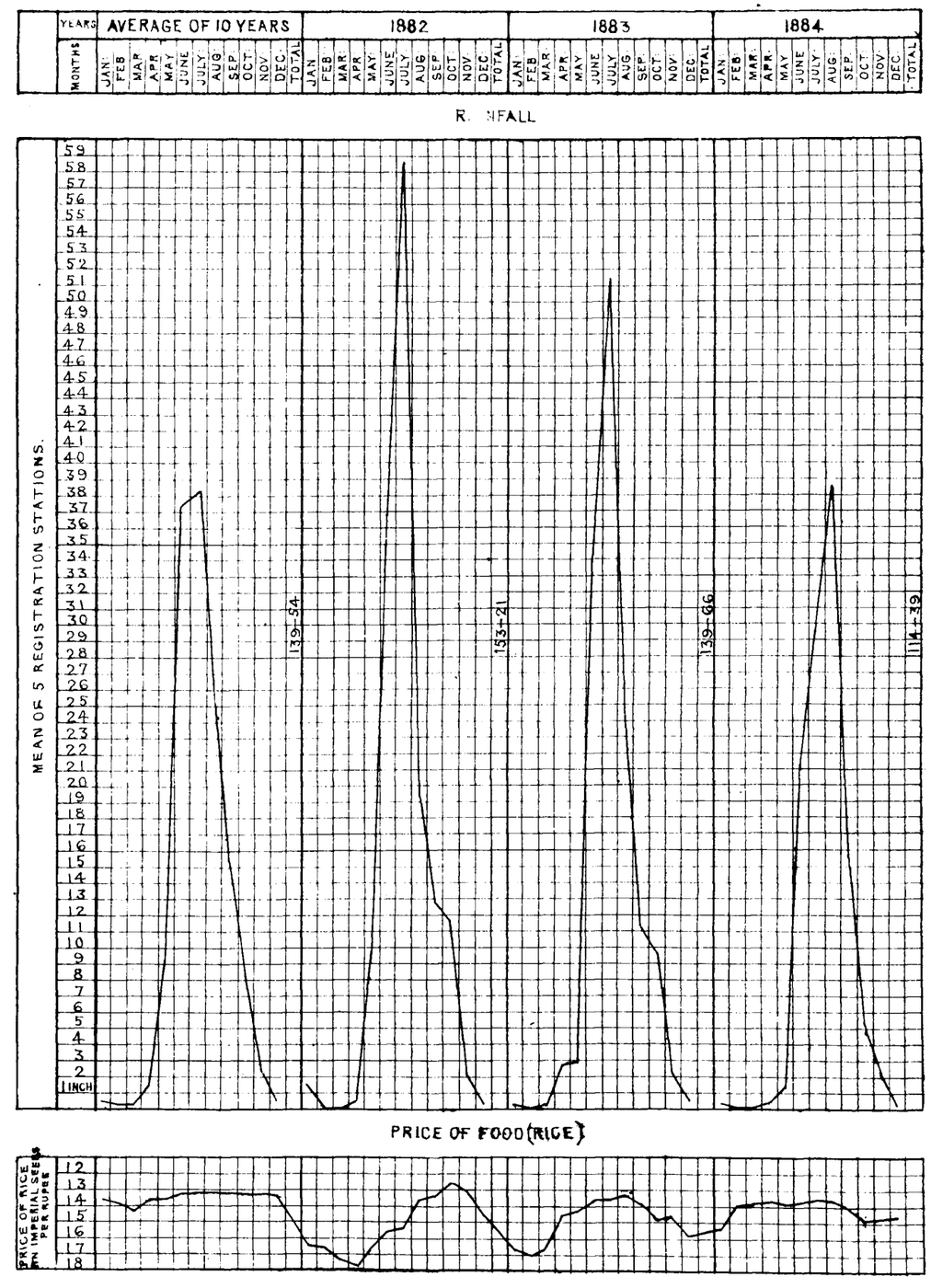
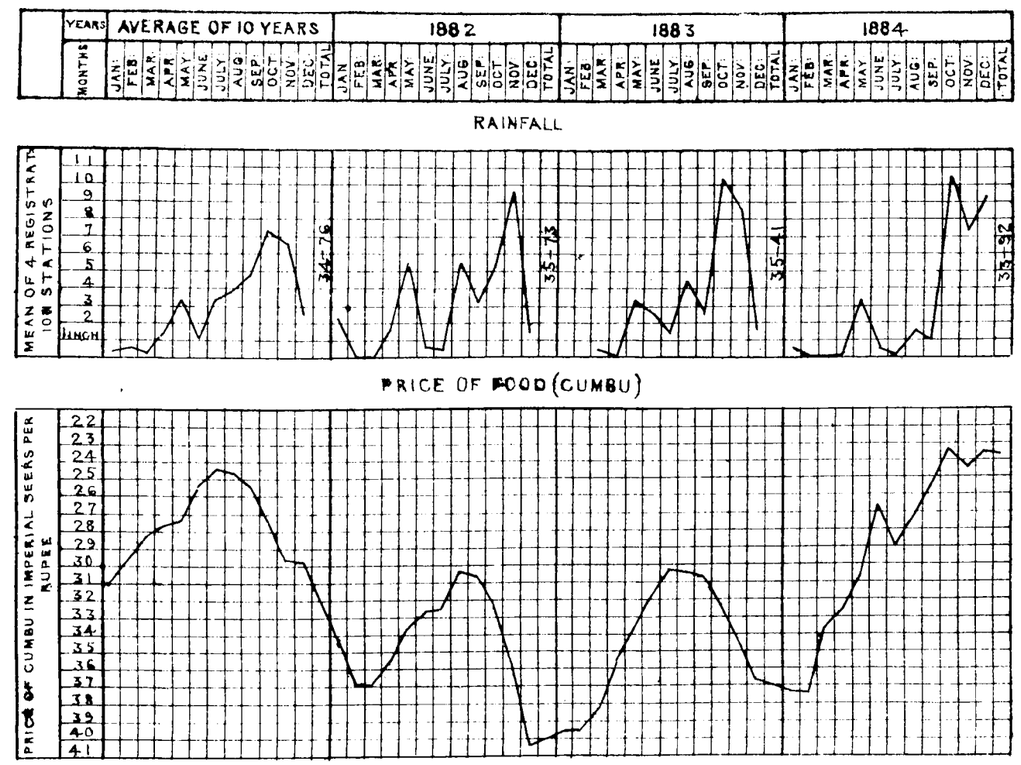


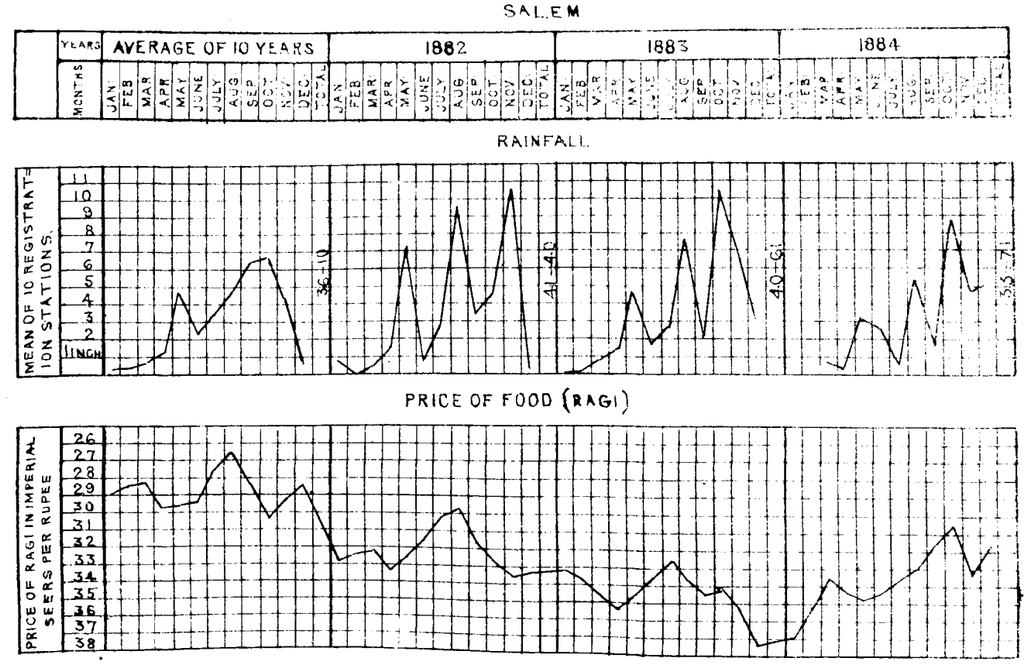
DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (CUMBU) IN THE DISTRICTS OF TRICHINOPOLY FOR 3 YEARS ENDING 1884.

COMPARED WITH AVERAGE OF 10 YEARS.

TRICHINOPOLY & SALEM



SALEM



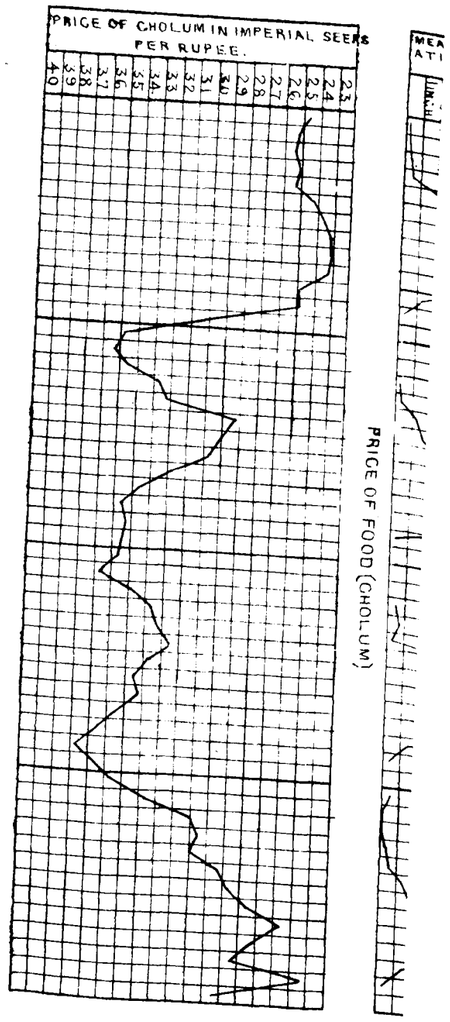
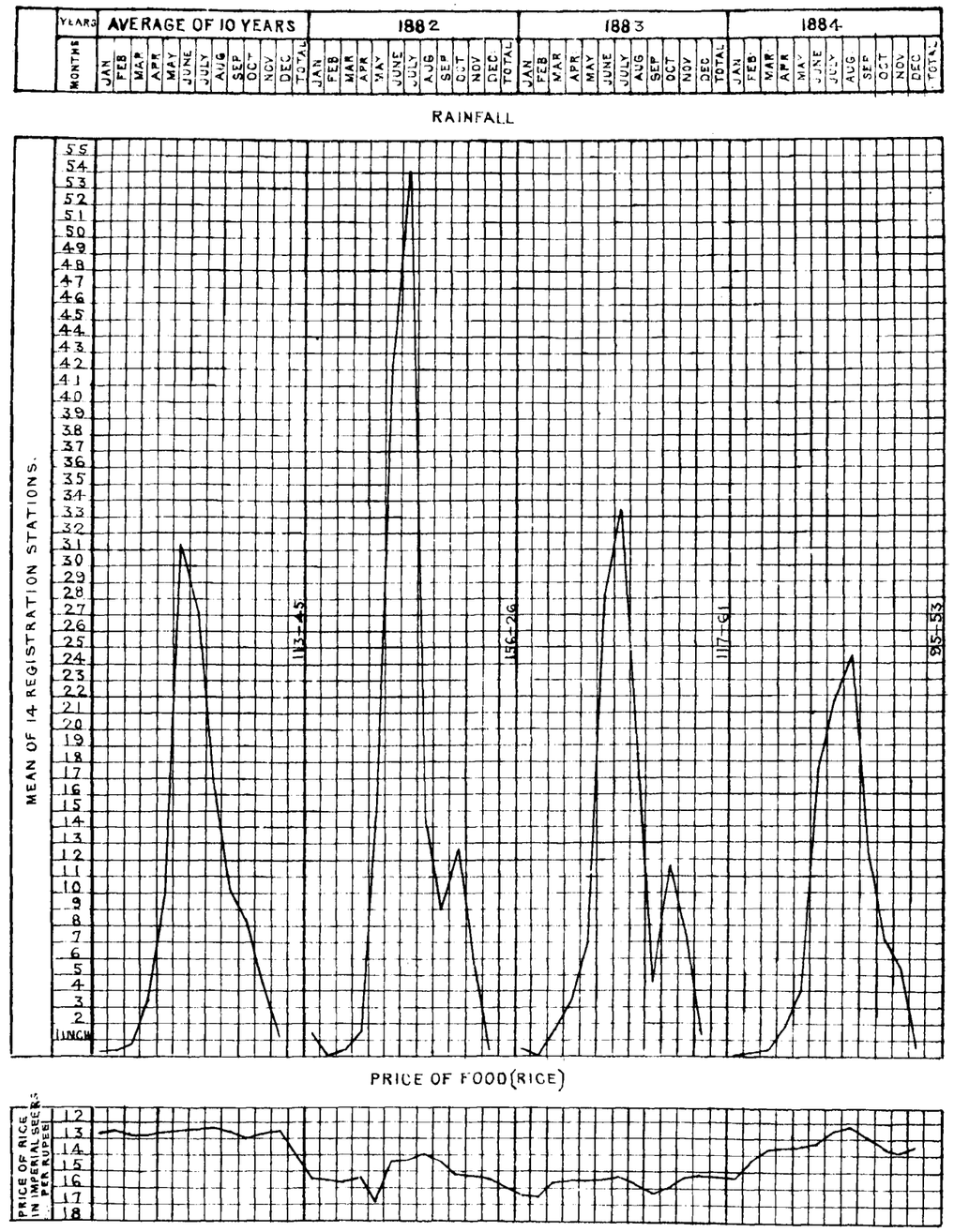


DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE & CHOLUM) IN THE DISTRICTS OF MALABAR & KURNOOL FOR 3 YEARS ENDING 1884.

COMPARED WITH AVERAGE OF 10 YEARS.

MALABAR



KURNOOL

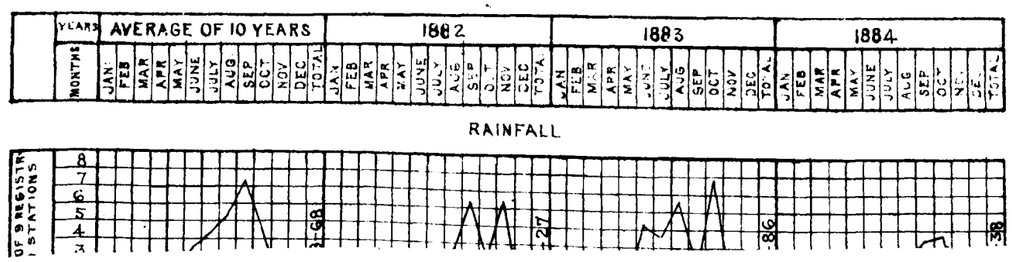
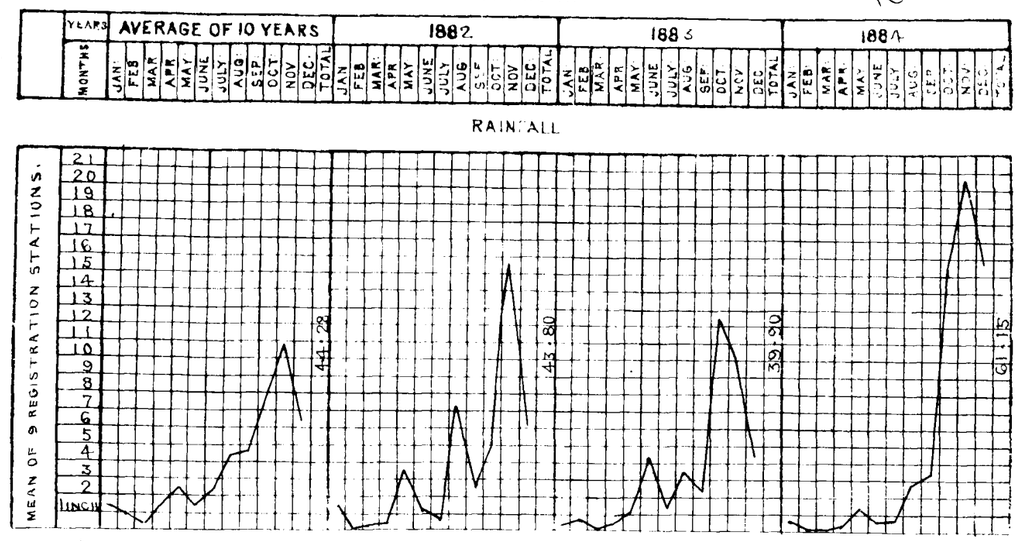


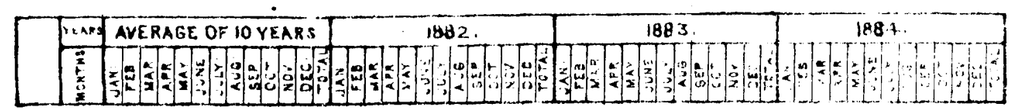
DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (RICE) IN THE DISTRICTS OF TANJORE & MADURA FOR 3 YEARS ENDING 1884 COMPARED WITH AVERAGE OF 10 YEARS.

TANJORE

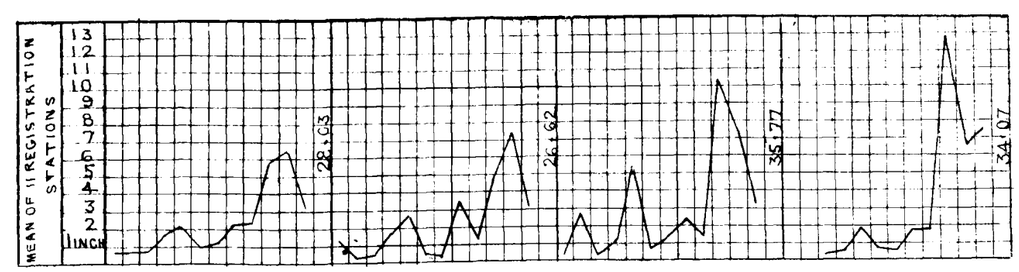


PRICE OF FOOD (RICE)

MADURA



RAINFALL



PRICE OF FOOD (RAGI)

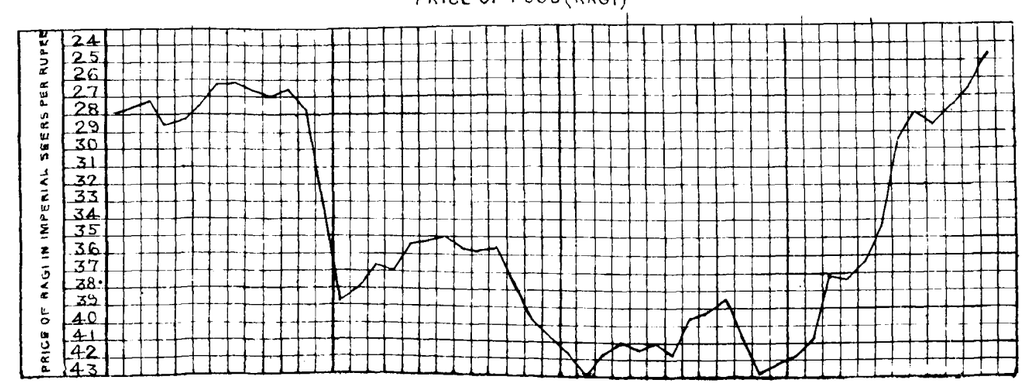
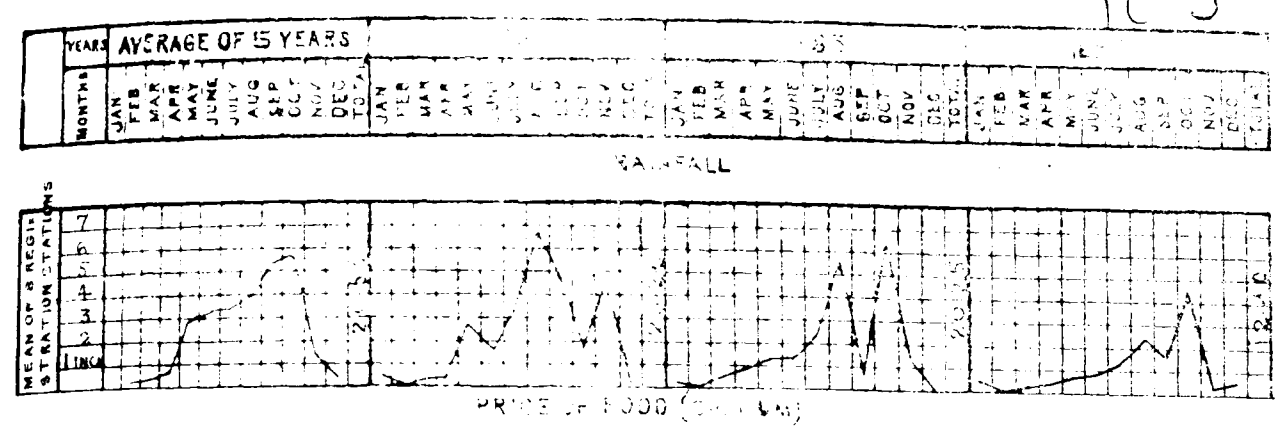
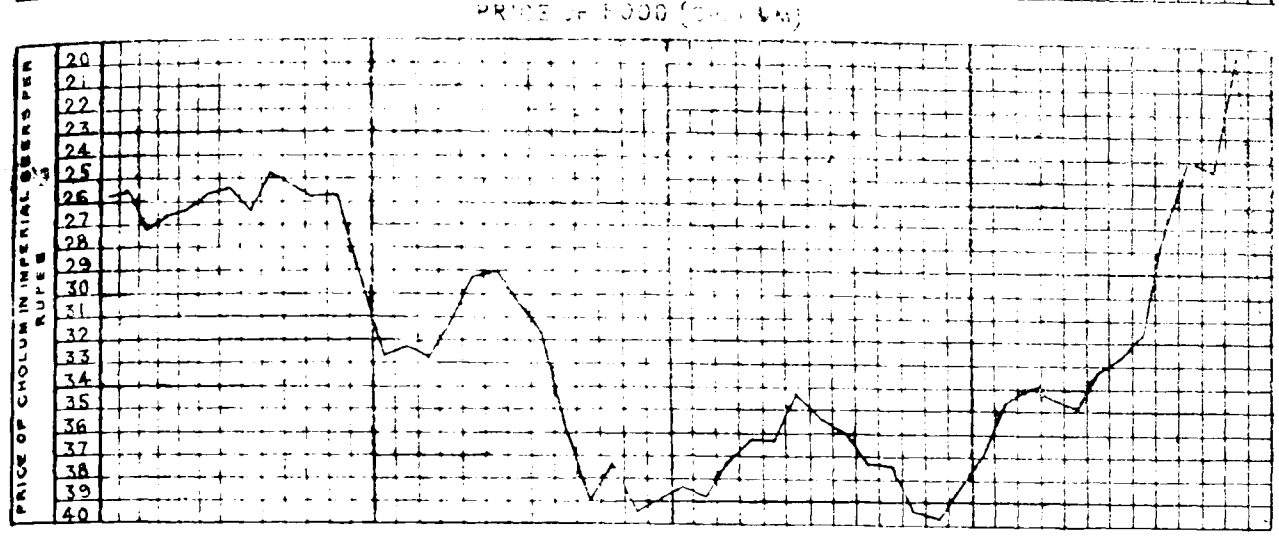


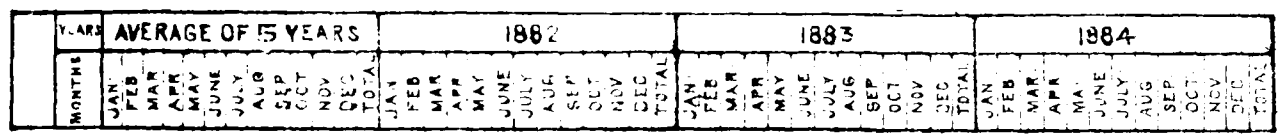
DIAGRAM SHOWING THE RAINFALL & PRICE OF FOOD (CHOLUM) IN THE DISTRICTS OF BELLARY [illegible] FOR 3 YEARS ENDING 1884.
COMPARED WITH THE AVERAGE OF 10 YEARS.

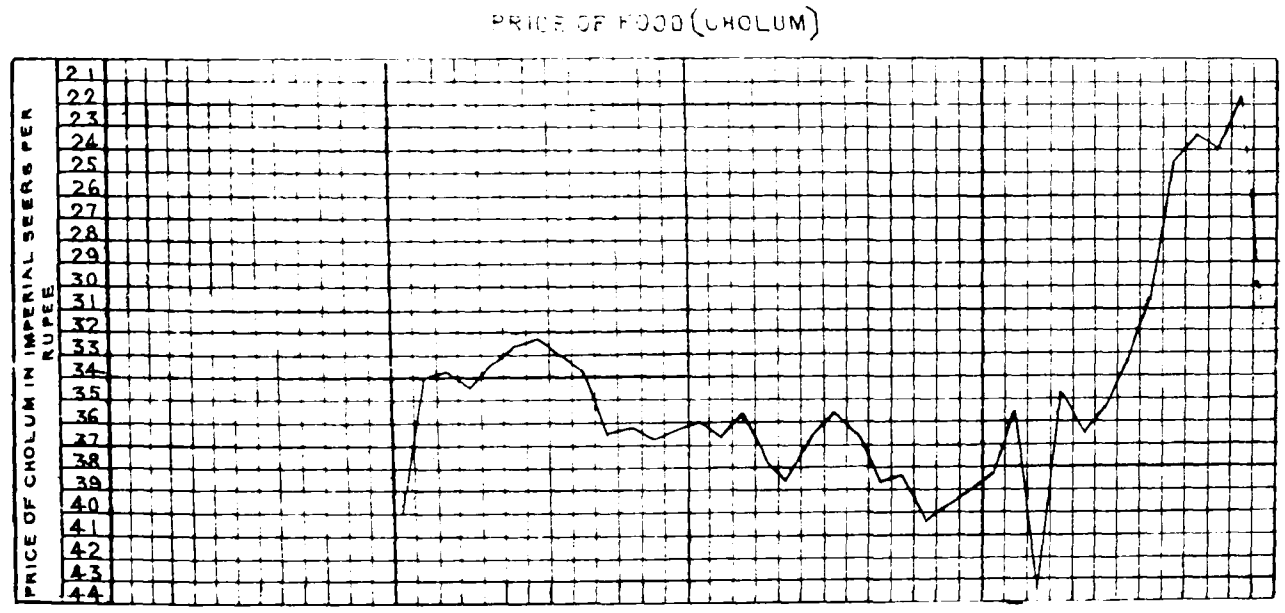
1C J



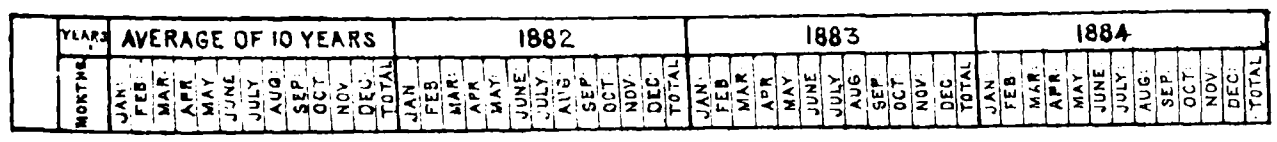


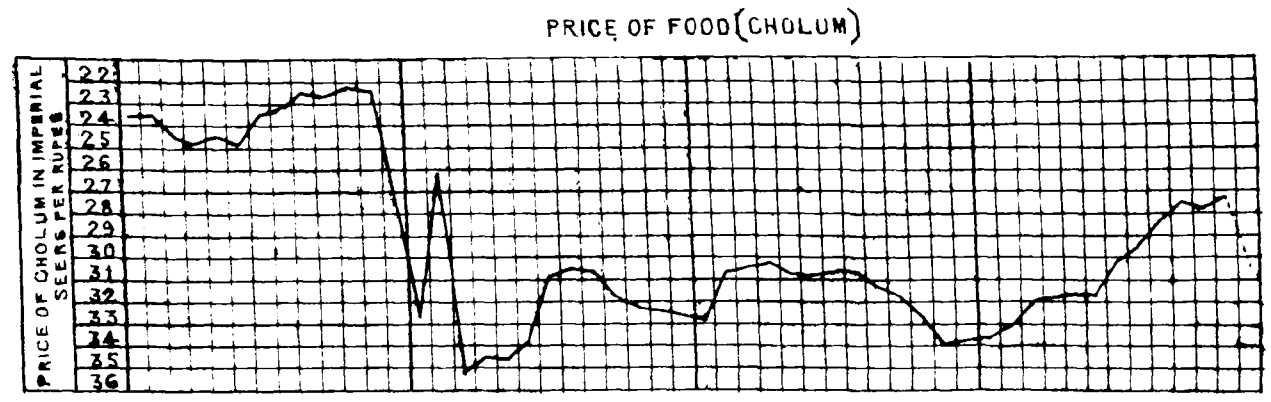
ANANTAPUR





CUDDAPAH

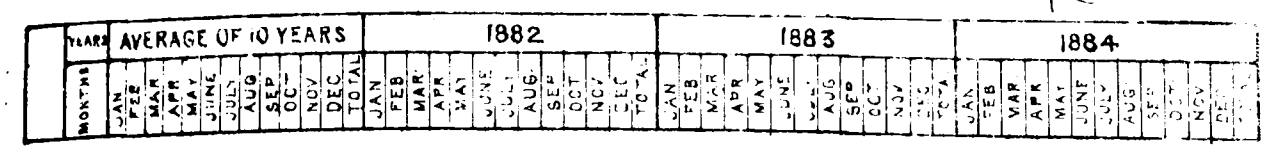




DISTRICTS OF NORTH ARCOT & MADRAS FOR 3 YEARS ENDING 1884

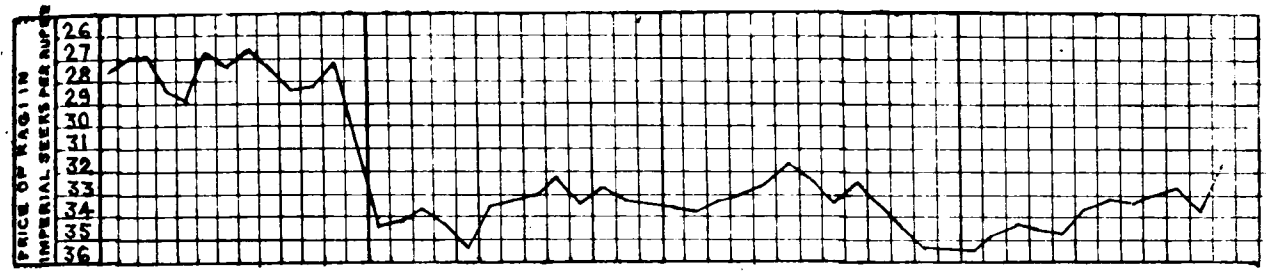
COMPARED WITH AVERAGE OF 10 YEARS

NORTH ARCOT

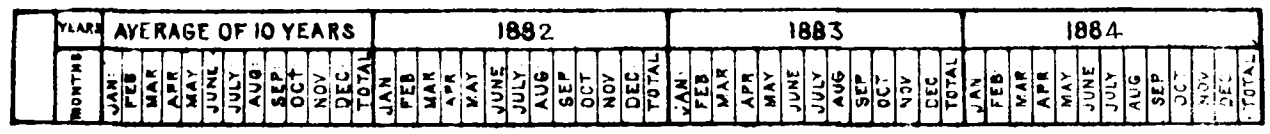


RAINFALL

PRICE OF FOOD (RAGI)

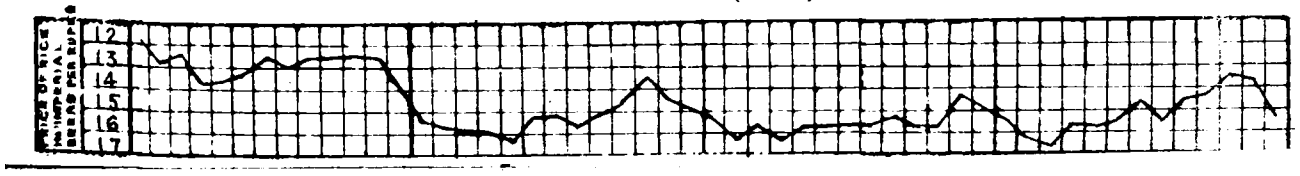


MADRAS



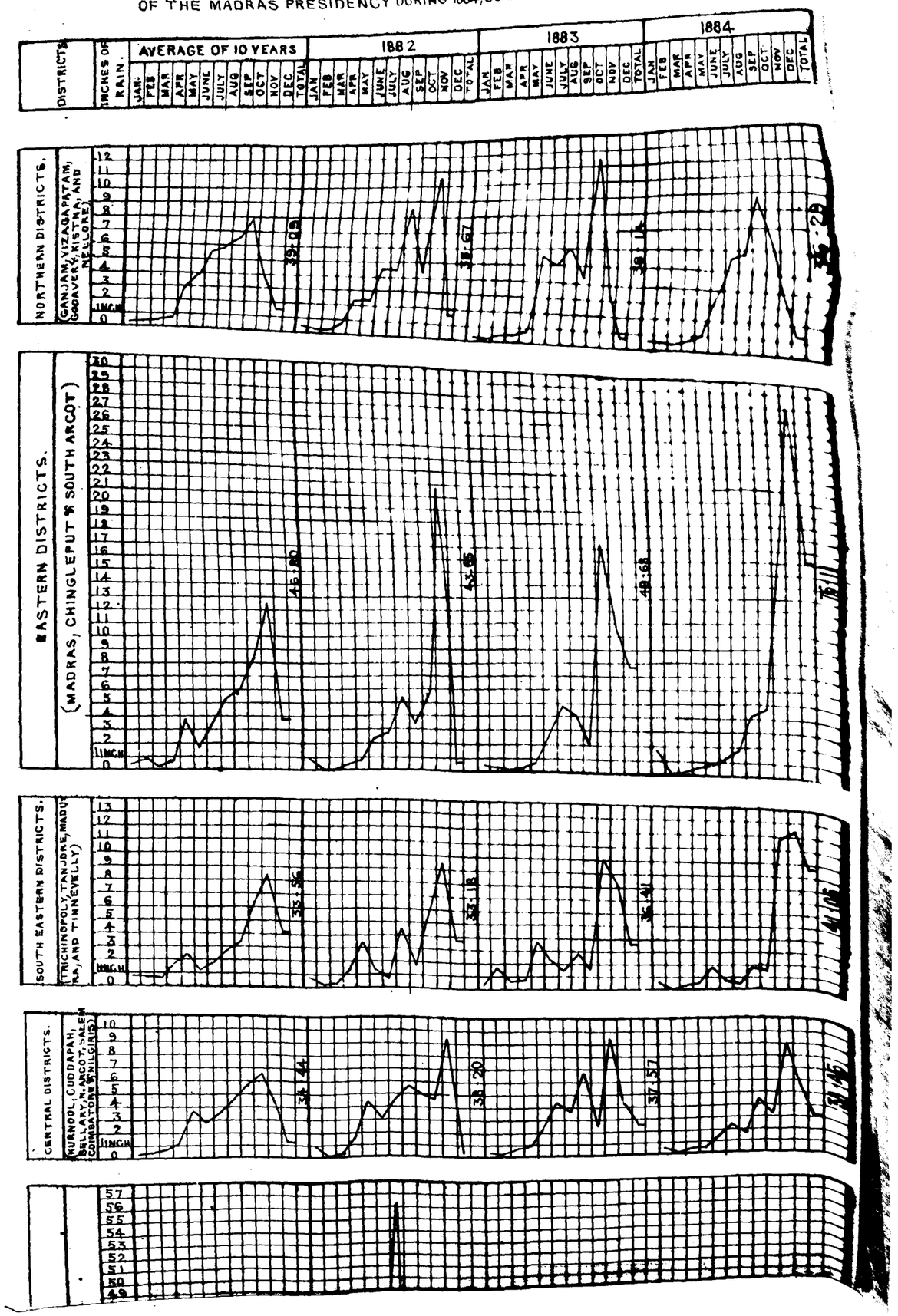
RAINFALL

PRICE OF FOOD (RICE)



(NORTHERN, EASTERN, SOUTH EASTERN, CENTRAL AND WESTERN.)

OF THE MADRAS PRESIDENCY DURING 1884, COMPARED WITH PREVIOUS YEARS.



VITAL STATISTICS OF THE GENERAL POPULATION.

Registration.

3. The important work of registration was still carried out as in former years, viz., under the supervision of the authorities in municipal towns and by the *kurnams* in villages. As regards the statistics of the former, they are now fairly reliable, and the results from the latter also show signs of improvement. The duties of registration are, however, so mechanical and apparently purposeless to ignorant men, that they will only be made to realize their importance by the interest taken in the work by district officials when on tour, and by occasional inspections of the registers. The population figures are, in every instance in this report, those obtained by the census of 1881. The average population per square mile for the whole presidency was 220·6.

BIRTHS.

4. The births were in the proportion of 29·3 per thousand of population sending in returns against 27·7 in 1883. The birth-rate in 1884 was therefore the highest on record in this presidency, and is, it is believed, nearer to the true ratio than any hitherto obtained. The rate in England and Wales for the same period was, it may be stated, 33·4 per thousand of population. The following table gives the number of births registered in each of the past sixteen years, and, omitting the famine period, shows a gradual, though tardy, progress towards greater accuracy :—

Table showing the number of Births registered for a series of years.

Years.	Population for which returns were received.	Births.	Birth-ratio per mille.
1869	24,633,127	452,410	18·5
1870	24,125,526	439,063	18·1
1871	24,555,046	517,109	21·0
1872	30,147,779	554,379	18·3
1873	30,287,842	538,123	17·7
1874	30,360,221	580,709	19·1
1875	30,278,903	638,771	21·1
1876	29,157,056	632,113	21·6
1877	29,209,542	477,447	16·3
1878	29,127,205	348,657	11·9
1879	28,991,267	477,762	16·4
1880	28,778,097	659,991	22·9
1881	28,676,375	731,866	25·5
1882	28,887,111	751,104	26·0
1883	28,503,100	791,774	27·7
1884	28,151,952	827,381	29·3

5. The following table gives the number of births in each district for each month of the year, and illustrates their seasonal occurrence :—

Table showing the Births in each Month and in each District during the year 1884.

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Ganjam	2,309	1,785	2,031	1,991	1,948	2,256	2,657	2,652	2,817	2,103	1,690	1,408	25,647
Vizagapatam ...	2,668	2,182	2,386	2,333	2,458	3,201	3,544	3,931	4,332	4,188	3,646	3,441	38,310
Godávari	2,577	1,929	1,961	2,695	2,674	3,248	3,854	3,564	3,447	3,819	3,602	3,669	37,039
Kistna	3,253	2,483	2,904	3,405	3,513	4,519	4,550	4,468	4,929	5,139	4,957	5,108	49,228
Nellore	2,169	1,633	2,165	2,238	2,299	2,088	2,034	2,017	2,054	3,252	2,787	2,556	27,292
Madras	1,280	1,124	1,309	1,186	1,335	1,317	1,464	1,506	1,315	1,220	1,335	1,306	15,697
Chingleput	3,000	2,552	2,674	2,673	2,922	3,389	4,134	4,491	3,879	3,838	3,614	3,349	40,515
South Arcot	2,867	2,302	2,432	2,671	2,919	3,840	5,587	5,253	4,987	4,833	4,351	3,787	45,829
Trichinopoly	2,322	2,264	2,661	2,736	2,829	3,179	3,759	3,479	3,337	3,500	3,217	2,916	36,227
Tanjore	4,463	3,924	4,026	4,501	4,434	4,519	5,625	6,357	6,215	5,811	5,443	5,188	60,506
Madura	2,679	2,467	2,913	3,148	3,413	3,853	4,526	4,000	3,727	3,687	3,561	3,260	41,234
Tinnevelly	3,623	3,192	3,723	3,852	3,957	3,743	4,764	4,237	4,119	4,211	4,192	4,143	47,756
Kurnool	1,821	1,749	2,140	2,294	2,392	2,540	2,565	2,522	2,364	2,451	2,300	2,090	27,228
Cuddapah	2,729	2,482	2,959	2,961	3,052	3,234	3,682	3,517	3,468	3,487	3,211	2,964	37,746
Bellary	2,314	2,182	2,357	2,357	2,637	3,166	3,265	2,866	2,662	2,634	2,645	2,563	31,648
Anantapur	1,817	1,686	1,829	1,793	1,865	1,934	2,517	2,040	2,000	2,145	2,030	1,952	23,608
North Arcot	3,575	3,223	3,858	3,777	3,740	4,347	5,849	5,743	5,644	5,397	4,897	4,783	54,835
Salem	3,693	3,617	3,881	4,075	4,533	4,480	5,228	4,947	5,179	5,718	5,273	4,658	55,282
Coimbatore	3,043	2,972	3,520	3,623	3,794	3,892	4,237	3,700	3,746	3,755	3,975	3,362	43,619
Nílgiris	110	109	106	105	142	75	123	151	148	192	113	140	1,514
South Canara ...	2,098	2,153	2,166	2,226	2,332	2,429	2,824	2,337	2,041	2,054	2,084	2,459	27,203
Malabar	3,515	4,196	4,906	5,221	5,675	6,143	5,793	5,410	5,102	4,793	4,357	4,309	59,420
Total ...	57,925	52,206	58,907	61,861	64,863	71,392	82,581	79,188	77,512	78,227	73,278	69,441	827,381
Ratio of births per 1,000 in each month.	2·0	1·8	2·0	2·1	2·3	2·5	2·9	2·8	2·7	2·7	2·6	2·4	29·3

As in 1883 and previous years, the births in 1884 were fewest in the first and second, and most numerous in the third and fourth, quarters of the year.

6. In table I of Appendix will be found further and more detailed information regarding the births amongst the native population in each district. Of the total children (827,381 in number) born, 423,108 were boys and 404,273 girls; so that 104·6 males were born for every 100 females.* As already mentioned, the average birth-rate for the presidency was 29·3 per thousand inhabitants, but the rates in the several districts ranged from 17·1 on the Nílgiris to 41·4 in Chingleput. On looking at previous returns, it is found that the average birth-rate on the Nílgiris during the past ten years has been 17·1 per mille of population. This comparatively low rate is no doubt, to some extent, due to imperfect registration, and perhaps to some extent to the rigors of climate; but I am credibly informed that it is common for low-country natives living on the hills to send their wives to the plains to be confined. With three exceptions, the births in the districts were more numerous than the deaths, the excess ranging from 19·9 per thousand of population in the conjoined districts of Bellary and Anantapur to 0·9 on the Nílgiris, while the mean excess for the presidency was 6·2 per thousand. The districts in which the deaths exceeded the births were Godávari, Tanjore, and Tinnevelly. In the Godávari district the excess of mortality amounted to 3·6 per thousand of population, and was principally due to the large numbers of deaths from small-pox and fevers. In Tanjore and Tinnevelly the disturbing cause was cholera, and the excess of deaths over births was 7·7 per mille in the former and 3·5 in the latter district.

DEATHS.

7. In a population of 28,151,952 for whom returns were received, the deaths numbered 650,335, being at the rate of 23·1 per thousand of population against 19·0 per mille in 1883. The increase in the death-rate was mainly due to the prevalence of epidemic disease, but partly to improved registration. The following table shows the mortality which has taken place during each of the past sixteen years,

* The average proportion of boys to 100 girls born, during the ten years 1870—1879, in the chief European countries, varied from 103·9 in England and Wales to 107·1 in Italy.

and, excluding the famine period, it will be remarked that the death-rate was unusually high in 1884.

Table showing the number of Deaths registered for a series of years.

Years.	Population for which returns were received.	Deaths.	Death-ratio per mille.	Years.	Population for which returns were received.	Deaths.	Death-ratio per mille.
1869 ...	24,633,127	451,981	18·3	1877 ...	29,209,542	1,556,312	53·2
1870 ...	24,125,526	451,020	18·6	1878 ...	29,127,205	810,921	27·8
1871 ..	24,555,046	444,371	18·0	1879 ...	28,991,267	549,390	18·9
1872 ...	30,147,779	501,482	16·6	1880 ...	28,778,097	454,101	15·7
1873 ...	30,287,842	506,894	16·4	1881 ...	28,676,375	465,682	16·2
1874 ...	30,360,221	516,848	17·0	1882 ...	28,887,111	470,700	16·2
1875 ...	30,278,903	641,260	21·1	1883 ...	28,503,100	541,930	19·0
1876 ...	29,157,056	680,384	23·3	1884 ...	28,151,952	650,335	23·1

8. From table II of Appendix it is noted that 105·6 males died for every 100 deaths of females; or, to put it according to population, the mortality amongst males was at the rate of 23·9, and amongst females in the ratio of 22·2, per thousand. The death-ratios in the several districts varied greatly. Thus in Nellore and Ganjam it was 14·5 per thousand, while in Tanjore it stood at 35·7. Looking at the death-rates of districts generally in table II, it will be seen that, with two exceptions, they exceeded the mean ratios for the antecedent five years, and in numerous instances to a considerable extent. This increase was, as already remarked, to some slight extent due to improved registration, but a reference to table VI will show that there were other factors in operation, such as cholera, small-pox, and fevers.

Deaths according to season.

9. The following abstract as well as table III of Appendix gives the death-rates for each month in 1884 :—

Table showing the Deaths in each Month and in each District during the year 1884.

Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Ganjam	1,698	1,088	1,082	1,051	1,183	1,138	1,343	1,523	1,712	1,069	947	950	14,784
Vizagapatam ...	2,253	1,475	1,674	1,372	1,542	1,660	1,708	1,896	2,110	2,320	2,281	2,524	22,815
Godávari	2,999	2,096	2,129	2,469	2,827	3,168	3,942	4,178	4,195	4,212	4,954	6,259	43,428
Kistna	4,041	3,283	3,300	2,941	2,609	2,996	3,045	4,095	3,863	2,987	3,569	4,444	41,173
Nellore	2,028	1,301	1,324	1,197	1,372	1,340	1,322	1,171	1,445	1,459	1,508	1,756	17,223
Madras	2,290	2,546	2,345	1,534	1,203	995	1,051	1,433	1,702	1,086	1,425	1,669	19,279
Chingleput	2,953	2,449	2,274	1,925	1,905	1,881	2,322	2,314	2,344	2,255	2,647	2,968	28,237
South Arcot	5,486	3,511	2,591	2,455	2,549	2,590	3,646	3,258	3,081	3,332	4,112	6,334	42,945
Trichinopoly	4,200	2,396	1,775	1,642	1,804	1,746	2,183	2,015	2,049	2,319	2,811	4,041	28,831
Tanjore	13,042	6,060	3,738	3,700	5,035	7,026	8,970	5,504	4,484	4,587	5,258	8,658	76,057
Madura	3,318	2,466	1,776	1,645	1,627	1,727	1,897	1,892	1,908	2,141	3,001	6,224	29,622
Tinnevelly	9,033	3,947	3,132	2,561	2,391	2,181	2,371	2,602	2,726	2,926	5,120	14,691	53,681
Kurnool	1,336	1,022	1,258	1,290	1,335	1,263	1,280	1,323	1,214	1,266	1,402	1,527	15,516
Cuddapah	1,741	1,276	1,346	1,303	1,449	1,284	1,457	1,417	1,441	1,610	2,174	2,311	18,809
Bellary	1,325	1,082	1,119	1,227	1,479	1,718	1,743	1,563	1,440	1,320	1,459	1,314	16,889
Anantapur	883	845	806	854	869	954	1,056	1,017	954	932	1,194	1,340	11,704
North Arcot	3,974	2,550	2,614	2,200	2,411	2,397	2,971	2,461	2,687	3,099	3,672	4,333	34,869
Salem	3,733	2,497	2,201	1,877	1,922	1,899	2,148	2,005	2,078	2,206	2,817	3,174	28,557
Coimbatore	3,593	2,768	2,090	2,053	2,073	2,021	2,204	1,959	2,076	2,388	3,188	5,271	31,634
Nílgiris	91	94	85	114	137	151	136	152	131	124	104	108	1,427
South Canara ...	2,053	1,856	1,636	1,431	1,686	2,071	2,995	2,773	2,085	1,835	1,697	1,833	23,951
Malabar	4,575	5,157	4,850	4,114	3,903	4,108	4,522	4,236	3,615	3,202	3,188	3,484	48,904
Total ...	76,645	51,765	45,140	40,955	43,311	46,314	53,762	50,787	49,340	48,625	58,478	85,213	650,335
Ratio of deaths per 1,000 in each month.	2·7	1·8	1·6	1·4	1·5	1·6	1·9	1·8	1·7	1·7	2·0	3·0	23·1

These figures show that the first and last quarters, being the periods during which fevers and cholera were most destructive, were the most unhealthy seasons of the year.

Deaths according to age.

10. Table IV of Appendix gives the deaths according to age and sexes, but the results can, it is feared, be only regarded as an attempt in the direction of systematic registration. Taking the figures

as they stand, they show a large infantile mortality, a sure indication of bad sanitation. Improper food and exposure are also causes of infantile sickness and mortality amongst the poorer classes, and large numbers of children perish from the great epidemics of the country. The total deaths for the year of children under one year of age amounted to 141,872, being in the ratio of 171·4 per mille to the total births. From infancy up to 15 years of age females have obviously a better chance of life than males, but from 15 to 30 marriage and child-bearing reverse the state of affairs. From 30 onwards the females have again the superiority as regards expectation of life. These results are not only interesting as facts, but as a test of the approximate correctness of the statistics.

Table showing the Deaths according to Age for a series of years.

Ages.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Infants unable to walk (under 1 year)	93,019	88,856	96,457	90,586	109,849	63,558	66,765	92,412	103,624	106,586	125,663	141,872
Boys and girls, 1 to 15 years ...	...	...	...	...	...	...	...	...	...	...	124,864	173,703
Adults (men and women), 15 to 50 years	...	...	...	...	...	...	...	...	...	...	172,350	201,268
Old people (men and women), over 50 years ...	139,530	145,291	163,693	171,460	405,273	237,478	157,016	112,864	111,072	109,566	119,053	133,492

Deaths according to classes.

11. A reference to table V will show the deaths according to classes, and it appears that proportionally more Hindus died than Muhammadans, and more of the latter than of Native Christians.

Deaths in town and country population.

12. Table VI in the Appendix shows the deaths from the chief causes of sickness according to districts and towns of over 10,000 population, with other particulars. From this it appears that in 1884 the death-rate per thousand was, from cholera 2·6 against 1·2, from small-pox 2·1 against 1·3, and from fevers 7·6 against 7·1 in the previous year. 1,514 persons committed suicide, of whom 870 were females and 644 males. 2,290 lives were lost by snake-bite and the attacks of wild beasts. Looking at the relative mortality to population in town and country, it appears that more than twice as many died from cholera in towns as in villages, and that small-pox was also slightly more fatal amongst the urban residents. Fevers, on the other hand, show a mortality of 7·8 per thousand in rural districts against 5·2 in towns.

Causes of death.

13. The following abstract shows the chief causes of death for a series of years, and it will be noted that the great scourges of the population of Southern India, viz., cholera, small-pox and fevers, were unusually active in 1884.

Table showing the Deaths from different Causes during the year 1884 compared with previous years.

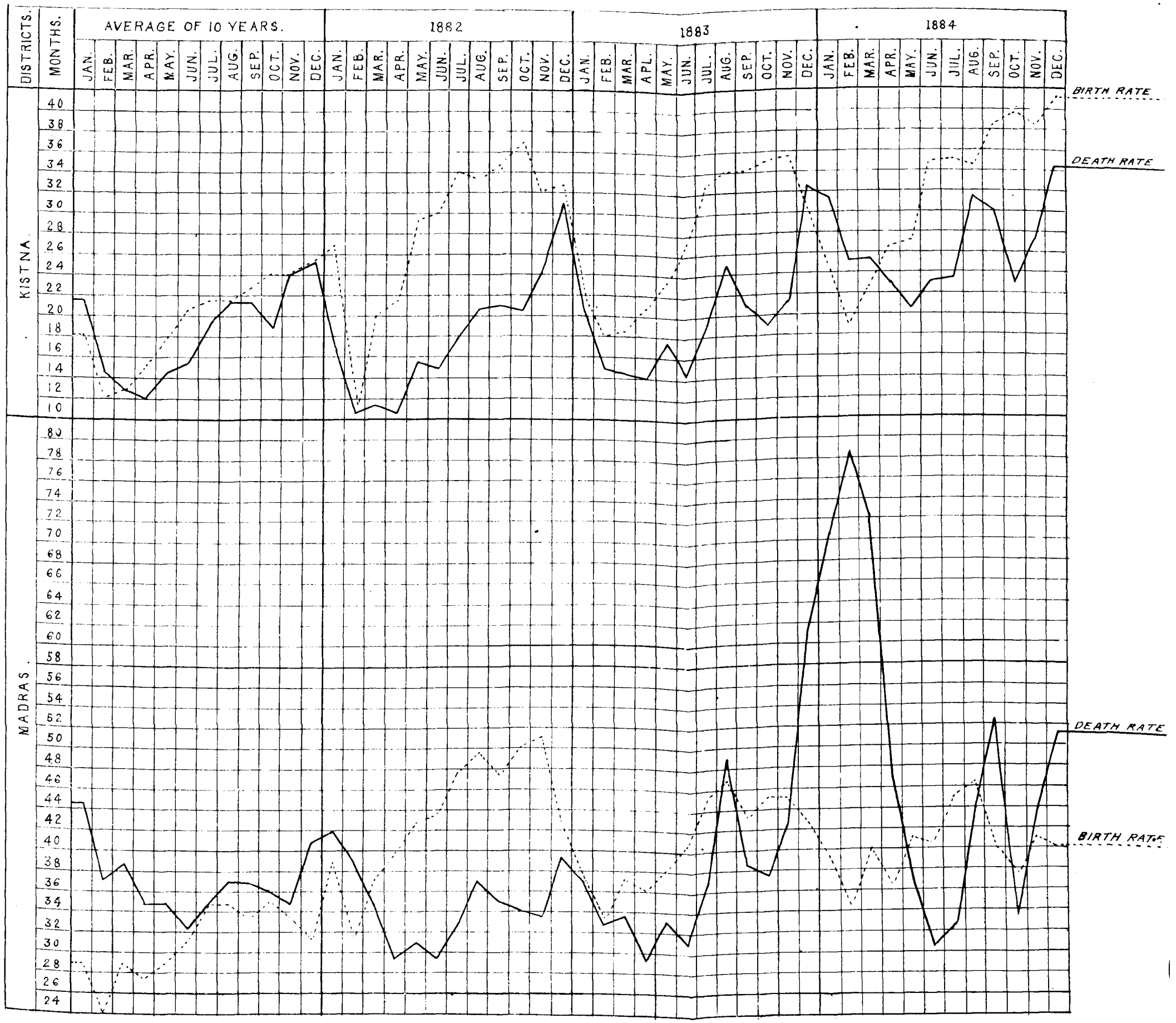
Years.	Total deaths.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Other causes.
1866	600,106	200,961	23,106	110,102	...	9,047	256,890
1867	372,026	33,205	27,907	112,511	...	8,613	189,790
1868	390,959	8,036	34,330	105,692	...	9,242	233,659
1869	451,981	21,034	17,448	132,346	...	9,310	271,843
1870	451,020	55,867	11,252	151,027	...	12,325	220,549
1871	444,371	17,656	20,823	192,469	38,928	15,323	159,172
1872	501,482	13,247	39,074	214,148	39,387	15,150	180,476
1873	506,894	840	51,784	222,843	36,392	14,251	180,784
1874	516,848	313	48,343	220,220	37,993	13,065	190,914
1875	641,260	94,546	24,775	252,042	37,484	12,421	219,992
1876	680,384	148,193	23,469	230,092	38,176	11,175	229,279
1877	1,556,312	357,430	88,321	469,241	133,366	16,460	491,494
1878	810,921	47,167	56,360	374,443	48,083	15,007	269,861
1879	549,390	13,296	17,840	285,477	23,218	12,619	196,940
1880	454,101	613	14,529	209,940	19,622	10,845	198,552
1881	465,682	9,446	15,776	203,542	18,961	11,527	206,430
1882	470,700	23,604	20,159	188,561	19,958	11,611	206,807
1883	541,930	36,284	37,975	203,786	22,098	11,509	230,278
1884	650,835	75,476	61,247	215,977	28,775	11,502	257,358

14 A

Diagram showing the Birth and Death rates per Mille per annum in the undermentioned Districts during the year 1884 Compared with previous years.

114 B

Diagram showing the Birth and Death rates per Mille per annum in the undermentioned Districts, during the year 1884 Compared with previous years.



THE DOTTED LINES REPRESENT THE BIRTH RATE.

Diagram showing the Birth and Death rates per Mille per annum in the undermentioned Districts. during the year 1884 Compared with previous years.

14 D

Diagram showing the Birth and Death rates per Mille per annum in the undermentioned Districts during the year 1884 Compared with previous years.

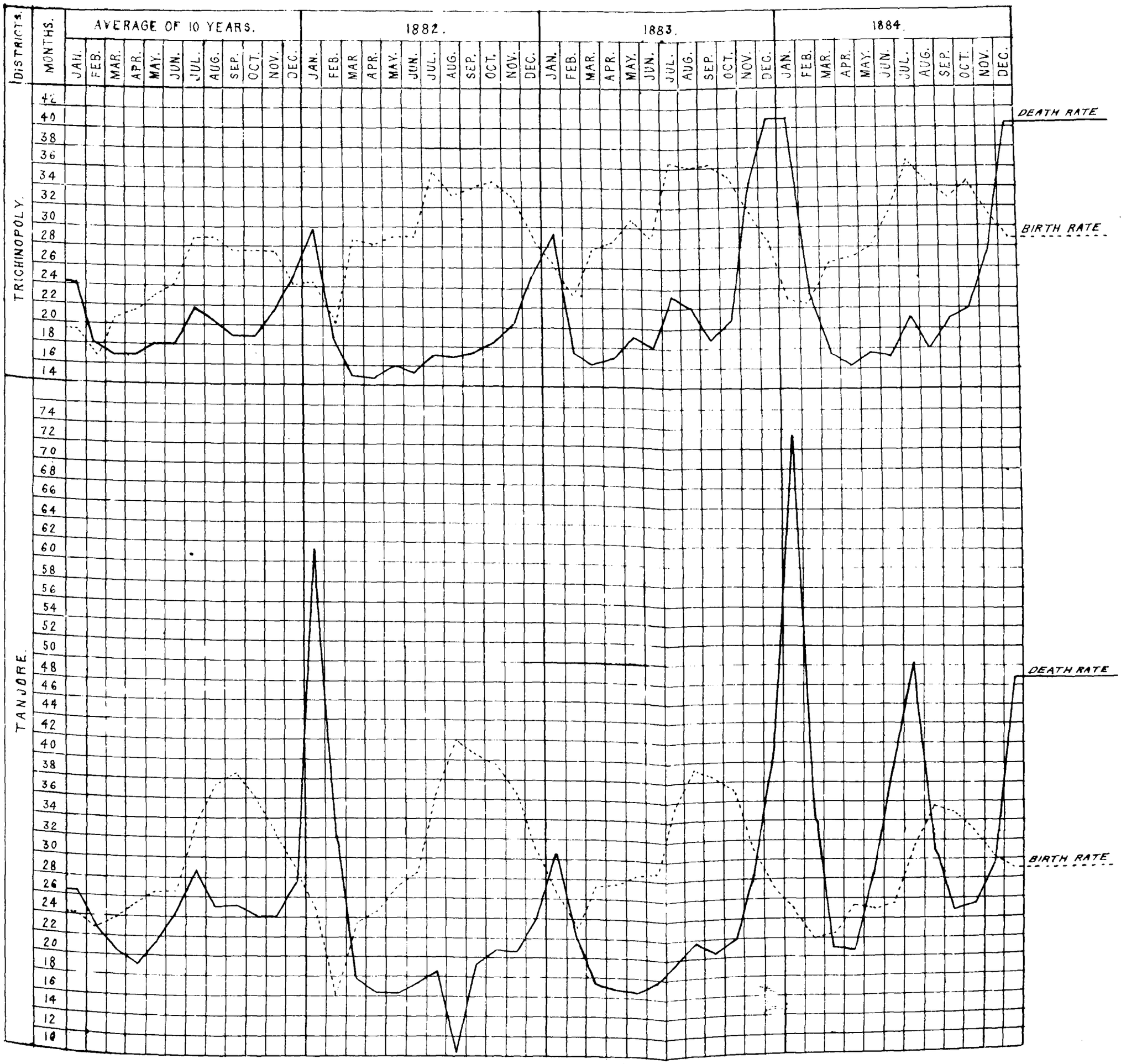


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Diagram showing the Birth and Death rates per Mille per annum in the undermentioned Districts during the year 1884 Compared with previous years

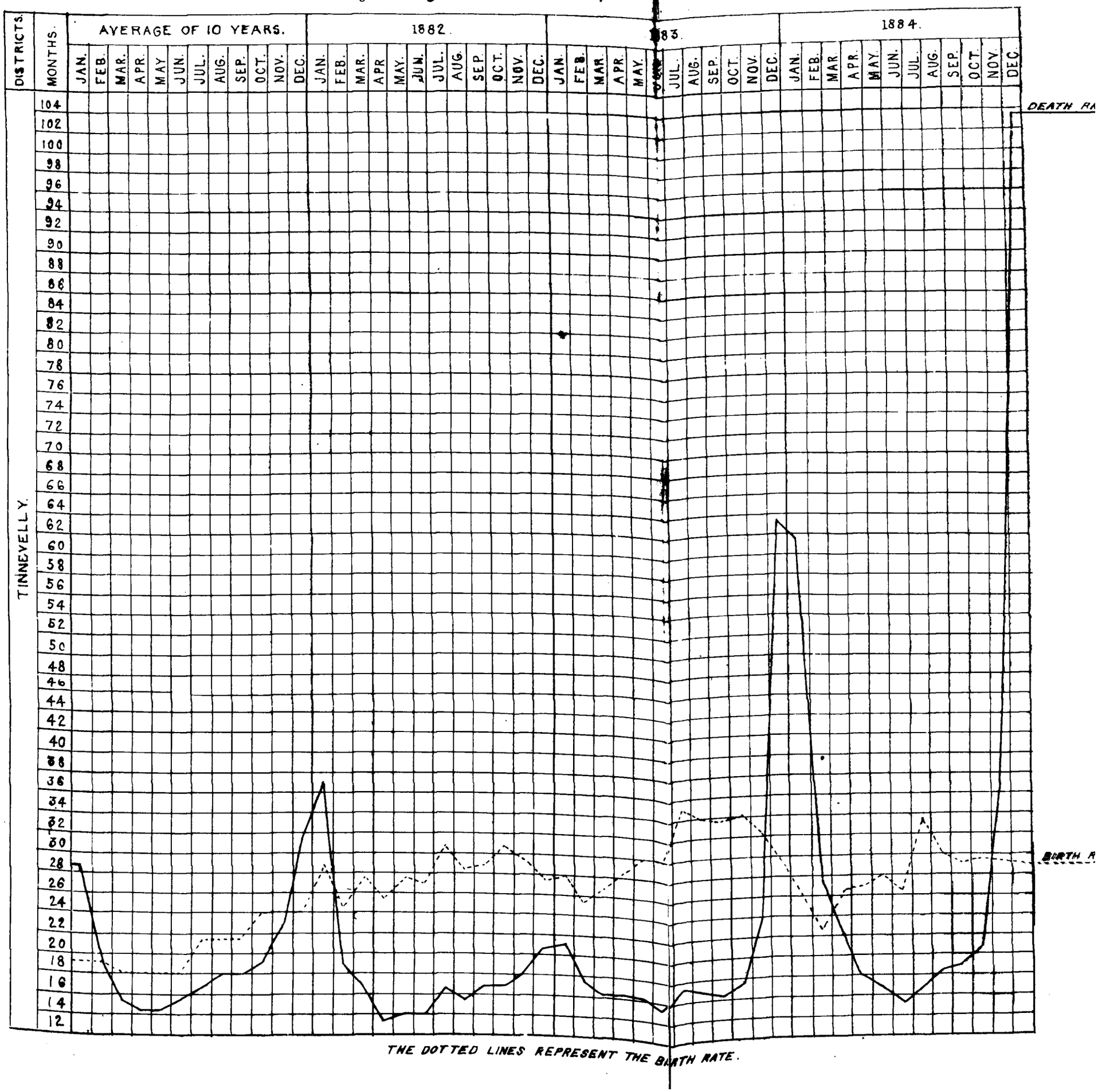


Diagram showing Birth and Death rates per Mille per annum in the undermentioned Districts during the year 1884 Compared with previous years.

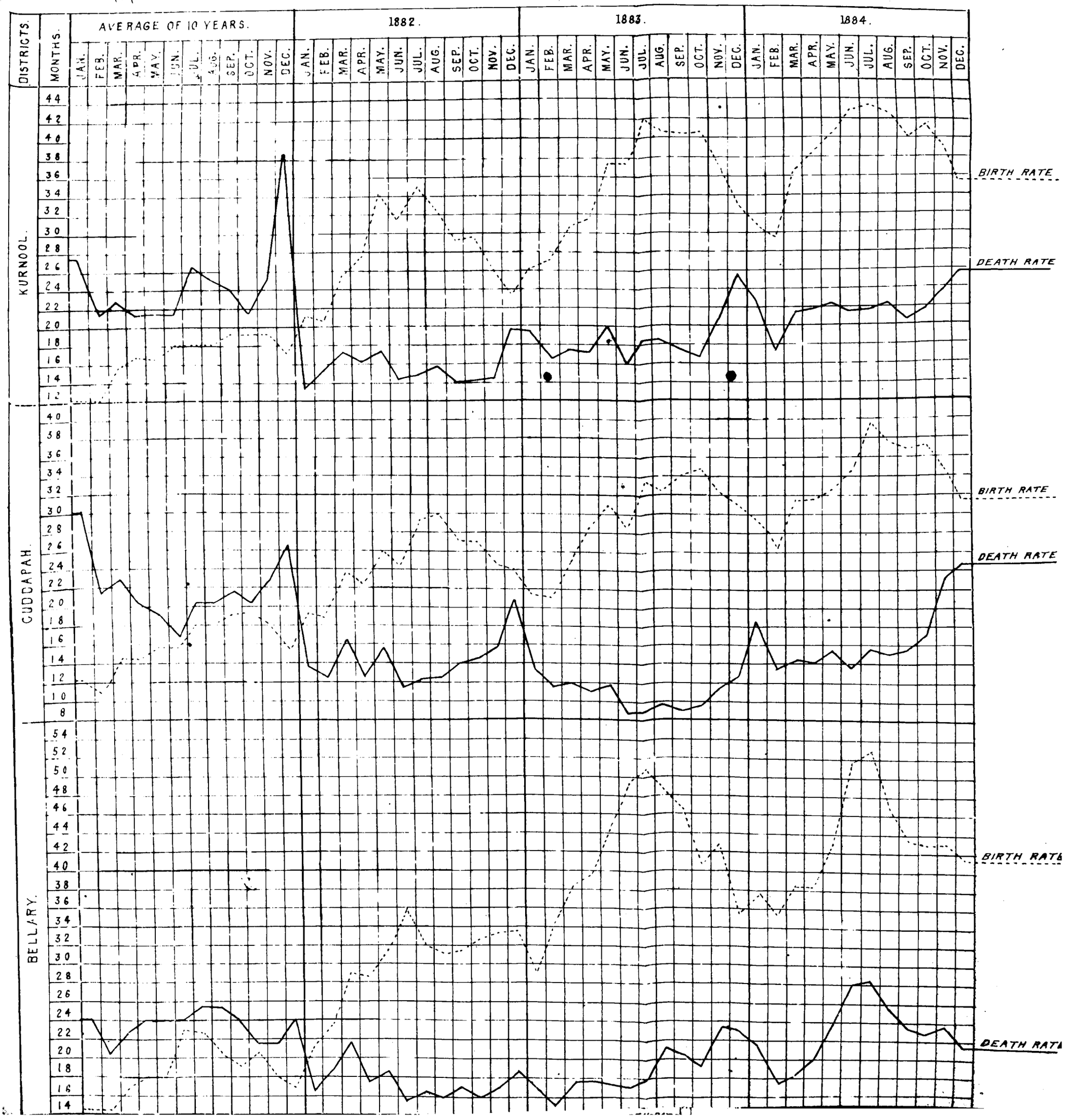


Diagram showing the Birth and Death rates per Mille per annum in the undermentioned Districts during the year 1884 Compared with previous years.

14 H

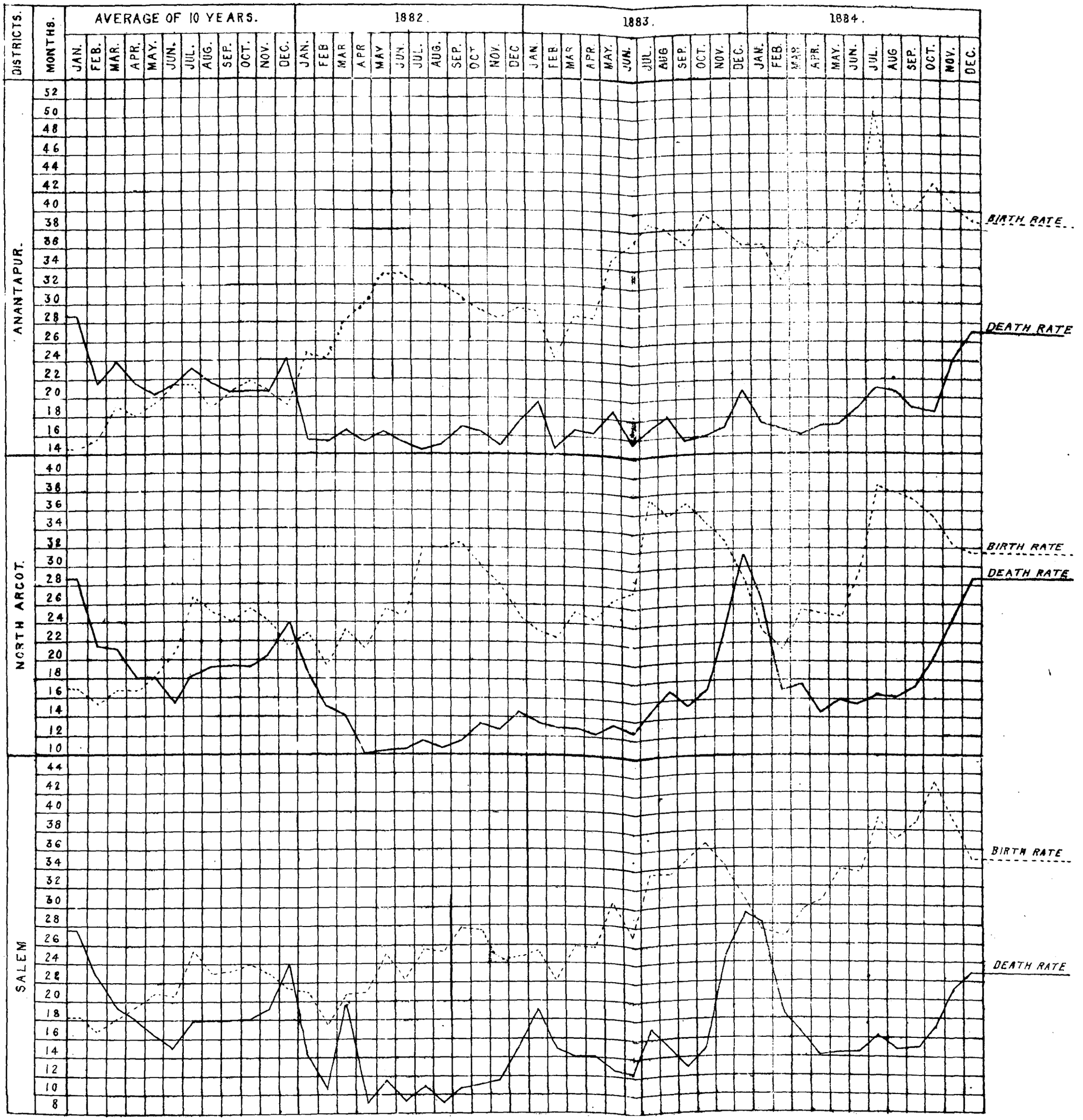
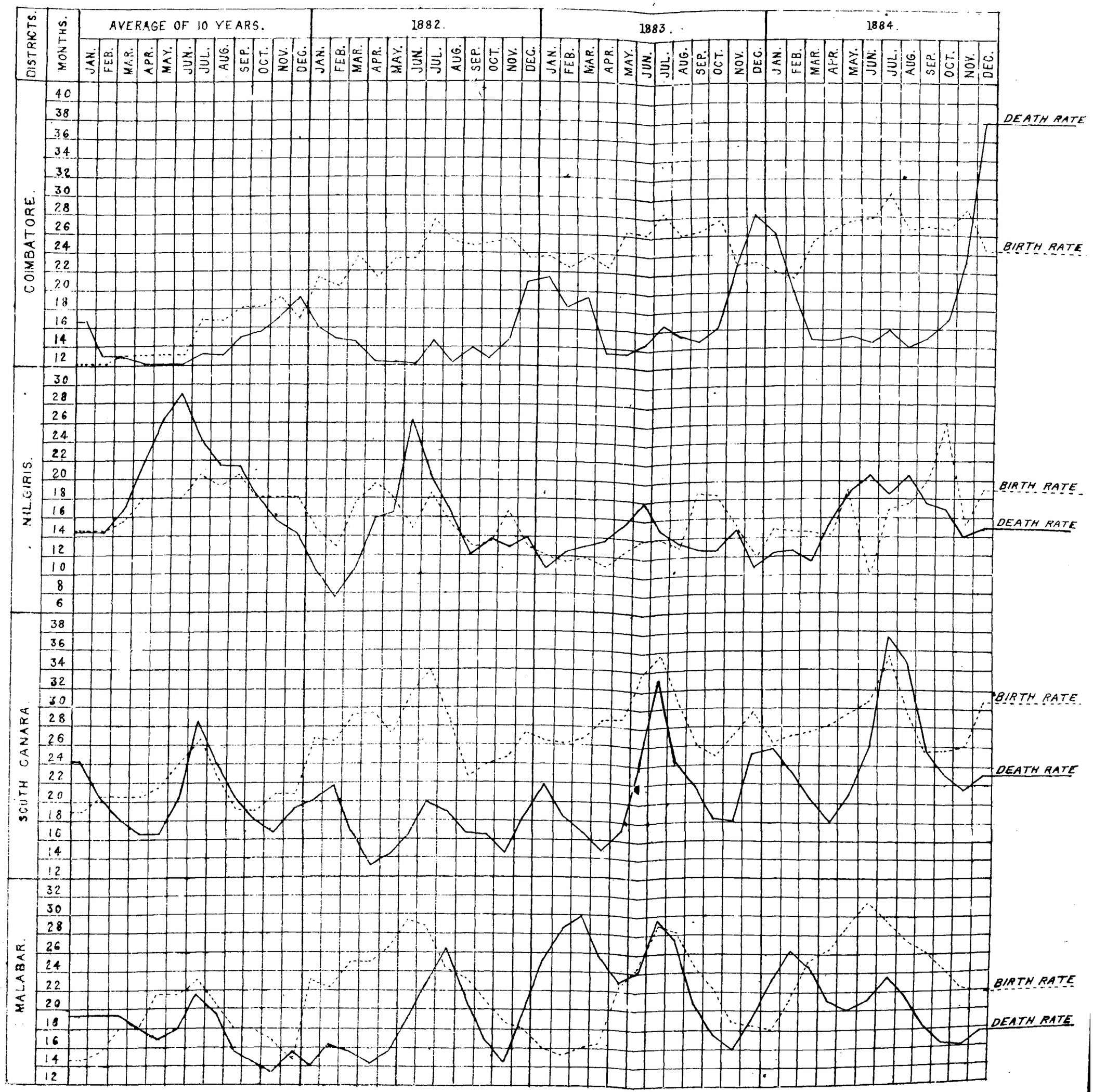


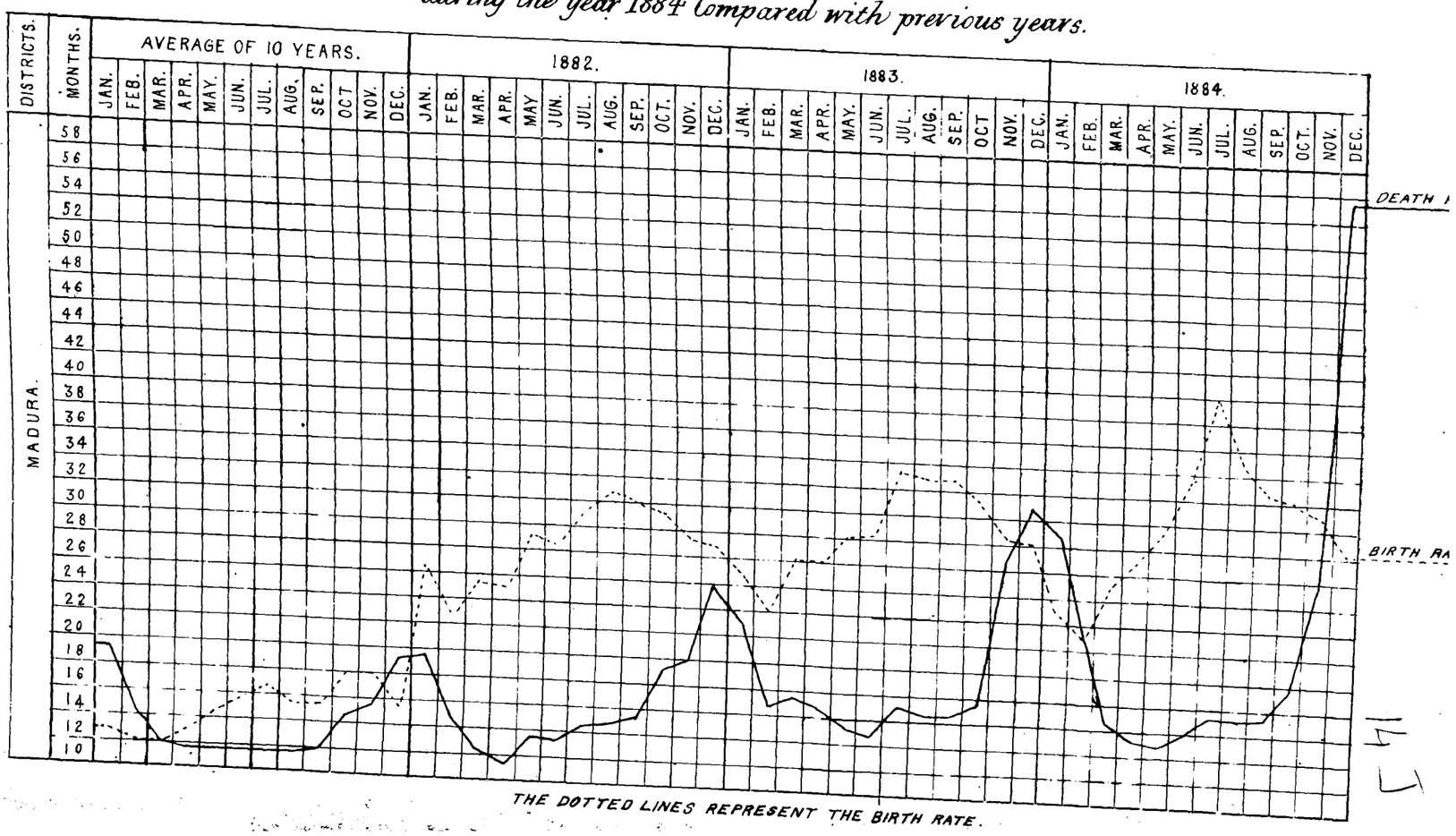
Diagram showing the Birth and Death rates per Mille per annum in the undermentioned Districts during the year 1884 Compared with previous years.

14



THE DOTTED LINES REPRESENT THE BIRTH RATE.

Diagram showing the Birth and Death rates per Mille per annum in the undermentioned Districts during the year 1884 Compared with previous years.



SECTION VI.

GENERAL HISTORY OF CHIEF DISEASES.

CHOLERA.

14. The great epidemic of cholera which invaded Southern India in 1875 lingered till the close of 1879. Its final ravages were mostly confined to the northern districts, but by the month of December it had died out, and the year 1880 began with the large population of Southern India entirely free from the disease. Throughout the year only a few cases were reported and these chiefly from the northern parts of the presidency.

15. During the first three quarters of 1881 a similar immunity was experienced, except in the north, where there was a slight revival of the disease, but in October epidemic cases began to appear in Trichinopoly, Bellary, North Arcot, Salem and Coimbatore. The year closed with cholera prevailing in all the districts south of Madras and with a total mortality of 9,446.

16. In 1882 the disease continued to prevail in the southern districts, and also to some extent in Ganjam and Vizagapatam. The epidemic was most severe in Tanjore, Madura, Tinnevelly and Trichinopoly, and the greatest numbers of deaths occurred in January, February, March and December. The total number of cholera deaths registered during the year was 23,604.

17. In 1883 the disease had all but died out in the extreme north of the presidency, and while it still continued very virulent in the south, it began to advance along the coast north of Madras and to show a tendency to invade the inland districts of Cuddapah, Bellary and Anantapur. During the last quarter of the year it was raging in Nellore, and had given the Kistna district a warning of its approach. In 1883 the mortality was greatest in the months of January, February, July, November and December, and the total deaths for the year numbered 36,284. The districts which suffered most were Tanjore, South Arcot, Tinnevelly, Trichinopoly, Salem and Coimbatore.

18. Throughout 1884 cholera prevailed in all the districts of the presidency except South Canara, which completely escaped. Its incidence in Ganjam, Vizagapatam, Kurnool and the Nílgiris, was also very slight. Tanjore again bore the brunt of the epidemic, the cholera deaths in this unfortunate district for the year having amounted to 23,671, giving a death-rate of 11·1 per thousand of population.

19. The long continuance of the disease in Tanjore and the heavy mortality caused much anxiety to Government, who accordingly invited the special attention of the Surgeon-General and of the Sanitary Commissioner to the subject. From the reply of the former it appears that during the last eighteen years in which registration has been in force there has not been a single year without cholera deaths in this district, and the disease, he thinks, is "in some degree endemic in the locality." "The conditions of soil and water in Tanjore are," it is stated, "very similar to those in Lower Bengal, where cholera is endemic, though the climatic conditions of Bengal and Tanjore vary considerably. Experience shows that in every new epidemic of cholera the disease will linger longer in Tanjore than anywhere else." The Surgeon-General further observes, "I believe that the habits of the people and their mode of life in the delta portions of the district largely contribute to the upkeep of cholera in their midst. They live in the midst of irrigated lands, and, when the rivers have dried up, take very little care of the drinking-water supplies. While the district is a wealthy one regarding its agricultural produce, the actual laborers are very poor and live in wretched hovels built on a damp porous soil."

20. Dr. Furnell, my predecessor as Sanitary Commissioner, paid a special visit to the district, and after his inspection stated it as his belief, that the cause of the continued prevalence of cholera in the Tanjore district "was most probably owing to the peculiarly contaminated water-supply upon which the people are dependent." In describing the sources of potable water he says, "but the peculiarity of the water-supply and the habits of the people favor in every possible way the propagation and retention of the disease. The beds of these water-courses in the dry weather are used as *places d'aisances;* but when they contain water, the banks are used, and the individual proceeds at once to wash his person in the water. These water-courses feed the tanks, and on these tanks the people in almost all the towns and villages of Tanjore depend for their drinking-water. Moreover, not only are these tanks filled with a water thus open to contamination, but they are themselves still more polluted in every possible way. The women bathe, wash their clothes *and the clothes taken from sick people* in them, and take home large, bright, clean chatties of the filthy fluid to drink and cook with. At a meeting of the Municipal Commissioners at Tanjore, I placed upon the table six samples of water taken from different tanks in the town, and one sample of ordinary filtered drinking water from the house of a European gentleman. The Native Commissioners could scarcely believe that the green offensive fluids exhibited—one especially from the Iyenkulam—were samples of the ordinary drinking-water of the people." He suggests that carefully conserved wells should be substituted for tanks, which are so liable to pollution, and would even go a step further by having in the larger villages pumps to raise the water into reservoirs, from which it might be drawn by stop-cocks.

21. These observations of the chief medical and sanitary authorities appear to fully explain why cholera should be so severe and persistent in Tanjore. The general death roll of the presidency will show how much has yet to be done to protect the people of Southern India from epidemic disease, and that our efforts must not be confined to periods when sickness is prevailing, but be continuous and systematic. Fortunately, too, the sanitary precautions which have been found most effectual in warding off cholera are equally valuable for the prevention of other diseases.

22. In offering these remarks, I have been placed at a disadvantage from not having been in charge of the office during the year, but this will be fully compensated for by the special report on the subject which Dr. Furnell has promised to submit.

23. In table VII of Appendix full details are given as to the severity of the disease in the various districts and its seasonal prevalence; and the following abstract gives the cholera mortality for a series of years:—

Deaths from Cholera for a series of years.

1866	200,961	1876	148,193
1867	33,205	1877	357,430
1868	8,036	1878	47,167
1869	21,034	1879	13,296
1870	55,867	1880	613
1871	17,656	1881	9,446
1872	13,247	1882	23,604
1873	840	1883	36,284
1874	313	1884	75,476
1875	94,546		

SMALL-POX.

24. In 1884 this disease prevailed in every district of the presidency, and the mortality from it was unusually heavy.

The following table gives the deaths from small-pox during each of the past fourteen years, and it will be noted that the ratio in 1884 was 2·1 per thousand of population and therefore higher than in any other year of the series except 1877:—

Table showing the Deaths from Small-pox compared with previous years.

Years.	Population from which returns were received.	Deaths from small-pox.	Ratio per mille of population.
1871	24,555,046	20,823	0·8
1872	30,147,779	39,074	1·2
1873	30,287,842	51,782	1·7
1874	30,360,221	48,343	1·5
1875	30,278,903	24,775	0·8
1876	29,157,056	23,469	0·8
1877	29,209,542	88,321	3·0
1878	29,127,205	56,360	1·9
1879	28,991,267	17,840	0·6
1880	28,778,097	14,529	0·5
1881	28,676,375	15,776	0·5
1882	28,887,111	20,159	0·6
1883	28,503,100	37,975	1·3
1884	28,151,952	61,247	2·1

25. The table further shows that the disease is subject to periods of repose and severe outbreaks. The latter do not appear to occur with any regularity, but are no doubt influenced by certain atmospheric states and any conditions that lower the vital powers of the general population. Where such a combination occurs—and there are at the same time large numbers of young people unprotected or imperfectly protected by vaccination—we have a severe outbreak, to be followed by a lull till similar conditions again occur. But the disease also varies in the malignancy of its type, as we know that in some of the former outbreaks in Europe it was almost as fatal in its ravages as the plague. Bad sanitary conditions are conducive to severity of type, and there can be no doubt that the malignancy of the epidemic in 1883-84 in Madras town, was aggravated by the crowded and filthy state of parts of Black Town.

Deaths from small-pox according to ages.

26. The following abstract shows the deaths that occurred at various ages, and it will be observed that of the total deaths, 39,292—or nearly 64 per cent.—were in children under 12 years of age. The liability of the young to small-pox is still further illustrated by the results during the severe epidemic of 1883-84 in Madras town, as 74 per cent. of the total deaths occurred in children under 3, and over 21 per cent. in children above 3 and under 12 years of age.

Deaths from Small-pox according to Age.

Districts.	Under one year.	Under twelve years.	Above twelve years.	Total.
Ganjam	53	143	168	364
Vizagapatam	306	663	634	1,603
Godávari	1,230	3,628	6,487	11,345
Kistna	2,023	5,843	2,520	10,386
Nellore	346	652	680	1,678
Madras	1,467	2,421	109	3,997
Chingleput	865	1,642	614	3,121
South Arcot	1,465	2,831	1,562	5,858
Trichinopoly	117	293	295	705
Tanjore	546	1,603	1,890	4,039
Madura	388	904	58	1,350
Tinnevelly	245	858	298	1,401
Kurnool	408	764	491	1,663
Cuddapah	155	247	130	532
Bellary	264	766	28	1,058
Anantapur	196	350	56	602
North Arcot	1,060	1,900	316	3,276
Salem	308	530	527	1,365
Coimbatore	163	514	103	780
Nílgiris	...	2	9	11
South Canara	39	122	516	677
Malabar	137	835	4,464	5,436
Total	11,781	27,511	21,955	61,247

Deaths from small-pox according to districts and season.

27. Table VIII in Appendix shows the mortality from small-pox according to districts and season. Excluding Madras, which only embraces the town and which will be specially referred to hereafter, it appears, that the disease was most severe in the Kistna and Godávari districts, the death-rates in these having been respectively 6·7 and 6·3 per thousand of population. Taking these results as a measure of the number of unprotected persons, vaccination requires to be energetically pushed in both these districts. Chingleput, South Arcot, Kurnool and Malabar show death-rates ranging from 3·2 per thousand in the two first named to 2·3 in the last. Of the total of 61,247 who died from small-pox throughout the presidency, 31,296 were males and 29,951 females. The districts in which the lowest death-rates occurred were the Nílgiris, Ganjam, Coimbatore and Cuddapah. The disease was most prevalent and most fatal during the first seven months of the year.

28. In the town of Madras small-pox assumed an epidemic form in the two last quarters of 1883, and in the first quarter of 1884 it was so severe that Government deemed it necessary to appoint a Special Health Officer as a temporary measure, and to render the vaccination of children above three and under twelve years of age compulsory. During the first quarter of 1884 the deaths in Madras from small-pox numbered 3,157,* and were therefore in the ratio of 7·7 per thousand of population. The outbreak reached its climax in March, in which month the mortality amounted to 1,256. In April there was a marked decline, and, by the close of the second quarter, during which 804 deaths occurred, the epidemic was practically at an end and public fear abated. As already stated, the disease was most destructive amongst children, and, as might be anticipated, it raged with greatest severity in the most crowded and dirtiest quarters of the town. Owing to native habits and prejudices, it is no doubt difficult to carry out in such cases the isolation of the sick, but in my opinion strenuous efforts should be made whenever small-pox invades a town or village to enforce this salutary measure. Such an arrangement in this country need not involve any great expense, as sheds or pavilions, with leaf or grass roofs and partial walls of matting, will meet all requirements. In the report of the Special Health Officer it is stated, "there was no attempt at isolation in the houses of the affected, and persons suffering from all stages of the disease might have been seen in the streets lying in the sun, and when convalescent, but still centres of infection, moving about the crowded bazaars of the town or at the railway stations." Under such circumstances and with a large section of the population, especially the young, unprotected by vaccination or previous attack, it is not surprising that the disease was so prevalent and fatal. The total mortality in the town during the epidemic of 1883-84 was 5,284 or 13·0 per thousand, and in 1884 the deaths numbered 4,064.

One good result that came out of the severe outbreak was the impulse which it gave to vaccination amongst all classes of the community.

FEVERS.

29. The following table shows the deaths from fevers in the several districts of the presidency during each of the past nineteen years, and it appears that, as in the case of small-pox and cholera, fever was also unusually prevalent and fatal:—

* The figures used with reference to this epidemic are taken from the Health Officer's report, and include also the mortality amongst Europeans and Eurasians.

Table showing the Deaths from Fevers during 1884 compared with previous years.

District.	Population for which returns received during 1884.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Ganjam ...	1,020,011	7,085	6,809	7,412	8,451	7,655	8,420	12,025	10,732	10,720	13,379	13,499	11,508	15,555	11,728	11,831	14,203	12,038	12,016	10,789
Vizagapatam ...	1,456,083	6,815	5,913	6,812	9,226	9,757	11,761	24,283	13,093	13,936	14,797	16,727	15,292	16,953	19,717	14,566	16,215	16,525	15,952	18,812
Godávari ...	1,790,850	9,675	13,885	8,262	17,200	12,654	11,306	14,118	16,201	15,143	16,125	20,165	13,398	16,403	17,586	11,453	12,018	14,366	14,221	16,857
Kistna ...	1,548,355	3,164	3,537	2,709	3,397	6,625	8,249	11,406	13,371	10,981	10,611	10,929	10,807	16,701	15,047	11,396	9,998	13,221	12,933	14,056
Nellore ...	1,183,132	2,867	1,834	1,972	2,318	4,138	7,760	8,601	10,279	8,988	8,548	8,329	26,641	29,604	9,812	6,293	6,306	6,097	7,702	8,094
Madras ...	389,984	2,256	2,456	2,232	2,015	2,296	2,474	2,948	2,569	2,640	2,395	2,309	5,971	4,851	3,421	3,507	3,645	3,674	3,422	3,726
Chingleput ...	978,524	2,227	1,996	2,096	2,631	3,321	3,916	5,535	5,548	5,611	6,042	5,718	10,500	6,203	7,213	7,455	7,040	5,582	5,574	6,082
South Arcot ...	1,814,279	2,790	3,501	2,335	3,252	6,354	11,315	10,548	11,394	9,950	13,544	11,055	28,610	15,672	18,323	10,826	10,611	9,262	10,110	10,524
Trichinopoly ...	1,214,485	3,174	2,456	2,521	2,689	6,289	9,942	9,150	8,988	8,712	7,978	7,448	13,486	10,356	7,511	5,968	6,777	5,905	6,323	5,973
Tanjore ...	2,129,538	4,906	4,699	5,943	7,151	7,210	7,309	6,105	5,767	5,892	5,154	5,004	5,844	5,825	5,604	4,399	4,660	3,405	3,742	4,074
Madura ...	1,293,829	4,652	3,510	4,411	4,882	4,195	7,552	8,901	9,297	10,153	9,222	9,690	27,393	20,050	16,318	8,033	8,048	8,043	9,158	9,496
Tinnevelly ...	1,699,056	2,379	1,897	2,420	2,960	4,990	5,758	5,952	6,151	10,723	7,564	7,886	10,607	11,215	10,001	7,417	7,518	5,750	5,937	6,448
Kurnool ...	709,218	6,698	7,913	7,737	8,160	8,696	9,581	11,406	12,188	12,062	16,134	17,587	55,394	32,660	19,780	16,295	14,897	11,925	9,984	10,771
Cuddapah ...	1,120,714	6,594	6,168	7,196	9,272	10,244	14,093	12,676	13,833	13,741	23,540	21,011	61,708	44,559	25,177	22,411	15,490	13,295	11,243	12,252
Bellary ...	1,336,017	11,514	8,227	8,445	8,503	7,753	7,997	8,468	9,659	9,210	13,569	10,003	30,555	25,480	13,223	10,508	8,799	4,632	4,359	4,622
Anantapur ...																		2,089	1,530	1,548
North Arcot ...	1,816,692	6,273	6,895	7,491	8,454	11,159	15,381	17,107	22,093	20,698	25,493	17,496	46,124	26,764	21,627	14,782	11,079	9,296	10,487	11,755
Salem ...	1,598,970	6,909	5,100	5,771	9,271	15,658	19,501	18,125	25,254	21,898	21,377	16,524	50,306	24,440	21,684	11,379	10,833	9,251	10,081	10,908
Coimbatore ...	1,657,144	3,275	2,908	3,425	3,483	7,612	11,925	10,103	10,294	11,214	12,850	10,673	21,592	13,922	14,405	9,876	10,888	11,125	12,843	12,897
Nílgiris ...	88,324	...	...	...	409	397	531	607	406	537	494	852	1,527	995	672	689	771	772	768	1,063
South Canara ...	955,595	4,287	11,438	6,912	5,596	3,796	6,741	4,323	3,824	4,084	5,239	3,740	6,068	17,413	10,970	5,633	6,059	4,462	7,410	10,384
Malabar ...	2,351,152	12,562	11,381	9,590	13,026	10,228	10,957	11,967	11,892	14,327	14,987	13,447	15,910	18,822	15,558	15,253	17,687	17,856	27,961	24,816
Total Madras Presidency...	28,151,952	110,102	112,511	105,692	132,346	151,027	192,469	214,148	222,843	226,220	252,042	230,092	469,241	374,443	235,477	209,940	208,542	188,561	208,786	215,977

30. The chief facts connected with the prevalence of fever in 1884 are summarized in table IX of Appendix. From this we learn that the disease in some form was most fatal in the districts of Kurnool, Vizagapatam, Nílgiris, Cuddapah, South Canara, Ganjam, Malabar, Madras (Town), Godávari and Kistna. In this group the highest rate of mortality was 15·1 and the lowest 9·0 per thousand of population. In the other districts the death-rates varied from 7·7 to 1·9 per thousand. In ten districts fever was more prevalent than during the preceding five years, and in the others less so. The total deaths from this cause during 1884 numbered 215,977 (111,246 males and 104,731 females), being at the rate of 7·6 per thousand of population. Fever was most fatal in the cold months of January, November and December, but the deaths were also very numerous in the third quarter of the year. That a chill may develope an attack of fever is a well-known fact, but that there is a veritable malaria in most cases no one can doubt.

BOWEL-COMPLAINTS.

31. The deaths from these in 1884 numbered 28,775 against 22,098 in the preceding year. When cholera is epidemic bowel-complaints are more frequent than usual, but at the same time there cannot be a doubt that some deaths due to cholera are registered under the milder term. Even in military statistics, which are entirely in the hands of medical officers, a tendency is sometimes observed to avoid the more formidable name of cholera.

32. Table X in Appendix shows the deaths from bowel-complaints in the districts during each month of the year, and it will be noted that they were most numerous in the months during which cholera is most prevalent. The districts showing the largest death-rates per mille of population from bowel-complaints are Madras (Town), Chingleput, South Canara, Malabar and Tinnevelly.

INJURIES.

33. The deaths from these causes amounted to 11,502 against 11,509 in 1883, and were fewer in number than in any preceding year since 1880. In the year under review 1,514 are attributed to suicides, 861 to wounds, 6,837 to accidents, and 2,290 to snake-bites and the attacks of wild animals.

Table showing the Deaths from Violence during the year 1884 compared with previous years.

Years.	Suicides.	Wounds.	Accidents.	Snake-bite and killed by wild beasts.	Total.
1866	623	...	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	1,093	8,473	3,387	15,323
1872	2,366	944	8,724	3,116	15,150
1873	2,077	918	8,267	2,989	14,251
1874	1,876	828	7,762	2,599	13,065
1875	1,811	880	7,177	2,553	12,421
1876	1,715	896	6,187	2,377	11,175
1877	2,575	1,372	10,425	2,088	16,460
1878	2,464	1,230	9,324	1,989	15,007
1879	1,926	1,119	7,205	2,369	12,619
1880	1,487	964	6,021	2,373	10,845
1881	1,603	977	6,555	2,392	11,527
1882	1,644	1,012	6,653	2,302	11,611
1883	1,477	840	6,874	2,318	11,509
1884	1,514	861	6,837	2,290	11,502

SECTION VII.

GENERAL HISTORY OF VACCINATION.

34. During 1884 the operations of the Vaccination Department, past and current, were rigorously tested by the great epidemic of small-pox, which exhibited in many quarters an unusual malignancy of type and a corresponding infective power.

35. Unfortunately we have no means of ascertaining the extent to which the protective influence of vaccination was manifested, but we may, from experience elsewhere, feel perfectly sure that it had the usual effect in restricting the spread and modifying the character of the disease, and in saving life. It would, however, be satisfactory at this stage of the history of preventive medicine in India, if we could collect some reliable data as to the actual value of our past vaccination operations.

36. A good deal might be done in this direction if, in the case of admissions for small-pox into civil hospitals and dispensaries, the number and character of the vaccination marks borne by the patients, and the results of treatment as to death or recovery, were in each instance recorded. An inquiry of this nature would prove an efficient test, and in course of time would give us a large amount of valuable information, which sooner or later is certain to be required for public purposes.

37. Vaccination unfortunately does not always confer the full protective influence which it is capable of exerting. To do this, the lymph must be good and the operation properly performed. Climate and protracted humanization exercise a deteriorating influence on the vaccine, while time reduces in the individual the amount of protection originally conferred, rendering a repetition of the operation necessary. Again the number of arm-marks has a most important bearing on the validity of vaccination.

38. An inquiry of the kind suggested would therefore, to some extent, show how far the conditions of thorough vaccination have been fulfilled amongst the general population; and, making allowance for the agency it has had to work with, and the obstacles encountered, I do not think that the Vaccine Department need shrink from the investigation.

39. That the people generally in India should be more or less averse to vaccination is hardly to be wondered at, considering that even in England it has been found necessary to render it obligatory by law, and that, although there exist overwhelming proofs of its efficacy, there are people illogical enough to contend that it is valueless as a protection against small-pox. In fact the marvel is that the common people in this country are not more opposed to an operation which to some extent comes in contact with religious scruples, and of which the advantages are not always immediately obvious. Possibly their familiarity in some districts with inoculation with small-pox virus, has to some extent smoothed the way for the milder operation of vaccination. If we could only now get the educated classes of the native community to realize the inestimable value of vaccination, and to take an active interest in a matter of such consequence to all classes, the progress of the prophylactic would be much more satisfactory, and they would probably be the first to ask Government for some measure to render it compulsory.

40. I am old enough to have conversed with people at home who lived prior to the general introduction of vaccination, and who resided in a remote district to which small-pox inoculation had never penetrated: and there can be no doubt that Jenner's discovery was for some time regarded with nearly as much suspicion by

the people at large in some parts of Great Britain, as it now is in India. And yet, at the time the conversation was held, vaccination was deemed as necessary for a child as the rite of baptism. We have no reason to despair therefore, I think, of vaccination becoming in due course more popular in Southern India.

41. In the Appendix will be found the Annual Report on Vaccination by Dr. Laing, Inspector of Vaccination and Deputy Sanitary Commissioner.

The statement of the strength of the establishment for 1884 shows an increase of 2 first-class Deputy Inspectors, 6 second-class Deputy Inspectors, and 38 Vaccinators, as compared with the numbers in the previous year. The augmentation in both the inspectorial and vaccinator grades was made, because the ranges in some districts were too large, or to meet the increased demands for vaccination due to the great prevalence of small-pox.

42. The total number vaccinated was 803,469 against 753,589 in 1883, making an increase of 49,880 in favor of 1884. Of the operations, 773,118 were primary and 30,351 secondary, so that the former were 36,456, and the latter 13,424, in excess of the corresponding results in 1883. The departments in which an increase occurred were Local Fund (26,598), Municipalities (16,538), dispensaries (9,339), and the army (2,699). A great impetus was given to re-vaccination by the prevalence of small-pox. In Government, Cantonments, Native States and Medical Subordinates the operations were less by 4,490, 393, 246 and 165 respectively.

43. The general rate of successful operations in 1884 was 91·2 per cent. against 91·7 per cent. in 1883. Taking primary and re-vaccinated cases separately, the ratio of success for the former was 92·6 per cent. against 92·7, and for the latter 54·4 against 46·4 in 1883. In primary vaccination the highest amount of success (97·1 per cent.) was obtained by Government vaccinators, and the lowest (59·0 per cent.) by medical subordinates. In cases of re-vaccination the greatest success (89·6 per cent.) was obtained in the European army, and the lowest (28·1 per cent.) again by medical subordinates.

44. Infantile vaccination continued backward, as the total number of successful operations performed by Local Fund and Municipal establishments was in the ratio of 15·4 per cent. on births, against 15·7 in 1883. The largest number of successful cases (375,687) was in children over one and under six years of age and in those above six years (204,658), but the latter shows a decline of 12,732 as compared with the result for 1883. Contrasting the work of establishments for the two years with respect to infantile vaccination, there was an increase under every head in 1884 except in the case of Government vaccinators.

45. Local Fund Districts.—The work done in Local Fund districts in 1884 shows an improvement, as the number of operations was 26,598 in excess of the total for 1883. The increase took place in thirteen circles, but in the eight marginally noted there was a decline. Of the latter group Kurnool shows the largest decrease (15,332) and Malabar the next largest (13,674). Of the total number of primary operations (excluding the unknown) by Local Fund agents, 17 per cent. were in children under one year of age, 52·8 in children over one and under six, and 26·9 in individuals above six years. Bellary shows the largest ratio (57·0 per cent.) of infantile vaccinations and Malabar the lowest (0·8). In explanation of the low rate of infantile vaccination in the districts as a whole, Dr. Laing says "that in many parts of the presidency it is a common practice for the parents to hide their children when the vaccinator appears, and this will continue as long as registration of births is not compulsory." Explanations as to the falling off in the number of operations in various districts will also be found in Dr. Laing's report.

Anantapur.	Kurnool.
Bellary.	Malabar.
Cuddapah.	South Canara.
Ganjam.	Tanjore.

46. As in 1883, the largest number of operations (61,078) was done in the Madura district and the smallest (12,382), excluding the Nílgiris, in Cuddapah. The Kistna district exhibited the greatest activity in vaccination work, as it returned 40,149 cases against 24,118 in 1883. This increase was due to the presence of small-pox, which led to the employment of additional vaccinators.

47. Of the total number vaccinated in 1884 by Local Fund establishments, 54·6 per cent. were males and 45·4 females, against 55·8 and 44·2 respectively in 1883. The relative proportions of the sexes operated on in the several districts did not differ to any remarkable extent except in Malabar, where the ratios were for males 76·3 and for females 23·7 per cent.

48. The rates of success for the districts generally in 1884 were on the whole satisfactory, having been for primary cases 94·0 per cent. and for re-vaccinations 75·5, against 93·6 and 45·1 in 1883. The highest ratio of success (97·8 per cent.) was obtained in the Madura district, and the lowest (84·8) in the Kistna circle.

49. The average number of operations done by each vaccinator was 961 or 2 less than in 1883. In nine districts there was an increase in the work done, ranging from 420 per man in Vizagapatam to 12 in Madura. The agents in the other districts show a decline in cases, ranging from 640 per man in Kurnool to 2 in Bellary.

50. Municipalities.—The staff of vaccinators employed by Municipalities was somewhat modified as compared with its constitution in 1883, there having been an increase of 5 second-class vaccinators and 4 probationers and a decrease of 1 first-class vaccinator. The work done shows an increase of 16,538 operations in favor of 1884, but in primary vaccination the percentage of success was lower than 1883—90·2 per cent. against 92·1—and only fractionally higher in re-vaccination.

51. Of the total successful primary operations, 26·3 per cent. were in infants, 41·3 in children over one and under six years, and 22·6 in individuals over six years of age, against 27·8, 40·9, and 23·3 respectively in 1883. There was thus a slight falling off in infantile vaccination and in operations on persons over six years of age, but an increase in the number of children vaccinated between one and six years of age. The total primary operations in municipal towns numbered 97,765 against 91,665 in 1883. They thus in the aggregate exceeded the births, which amounted to 55,152 in 1884, but as the greater portion of the cases was in children and persons over one year of age, the operations failed to protect the whole of the infantile population. Considering the difficulties attending vaccination, it is feared that it will be some time before vaccination, even in towns, can be pushed to keep pace with the births, unless it be made compulsory.

52. The Municipalities which show the most marked decline in work in 1884, as compared with the results for 1883, are Coonoor, Mangalore, Calicut, Dindigul and Erode; but Cocanada, Masulipatam, Rajahmundry and Salem exhibit a creditable increase. In Madras the cases numbered 56,893 against 40,940 in 1883, the increase being due mainly to the presence of small-pox, but partly to the introduction of compulsory vaccination. Excluding Madras, the largest number of primary operations (3,463) was done in Trichinopoly and the smallest (171) in Wálajápet.

53. Government Vaccinators.—There were 16 of these at work as in 1883, and they vaccinated in 1884 12,401 persons against 16,891 in the preceding year. The decrease (4,490 cases) was chiefly in the Ganjam hill tracts, and was mainly due to the absence of small-pox, which, when prevalent, gives an impetus to the work. The percentage of success in 1884 was satisfactory, having been 97·1 against 96·6 in 1883. Of the successful operations, 701 were on infants, 3,867 on children above one and under six years of age, and 7,465 on persons above six years.

54. Native States.—There was no change in the staff, but the total number of operations (4,506), contrasted with the result in 1883, shows a decline of 246 operations. The percentage of success was higher, having been 95·2 against 93·3 in 1883. The average number vaccinated by each vaccinator was 501.

55. Dispensaries.—279 institutions, or 12 more than in 1883, furnished returns, but in nine instances no work was done. The number of operations performed was 9,339 in excess of the result for 1883. The institutions in all the districts, except those of Nellore and Malabar, show an increase of work, which is attributed by Dr. Laing to Surgeon-General Cornish having issued a circular on the subject, and to the circumstance that some Local Fund Boards ruled, that in places where there are dispensaries vaccination is to be carried on entirely through their agency.

56. Cost of Vaccination.—The following abstract contrasts the average cost of vaccination by the several establishments at work:—

	Average cost per successful case.		
	RS.	A.	P.
Government Vaccinators	0	7	6
Local Fund do.	0	3	9
Municipal do.	0	4	0
Native States (Zemindary)	0	4	0
Cantonments	0	3	1

The average cost of each successful operation was therefore As. 3-10 against As. 3-9 in 1883.

57. Supplies of Lymph.—In many districts it was found difficult to keep up a supply of lymph, but its quality was on the whole satisfactory. Animal vaccination was carried on in Madras, Bangalore, Tanjore, Negapatam, Guntúr, Bellary and Harpanahalli circles, and was popular and satisfactory. Its extension is desirable and will be pushed as much as possible.

58. Compulsory Vaccination was brought into force in the city of Madras on the 23rd May 1884. Eight vaccine depôts were opened in various parts of the town to give the people the necessary facilities for complying with the terms of the Act. Supplies of lymph from calves were always available, and so far the results were satisfactory.

59. Inspectional Staff.—Dr. Laing reports that "the conduct of the Deputy Inspectors, with a few exceptions, has been satisfactory on the whole, and there has been an improvement in their work in 1884."

SECTION VIII.

REMARKS ON THE SICKNESS, &c. OF THE ARMY AND MILITARY SANITARY WORKS.

EUROPEAN TROOPS.

60. The strength of Her Majesty's European troops belonging to the Madras Presidency in 1884 was as follows:—

Strength on the 1st January 1884	10,774
Increase during the year by recruits, drafts from England, transfers, &c.	3,193
	13,967
Decrease during the year by invaliding, discharged, time-expired, &c.	2,747
Strength on the 1st January 1885	11,220

Sickness and mortality.

61. The health of European troops, although disturbed by typhoid fever and cholera, was on the whole very good, and the death-rate lower than any on record in this presidency.

62. The admissions during the year were in the ratio of 1,106·1, while the average daily sick rate stood at 59·1 per thousand of strength, against 991·0 and 59·71 respectively, the rates in 1883. The mortality was reduced to the very low ratio of 8·5 per thousand, a most satisfactory result considering the great prevalence of epidemic disease amongst the civil population.

Sickness and mortality compared with former years.

63. The following table shows for a series of years the admissions, daily sick, mortality, and invaliding amongst European troops, and it will be noted that, while there has not been much reduction in the actual amount of sickness, there has, since 1880, been a decided decline in the death and invaliding rates.

Table showing the Ratio per Mille of Admissions, Daily Sick, Mortality and Invaliding since 1860.

Years.	Ratio per 1,000 of strength.			Invalided per 1,000 of strength.	
	Admitted.	Daily sick.	Died in and out of hospital.	Change of climate.	For discharge.
1860	1,448·5	59·9	20·9	49·6	8·1
1861	1,254·4	57·6	14·8	22·2	13·3
1862	1,295·4	62 1	18·5	18·7	9·5
1863	1,254·6	55·7	19·4	28·5	11·5
1864	1,538·4	65·5	20·5	51·0	14·0
1865	1,450·2	62·7	23·3	33·9	4·9
1866	1,490·5	69·1	22·2	46·1	10·5
1867	1,386·8	61·8	19·9	44·1	10·5
1868	1,399·4	62·4	20·6	52·8	9·5
1869	1,328·6	62·1	23·2	47·4	8·2
1870	1,481·5	63·9	19·7	70·4	6·6
1871	1,211·5	56·2	19·1	29·7	12·5
1872	1,352·3	59·7	19·2	26·8	11·2
1873	1,270·8	59·3	18·5	50·6	12·7
1874	1,141·2	57·6	13·4	29·5	8·3
1875	1,096·3	56·9	14·8	60·8	15·5
1876	1,132·9	55·2	16·1	31·9	10·9
1877	1,172·2	58 7	17·2	36·0	10·2
1878	1,379·7	65·8	22·1	36·6	9·1
1879	1,438·7	68·4	16·8	34·3	10·2
1880	1,385·4	68·4	9·9	15·0	8·0
1881	1,164·8	68·2	11·1	18·6	8·8
1882	1,069·4	59·3	10·4	17·6	12·0
1883	991·0	59·7	10·0	20·1	13 6
1884	1,106·1	59·1	8·5	20·9	11·4

64. Excluding depôts and very small stations, the average daily sick rate per thousand of strength in the several cantonments ranged from 72·5 at St. Thomas' Mount to 33·6 at Thayetmyo, and the death-rate from 10·2 in Madras to 2·9 in Bangalore.

65. The depôt at Wellington was fully utilized during the year by sending up young and feeble men likely to break down during the hot season, as well as invalids.

66. Fevers and venereal diseases were the most common causes of inefficiency throughout the force.

PRINCIPAL DISEASES.

Cholera.

67. There were 12 admissions with 10 deaths from cholera in the stations of Bangalore, Kamptee, Madras, Poonamallee, St. Thomas' Mount and Secunderabad, results which may be regarded as favorable considering the extent to which the disease prevailed amongst the civil population.

Small-pox.

68. The chief incidence of this disease was at Bangalore, where 9 cases occurred with 1 death. Altogether there were 19 cases in the force against 9 in 1883.

Paroxysmal fevers.

69. There were 762 cases of ague and 104 of remittent fever recorded. At Kamptee there occurred 379 cases of the former and 32 of the latter, and there were also a good many admissions under both heads at Secunderabad and Bangalore.

70. The following table shows the admissions for intermittent fever during each of the past seven years, in every station in the command. From this it

appears that during the past two years there has, on the whole, been a decline in this disease.

Table showing Admissions under Intermittent Fever for the last seven years.

Stations.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	Total.
Bangalore	126	205	164	247	73	102	57	974
Bellary	406	593	367	505	270	160	17	2,318
Cannanore	3	2	44	4	21	7	2	83
Calicut	...	...	...	5	3	2	...	10
Kamptee	287	531	764	463	373	213	379	3,010
Madras	43	32	23	25	11	2	6	142
Malapuram	...	...	...	...	...	2	1	3
Poonamallee	14	9	90	42	5	3	5	168
Pallavaram	1	1	...	...	1	1	1	5
Port Blair	21	25	59	8	7	8	11	139
Ramandroog	71	28	...	...	...	...	...	99
Rangoon	11	306	1,232	348	56	29	48	2,030
St. Thomas' Mount ...	7	1	6	13	12	15	4	58
Secunderabad ...	360	627	245	164	115	69	88	1,668
Seetabuldee	22	37	98	35	27	35	15	269
Trichinopoly	23	8	...	...	...	...	...	31
Thayetmyo	104	103	52	35	14	4	24	336
Tounghoo	23	10	21	19	84	49	57	263
Wellington	69	81	182	183	211	26	39	791
Thondoungee	...	...	...	...	...	1	5	6
Troops on the march...	2	18	49	4	18	...	3	94
Total ...	1,593	2,617	3,396	2,100	1,301	728	762	12,497

Typhoid fever.

71. There were 129 cases of this disease with 18 deaths, against 94 admissions and 29 deaths in 1883. The admissions in 1884 were therefore in the ratio of 11·9 per thousand of strength and the deaths in the proportion of 1·6. As in 1883, the largest number of cases in any one station (60) occurred at Bangalore, and there were 39 at Secunderabad and 15 at Kamptee. Bangalore is thus becoming notorious for enteric fever, a circumstance due no doubt to some extent to its impure water-supply. Fortunately this is at length to be remedied, as the subject has for some time engaged the attention of Government.

Dysentery and Diarrhœa.

72. There were 602 admissions with 4 deaths from dysentery, against 513 and 3 respectively in 1883. The ratios per thousand of strength in 1884 were therefore for admissions 55·6, and for deaths 0·37. The admissions were most numerous in Secunderabad and Madras, and there was 1 death at each of the stations of Madras, Rangoon, St. Thomas' Mount and Tounghoo. Of diarrhœa there were 452 cases in the force with 1 death. The stations of Secunderabad, Bangalore and Thayetmyo show the largest numbers of admissions for this ailment.

Hepatic diseases.

73. The admissions under this head were 310 and the deaths 23, against 422 and 17 in the previous year. The results for 1884 thus give an admission rate of 28·6 per thousand men and a death-rate of 2·1.

Sunstroke and Heat apoplexy.

74. There were 5 deaths, 4 from the former and 1 from the latter cause.

Venereal diseases.

75. These were more prevalent in 1884 than in 1883, the admission rate per thousand of strength having been 256·1 in the former and 243·2 in the latter. The marginal statement gives the prevalence of venereal complaints for a series of years, and shows a great amount of inefficiency due to this cause amongst British troops, and that all our efforts to improve matters have been of no avail. In the year under review the admissions were most numerous in Secunderabad, Bangalore, Madras and Bellary.

1872	158·2	1879	255·9
1873	148·4	1880	256·2
1874	179·4	1881	220·0
1875	195·5	1882	257·3
1876	176·1	1883	243·2
1877	229·7	1884	256·1
1878	244·1		

EUROPEAN WOMEN.

Strength, sickness and mortality.

76. The strength of the wives of non-commissioned officers and privates in 1884 was 887, and their average daily sick rate 31·48. The admissions into hospital numbered 908, and there were 10 deaths. The immunity which they enjoyed from the prevailing epidemics of the country was remarkable, as there was but 1 case of cholera and 2 of small-pox. There were 4 cases of enteric fever, viz., 2 at Bangalore, 1 at Bellary, and 1 at Thayetmyo. Continued fever and intermittent fever were more common causes of sickness, there having been 41 cases of the former and 33 of the latter. From phthisis pulmonalis there were 4 admissions and 1 death, from diseases of the brain and nervous system 18 admissions and 2 deaths, from dysentery 11 admissions and 1 death, and from diseases of the liver 13 admissions. The women, according to the admission rates, were most healthy, excluding small stations and Wellington depôt, at Madras and ~~Thayetmyo~~ Tounghoo, and most sickly at Cannanore and Kamptee.

77. The following table gives particulars regarding admissions and mortality at the several stations, from the chief causes of sickness :—

Table showing the Admissions and Deaths among Women belonging to the European Corps stationed in the Madras Presidency during the year 1884.

| — | Stations. | | |

80. Although the military regulations are very strict in the matter of vaccination, there were 18 cases of small-pox, 7 of which occurred in Bangalore and 6 in Cannanore. From measles there were 121 admissions without a single death ; and 10 cases of chicken-pox. Of paroxysmal fevers there were 54 cases, and 115 of continued fever. There occurred only one case of enteric fever and one of cholera. From dysentery there were 42 admissions with 1 death, and there were 121 cases of diarrhœa, of which 9 proved fatal. No less than 10 infants died in teething. Omitting the smaller stations and depôts, the children were healthiest at Tounghoo and Madras, and most sickly at St. Thomas' Mount, Cannanore and Secunderabad.

81. The annexed abstract gives the chief causes of mortality amongst children during each of the past eleven years.

Table showing the principal Causes of Mortality amongst the Children during the past eleven years.

Diseases.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Small-pox ...	...	...	...	1	...	...	...	...	...	...	...
Chicken-pox ...	...	..	...	...	...	...	...	...	..	...	...
Measles	6	1	4	...	6	2	4	...	...	1	...
Typhoid fever ...	...	...	1	2	...	...	...	...	...	...	...
Continued do. ...	4	4	3	5	4	1	3	1	1	1	...
Intermittent fever	...	1	...	2	...	2	..	2	...	...	...
Remittent do. ...	1	1	2	2	2	2	1	...	.	3	.
Cholera	...	5	6	12	..	3	...	...	2	1	1
Influenza	...	...	...	...	...	...	..	...	...	...	...
Pertussis	...	..	...	...	...	...	2	...	...	...	1
Atrophy and anæmia	1	...	2	1	...	1	...	...	..	...	...
Ophthalmia ...	...	...	...	...	...	...	...	...	.	...	...
Other eye diseases ...	...	...	...	...	.	...	...	...	...	...	...
Convulsions ...	20	22	29	27	63	13	18	12	9	9	11
Diseases of the brain and nervous system.	3	5	6	6	4	3	2	3	4	1	...
Dysentery	9	7	8	8	14	8	2	4	..	1	1
Diarrhœa	18	24	21	29	29	12	17	11	12	14	9
Teething	22	25	21	21	14	19	14	6	2	7	10
Tonsilitis	...	2	...	...	1	1	...	1	...	...	...
Still-born	...	...	...	...	...	...	..	...	...	...	...
Premature birth ...	2	3	5	2	2	1	...	1	1	2	4
Vermes	...	...	..	...	...	...	...	...	...	...	...
Other diseases ...	40	33	49	50	44	29	27	19	10	28	19
Total ...	126	133	157	168	183	97	90	60	41	68	56

NATIVE ARMY.

82. The strength of the Native Army in 1884 was as follows :—

Strength on the 1st January 1884	29,181
Increase by recruits, transfers, &c.	1,442
	30,623
Decrease by invaliding, deaths, &c.	1,503
Strength on the 1st January 1885	29,120

The figures in this return refer only to men serving within the Madras command, Madras troops beyond its range being omitted, as no returns are received from them.

Sickness and mortality.

83. Native troops were not so healthy as in the previous year, the admission rate per thousand of strength in 1883 having increased from 693·9 and the daily sick from 27·7, to 749·3 and 32·8 respectively in 1884. There was a slight decline in the death-rate as compared with

that for 1883, although it still stands somewhat higher than the ratio for British troops. This disparity may be partly accounted for by the greater proportion of men somewhat advanced in years serving in the Native Army, than in British regiments. The invaliding rate was 21·1 against 26·9 in 1883.

84. The following abstract gives the main facts connected with the vital statistics of Native troops, for a series of years :—

Table showing the Admissions and Deaths amongst the Native Troops since 1868.

—	Ratio per 1,000 of strength.																
	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Admissions	707·4	702·5	630·6	693·9	1,067·9	883·2	772·7	777·7	726·8	832·2	793·2	1,001·2	1,275·9	948·7	866·0	693·9	749·2
Daily sick	29·0	29·3	26·4	26·9	34·7	31·3	30·0	30·7	28·2	28·8	29·7	40·4	55·8	44·6	32·2	27·7	32·8
Deaths in hospital ...	8·6	10·1	9·4	8·8	9·9	6·4	7·7	9·0	9·8	11·3	11·7	11·8	12·3	13·2	12·4	9·6	9·0
Do. out of do.	1·4	3·6	3·6	1·8	2·4	1·8	2·0	1·5	1·2	1·7	1·6	2·4	2·4	3·0	2·6	2·8	2·6
Invaliding	16·4	24·5	25·6	23·3	28·4	30·8	33 5	39·3	37·1	30·5	52·6	38·9	31·8	47·0	39·0	26·9	21·1

The principal causes of sickness.

85. The principal causes of sickness amongst Native troops were simple continued, and paroxysmal, fevers 6,861 admissions, skin diseases 2,776, dysentery and diarrhœa (655+532) 1,187, rheumatism 653, and respiratory diseases 605. There were also 3 cases of typhoid fever. The largest number of deaths (29) in the Native Army from a single cause was due to cholera; but respiratory diseases caused 28, remittent fevers 21, diarrhœa 21, and dysentery 16 deaths.

Deaths from fevers.

86. The total deaths from non-eruptive fevers amounted to 39 against 31 in the previous year, and the mortality was therefore in the ratio of 1·6 per thousand of strength and 282·0 per mille of admissions, from this class of fevers.

Small-pox.

87. The subjoined abstract shows the admissions and deaths from small-pox for a series of years in the Native Army, and although the admissions in 1884 were more numerous than in several preceding years, they must be regarded as moderate considering the very great prevalence of the disease amongst the civil population.

Table showing Admissions and Deaths from Small-pox for the last twelve years.

—	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.
Admissions.	308	38	17	48	99	38	49	23	33	28	63	66
Deaths ...	1	2	...	1	...	3	...	2	3	2	3	5

Venereal diseases.

1872	16·3	1879	26·7
1873	15·8	1880	25·1
1874	16·0	1881	25·8
1875	18·1	1882	22·6
1876	14·9	1883	23·2
1877	20·0	1884	22·7
1878	27 2		

88. The marginal figures show the extent to which venereal disease prevailed amongst Native troops, for a series of years. The ratio of admissions per thousand of strength in 1884 was 22·7 against 23·2 in 1883.

STATIONAL SICKNESS AND MORTALITY.

European troops.

89. At the depôt of Poonamallee, which is used as a sanitarium for men suffering or recovering from complaints that would not be benefited by a change to the hill station of Wellington, there were 305

admissions out of a strength of 157, giving a ratio of 1,942·6 per mille. The deaths amounted to 7, which gives a rate of 44·5 per thousand men. At Wellington, where the population consisted of convalescent and young and feeble men, the admission-rate to strength was 1,185·9, and the death-rate 3·6, per thousand. The stations showing the largest average daily sick rates per thousand of strength are Madras, St. Thomas' Mount, Rangoon, Calicut, and Tounghoo, and those showing the lowest Seetabuldee, Port Blair, and Thayetmyo. Excluding the Poonamallee depôt, the death-rate per mille stood highest at Malapuram, Seetabuldee (both small detachments), Madras, Kamptee, and Secunderabad. At Poonamallee the chief diseases transferred for change were dysentery 53, hepatic complaints 47, diarrhœa 14, and rheumatism 11; and there was 1 case of cholera. At Wellington the admissions for the more important diseases were fevers 64, rheumatism 26, hepatic diseases 10, dysentery 17, and diarrhœa 17.

90. The accompanying table shows the general results as regards sickness and mortality in the various stations, and also the aggregate admissions and deaths from the principal diseases in each cantonment :—

Table showing the Stational Sickness and Mortality among the European Troops in the undermentioned stations of the Madras Command for the year 1884.

Stations.	Strength.	Admissions.	Daily sick.	Deaths		Ratio per 1,000 of strength of 1884.				Ratio per 1,000 of strength of 1883.		Principal diseases of 1884.																							
												Small-pox.		Fevers.		Cholera.		Rheumatism.		Dysentery.		Diarrhœa.		Hepatic diseases.		Venereal diseases.									
				In hospital.	Out of hospital.	Admissions.	Daily sick.	In hospital.	Out of hospital.	Daily sick.	Admissions.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.	A.	D.								
Bangalore ...	2,067	2,020	116·96	6	2	1,000·4	58·27	2·9	0·9	1,320·7	77·7	9	1	227	1	4	3	40	...	50	...	51	...	22	...	566	...								
Bellary ...	841	811	49·37	5	1	964·3	58·7	5·9	1·1	1,057·8	65·7	1	...	91	1	...	...	29	...	3	...	29	...	14	...	270	...								
Calicut ...	103	100	6·26	...	...	970·8	60·8	...	...	1,172·0	69·2	...	...	...	...	...	...	2	...	2	...	3	...	2	...	39	...								
Cannanore ...	719	595	39·28	4	1	827·5	53·2	5·5	1·3	856·3	58·3	...	...	36	1	...	...	14	...	46	...	28	...	14	2	174	...								
Kamptee ...	770	1,061	43·25	7	1	1,377·9	56·1	9·0	1·3	1,023·1	42·8	2	...	461	3	1	1	9	...	10	...	29	...	7	1	108	...								
Madras ...	682	886	48·04	7	4	1,299·1	70·4	10·2	5·8	1,028·0	61·1	4	...	97	...	3	3	2	...	92	1	35	...	15	2	259	...								
Malliapuram ...	95	112	5·86	2	1	1,178·9	61·6	21·0	10·5	1,130·4	59·5	...	...	24	1	...	...	...	...	12	...	3	...	6	...	24	...								
Ootacamund ...	10	13	0·76	...	...	1,300·0	76·0	...	...	...	...	...	...	...	...	...	...	1	...	1	...	2	...	...	...	...	...								
Pallavaram ...	55	71	1·87	...	...	1,290·9	34·0	...	...	1,000·0	33·1	...	...	8	...	...	...	2	...	17	...	1	...	2	...	18	...								
Poonamallee ...	157	305	29·99	7	...	1,942·6	191·0	44·5	...	1,714·2	211·3	7	...	7	...	1	1	11	...	53	...	14	...	47	4	58	...								
Port Blair ...	141	97	3·41	...	...	687·9	24·1	...	...	661·9	17·1	14	...	256	...	...	...	2	...	...	...	10	...	2	...	20	...								
Rangoon ...	582	904	36·95	5	2	1,553·2	63·4	8·5	3·4	1,285·7	61·5	1	...	256	...	...	...	...	...	32	1	23	...	36	1	110	...								
St. Thomas' Mount.	347	480	25·16	3	1	1,383·2	72·5	8·6	2·8	912·8	49·7	2	...	59	1	1	1	15	...	45	1	20	...	36	...	65	...								
Secunderabad ...	2,386	2,571	136·67	21	2	1,077·5	57·2	8·8	0·8	805·3	54·7	1·3	1·3	301	10	2	1	47	...	136	...	121	1	72	9	569	...								
Seetabuldee ...	55	39	0·96	1	...	709·0	17·4	18·2	...	1,280·0	20·0	...	...	17	...	...	...	...	...	3	...	2	...	...	...	2	...								
Thayetmyo ...	635	586	21·39	2	1	922·8	33·6	3·1	1·5	761·7	44·3	1·5	...	171	...	...	...	20	...	33	...	41	...	5	1	76	...								
Tonghoo ...	428	542	28·29	2	1	1,266·3	66·0	4·6	2·3	838·9	45·4	2·1	...	60	...	...	...	14	...	41	1	17	...	18	1	145	...								
Wellington ...	554	657	43·06	2	...	1,185·9	77·7	3·6	...	682·4	49·1	1·6	...	64	...	...	...	26	...	17	...	17	...	10	1	172	...								
Thoundoungee ...	18	13	0·53	...	...	722·2	29·4	...	...	166·6	...	...	...	5	...	...	...	...	...	1	...	1	...	1	...	2	...								
On the march ...	227	97	1·40	2	...	427·3	6·1	8·8	...	271·4	9·1	7·1	...	7	...	...	...	5	...	8	...	5	...	1	1	33	...								
Total ...	10,812	11,960	639·46	76	17	1,106·1	59·1	7·0	1·5	991·0	59·7	8·8	1·2	1,905	18	12	10	280	...	602	4	452	1	310	23	2,770	...								

91. The health of the Native troops in the several stations varied greatly. Thus the average daily sick rate per thousand of strength in the detachment in the pestilential climate of the Nicobars was 110·8, while at St. Thomas' Mount it was but 6·3. The stations, omitting small ones, at which there was the greatest amount of inefficiency from sickness were Tounghoo, Secunderabad, Rangoon, Moulmein, Cuttack, and Madras.

Native troops.

92. The station with the largest death-rate (23·3 per mille) was Tounghoo, and that showing the lowest, viz., 0·9, St. Thomas' Mount. Secunderabad had also a very high death ratio, 22·7 per thousand men. There were no epidemics at Tounghoo to account for the great mortality, but 22, out of a total of 63 deaths, at Secunderabad were caused by cholera.

93 Cholera attacked the troops in the stations of Bangalore, Kamptee, Madras, Rangoon, Secunderabad, Thayetmyo, Trichinopoly, and Vellore; but the cases were few in number except at Secunderabad, where there were 41 admissions, and at Trichinopoly, where there were 8. The risk of cholera at Secunderabad is enhanced by the insanitary condition of the native town,* which is virtually overlapped by the cantonment, and by the unhealthy state of Chudderghat, as the native guard posted there, at the Residency, is very liable to attacks of the disease. In fact the duties assigned to our Native troops in that suburb of Hyderabad seem, in epidemic years, to be as perilous to life as a "forlorn hope," and this, in spite of every practicable precaution for the protection of the men. The improvement of the drainage and water-supply of the town of Secunderabad is, however, engaging the attention of Government, and various important reforms are in contemplation. Small-pox appeared amongst the men in fourteen stations, but with six exceptions only a solitary case in each occurred. In Bangalore there were 15 admissions from the disease, in Secunderabad 14, in Kamptee 12, and in Rangoon 11.

94. The annexed table contrasts the general results of sickness and mortality at the several stations during the year with those for 1883:—

* As regards drainage and water-supply.

Table showing the Stational Sickness and Mortality among the Native Troops in the undermentioned stations of the Madras Command for the year 1884.

Stations	Strength.	Admissions.	Daily sick.	Deaths. In hospital.	Deaths. Out of hospital.	Deaths. Ratio per 1,000 of strength of 1884.	Ratio per 1,000 of strength of 1883. Admissions.	Ratio per 1,000 of strength of 1883. Daily sick.	Ratio per 1,000 of strength of 1883. Deaths. In hospital.	Ratio per 1,000 of strength of 1883. Deaths. Out of hospital.	Principal diseases of 1884. Small-pox. A.	Small-pox. D.	Fevers. A.	Fevers. D.	Cholera. A.	Cholera. D.	Rheumatism. A.	Rheumatism. D.	Dysentery. A.	Dysentery. D.	Diarrhœa. A.	Diarrhœa. D.	Hepatic diseases. A.	Hepatic diseases. D.	Venereal diseases. A.	Venereal diseases. D.
Bangalore	2,913	1,639	75·51	20	6	25·6	52·4	20·8	6·9	1·2	15	3	432	4	4	2	62		60		24		4	1	95	
Bellary	1,694	876	26·58	11	3	6·8	54·0	17·1	1·6	1·1			305	6			30		41		11				18	
Berhampore	454	197	15·06	6		13·2	54·7	19·5	7·4	4·9			27	2			7		3		4		1		16	
Cannanore	726	390	19·13	2	4	8·1	54·2	27·2	5·5		1		43	1			16		8		5		2		4	
Cuttack	791	697	36·00	4	2	7·7	73·0	27·2	5·8	5·9			174	1			40		19		30	1	2		24	
Hoshungabad	371	259	9·99	2	1	9·5	72·5	29·3	5·8		1		134				11		2		4				33	
Kamptee	1,803	853	44·90	13	1	8·0	61·2	24·9	7·2	3·2	12		329	2	2		37		13	1	9		2		21	
Madras	139	113	5·07	1		7·2	81·3	36·4	7·1	3·3			22				5		3		4				1	
Mangalore	773	295	21·03	7	1	9·0	37·3	24·4	4·4				44				16		19	2	21	2	1		16	
Moulmein	404	482	19·21	2	6	4·9	119·2	28·8					142				5		67		7		5		89	
Nicobars	47	279	5·21			110·8	594·0	84·9	19·6				233				8				3				1	
Pallavaram	509	323	31·32	5	10	9·8	63·4	61·5	9·8	19·6			83				8		7	1	13	1			3	
Port Blair	329	245	7·79	2	1	6·0	74·4	23·6	6·0				168				1		4		4			1	6	
Quilon	569	224	10·14	2		3·5	39·3	17·8	3·5				39				15		4				1		3	
Raipur	693	604	17·57	3		4·3	87·1	25·3	4·3				230				34		28		11		3		32	
Rangoon	1,742	1,927	87·91	23	4	13·7	110·6	50·4	13·7	2·3	11	2	376	5	1		54		126	2	70	2	5	1	43	
Secunderabad	3,388	4,900	177·68	63	14	18·6	144·6	52·4	18·6	4·1	14		2,985	5	41	22	95		100	5	168	10	23	1	57	
Seetabuldee	544	423	16·36	1		1·8	77·7	30·1	1·8		1		175	1			16		5		3				15	
St. Thomas' Mount	1,026	242	6·47	1		0·9	23·5	6·3	0·9		3		73	1			4		3		9		1		1	
Sumbulpore	375	148	5·75	5		13·3	39·4	15·3	13·3				72	2			4		1						4	
Thayetmyo	941	496	25·06	6		6·3	52·7	26·6	6·3				102		1	1	12		15		34		4		19	
Tonghoo	727	526	43·79	16	1	22·0	72·3	60·2	22·0	1·3			91	4			5		57	1	64	2	1		4	
Trichinopoly	1,414	707	35·53	12	8	8·4	50·0	25·4	8·4	5·6			244	1	8	8	35		32	1	8		4	1	38	
Trichoor	110	54	1·77				49·0	16·1					14				2				2		1			
Vellore	859	353	19·35	8	3	9·3	41·0	22·5	9·3	3·5	1		67	2	1	1	20	1	9	2	6		2		15	
Vizagapatam	56	22	4·41	1		17·8	39·2	78·7	17·8				2				2		1		1	1				
Vizianagram	566	657	20·89	2		3·5	116·0	36·9	3·5		1		184				60	1	9		8		1		38	
Ootacamund	173	123	4·90	2		11·5	71·0	28·3	11·5				31				7		7		4				1	
Salem													31				2		5		2					
Samalkottah	94	88	2·49	1		10·6	93·6·1	26·5	10·6				8				5		4		3				2	
Trevandrum	77	66	2·35				85·7·1	30·5																		
Total	24,337	18,238	800·12	221	65	9·0	749·3	32·8	9·0	2·6	66	5	6,864	39	60	29	653	2	655	16	532	21	66	5	553	

ABSTRACT OF SANITARY REPORTS—MILITARY.

95. In the following pages is given, as usual, an abstract of the cantonment sanitary reports received from 31 stations in the Office of the Sanitary Commissioner, during the year under notice. These reports are mostly so perfunctorily drawn up, and the information they contain is so meagre, that they are practically of very little use. An effort will be made to obtain more detailed and useful information for future reports.

Bellary.

Water-supply ... ... Is obtained from wells; of fairly good quality.

Drainage ... ... Fair.

Conservancy ... ... No change in the system since last report. The Municipality attended to it. The sweepings, &c., are carted away to a distance. The bazaars and latrines were kept in a satisfactory condition. There is one latrine for every 2,000 people. The native civil population numbers 53,000. Dry-earth system is adopted.

Climate and general health. The season was, on the whole, conducive to health; but owing to the failure of the monsoon, food was scarce. Only 7 inches of rain fell against an average of 17 inches. There was cholera in the native town, but none among the troops.

Sanitary works ... None.

Bangalore.

Water-supply ... ... Indifferent; obtained from doubtful sources. A scheme by Captain Romilly for obtaining water from better sources and protecting the same was rejected by the Municipality. The question of a better water-supply for Bangalore is now engaging the attention of the authorities.

Drainage ... ... Imperfect.

Conservancy and sanitary condition. Was well attended to. The sweepings, &c., were carted away to a distance. The latrines and bazaars were kept in a good sanitary condition. The sewage from private houses is carried away by a main drain beyond the station, where it is utilized for cultivation.

Climate and general health. Cholera and small-pox prevailed; the former from March to October, and caused much mortality. There were 24 admissions and 4 deaths among the troops from small-pox, and 8 admissions and 5 deaths from cholera. 23·11 inches of rain fell.

Sanitary works... ... Some drains were constructed; three wells were widened and deepened, and one latrine was built.

Berhampore.

Water-supply ... ... Is obtained from two wells; of fair quality.

Drainage ... ... Generally fair, but requires improvement. In the lines it is unsatisfactory.

Conservancy and sanitary condition. Conservancy is attended to by the Municipalities. No change in the system since last report. There are five public latrines in the lines, which were kept in a fairly satisfactory condition. Sewage from private houses is removed by scavengers and emptied in pits and covered over with earth; in many instances it is thrown out in the fields. The sanitary condition of the bazaars was unsatisfactory; they are beyond the control of the military authorities.

Climate and general health. Season was favorable and conducive to health. 35·8 inches of rain fell against a seven years' average of 46·2. Food was plentiful and prices moderate.

Sanitary works ... A tank and a well were cleaned; several roads were repaired and by-lanes levelled; a pucka slaughter-house was completed and several tunnels and dust-bins were repaired.

Calicut.

Water-supply ... ... Is obtained from a well; of good quality.

Drainage ... ... Fairly good.

Conservancy and sanitary condition. The station and bazaars were kept fairly clean. Sewage from private houses is removed by conservancy carts and thrown into the sea. Dry-earth system is adopted in the latrines, which are kept in a fairly satisfactory condition.

Climate and general health. Was satisfactory. No epidemics prevailed. 100 inches of rain fell during the year against 116 in 1883.

Sanitary works... ... None.

Cannanore.

Water-supply ... ... Good and abundant; obtained from wells.

Drainage ... ... Fairly good in cantonment; in the town it is being improved.

Conservancy and sanitary condition. No change in the system since last report. Conservancy is attended to by the Municipality. The sweepings, &c., and contents of latrines are carted away outside municipal limits. Sewage from private houses is deposited in the corners of the compounds, which is objectionable.

Climate and general health. Season was favorable and public health tolerably good. No epidemics prevailed. 107 inches of rain fell against 117 in the preceding year. Prices of food were moderate.

Sanitary works... ... Several tanks and wells were cleaned and repaired, and a masonry drain completed.

Cuttack.

Water-supply ... ... Is of good quality; obtained from wells.

Drainage ... ... Is fairly good and is gradually being improved.

Conservancy and sanitary condition. The system is the same as last reported. The sweepings, &c., and sewage from private houses are carted away and buried. The bazaars, latrines, and station generally were kept in a fair sanitary condition.

Climate and general health. Was satisfactory. 53·12 inches of rain fell, against 61 inches in the preceding year and 56 inches the average.

Sanitary works... ... None.

Hoshungabad.

Water-supply ... ... Is obtained from wells; of fairly good quality, but hard.

Drainage ... ... On the whole fairly satisfactory.

Conservancy and sanitary condition. No change in the system since last report. The sweepings, &c., and sewage from private houses are carted away to a distance and to the public gardens. There is only one public latrine, which was kept in a fair sanitary condition as well as the bazaars and the station generally.

Climate and general health. Was satisfactory. No epidemics prevailed. 79·3 inches of rain fell against an average of 65·6. Prices of food were moderate.

Sanitary works ... None.

Kamptee.

Water-supply ... ... The sources are the same as those reported last year, viz., numerous wells and the river Kanhan, yielding an abundant supply of good water.

Drainage ... ... No change since last report. There is no regular system. Some drains exist to carry off surplus water from houses and storm water.

Conservancy and sanitary condition. Conservancy was well attended to, and the latrines, bazaars, and station generally were kept in good sanitary condition. The sweepings, night-soil, &c., are carted away to a safe distance from the cantonment and buried.

Climate and general health.	Was satisfactory. No epidemics prevailed. 57 inches of rain fell against 55 in the preceding year. Food was abundant and prices moderate.
Sanitary works ...	Some minor improvements were effected in drainage and some wells were deepened and repaired.

Mangalore.

Water-supply	Is good; obtained from numerous wells and a tank specially reserved for drinking purposes.
Drainage	Very good owing to the natural configuration of the ground and good drains.
Conservancy and sanitary condition.	Was well attended to by the Municipality. Sweepings and sewage from private houses, &c., were carted away to a distance and buried. The sanitary condition of the latrines, bazaars, and station was fairly satisfactory.
Climate and general health.	Season was favorable and conducive to health. No epidemics prevailed. 111 inches of rain fell against an average of 130 inches.
Sanitary works ...	None.

Madras (Fort Saint George).

Water-supply	Good; obtained from the Seven Wells, led into the fort by pipes.
Drainage	Same as last reported. Satisfactory.
Conservancy and sanitary condition.	No change in the system of conservancy since last report. Sweepings, &c., are carted away to a distance and buried. Sanitary condition of barracks and latrines was satisfactory. Dry-earth system is adopted.
Climate and general health.	Was satisfactory. Cholera prevailed in the town; 3 cases occurred in the fort among the troops, all of which proved fatal.
Sanitary works ...	None.

Malapuram.

Water-supply	Good and abundant; obtained from wells.
Drainage	Satisfactory.
Conservancy and sanitary condition.	Conservancy was well attended to. Sewage from private houses was carried away and thrown into the river. The latrines, bazaar, and station generally were kept in a fair sanitary condition. Dry-earth system is adopted.
Climate and general health.	Was satisfactory. No epidemics prevailed. 65 inches of rain fell. Prices of food were moderate.
Sanitary works ...	Some new wells were sunk.

Moulmein.

Water-supply	Obtained from wells; of fair quality.
Drainage	Satisfactory.
Conservancy and sanitary condition.	Conservancy was attended to under station arrangements. The sweepings, sewage from private houses, and other refuse, &c., were collected and carried out of municipal limits and buried. The sanitary condition of latrines and bazaars was fairly satisfactory.
Climate and general health.	Was satisfactory. No epidemics prevailed. 181·7 inches of rain fell against an average of 182 inches. Food was plentiful and prices moderate.
Sanitary works ...	None.

Pallavaram.

Water-supply	Good; obtained from covered wells.
Drainage	Satisfactory.
Conservancy and sanitary condition.	No change in the system since last report. The sweepings, sewage from private houses, &c., were carted to a distance. The latrines and bazaars were kept in a fair sanitary condition. Dry-earth system is adopted.
Climate and general health.	Was unfavorable. Owing to excessive rainfall crops were damaged, and consequently food was scarce.
Sanitary works... ...	None.

Poonamallee.

Water-supply	Obtained from wells; of good quality.
Drainage	Indifferent.
Conservancy and sanitary condition.	Conservancy was fairly attended to. All filth and the sweepings and sewage from private houses were carted away to a distance and buried. No diseases prevailed epidemically. One sporadic case of cholera occurred among the troops and proved fatal.
Climate and general health.	Season was favorable and prices of food moderate. Public health was satisfactory.
Sanitary works	Some drains were laid.

Port Blair.

Water-supply...	Was good; obtained from two wells and a tank.
Drainage	Is natural and good; the configuration of the ground being favorable.
Conservancy and sanitary condition.	The bazaars and latrines were kept in a good sanitary condition. Dry-earth system is adopted. The sweepings, &c., were carted away to the main island and buried in trenches.
Climate and general health.	Was satisfactory. No epidemics prevailed. Rainfall was copious and prices of food moderate. 110 inches of rain fell, being almost the same as the preceding year.
Sanitary works	None.

Quilon.

Water-supply	No improvement since last report; is obtained from wells; of fair quality.
Drainage	Good.
Conservancy and sanitary condition.	Conservancy was fairly well attended to. The latrine and bazaars were kept in a good sanitary condition, and the sweepings, &c., were removed to a distance and buried.
Climate and general health.	Was favorable. No epidemics prevailed. Sporadic cases of cholera occurred among the civil population; none among the troops.
Sanitary works	None.

Raipur.

Water-supply	Sources are the same as last reported, viz., wells and tanks, containing fairly good water.
Drainage	Satisfactory.
Conservancy and sanitary condition.	Conservancy was well attended to, and the latrines and bazaars kept in a fair sanitary condition. The sweepings, sewage from private houses, and other refuse, &c., are removed daily beyond cantonment limits and buried in trenches. Dry-earth system is adopted in latrines.
Climate and general health.	Was unfavorable owing to exceptional rainfall. 85 inches of rain fell against an average of 45 inches. Prices of food cheap.

Sanitary works ... ... A slaughter-house was erected, some trees were planted, a tank was filled up, and several wells were repaired and cleaned and some new wells are under construction.

Rangoon.

Water-supply ... ... Same as last reported; is obtained chiefly from wells; of good quality.

Drainage ... ... Consists of open trenches along the sides of the streets and is fairly good.

Conservancy and sanitary condition. The sanitary condition of bazaars and latrines was not altogether satisfactory. Some of the latrines were not kept in a good condition. The sweepings and sewage from private houses are carted away and thrown into the river. Small-pox prevailed epidemically both in the town and cantonment.

Climate and general health. Was favorable. 89·9 inches of rain fell against 81·7 in 1883. Food was plentiful and cheap.

Sanitary works ... ... None.

Saint Thomas' Mount.

Water-supply ... ... Tolerably good; obtained from wells.

Drainage ... ... Fairly satisfactory.

Conservancy and sanitary condition. The latrines, bazaars, and station were kept fairly clean. The sweepings, sewage from private houses and other refuse were carted away beyond cantonment limits. Dry-earth system is adopted in the latrines.

Climate and general health. Nothing unusual. Season was fairly satisfactory. Cholera prevailed somewhat among the civil population One case occurred amongst the European Troops. 74 inches of rain fell against an average of about 50.

Sanitary works ... ... A tank and a well and some roads were repaired.

Samalkottah.

Water-supply ... ... Is obtained from wells and a tank; reported to be of good quality.

Drainage ... ... Side-cuttings exist for surface drainage, which answer the purpose well.

Conservancy and sanitary condition. The station, bazaars, and latrines were kept fairly clean. The sweepings, &c., and sewage from private houses are removed to a distance by sweepers.

Climate and general health. The climate was, on the whole, good and conducive to health. No epidemics prevailed.

Sanitary works ... ... None.

Seetabuldee.

Water-supply ... ... Same as last reported; obtained from wells and a tank; fairly good.

Drainage ... ... Is natural, superficial, and good.

Conservancy and sanitary condition. Conservancy is attended to by the Municipality. The latrines and bazaars were kept fairly clean. The sweepings and other refuse, &c., were carted away to a distance and buried. Dry-earth system is adopted in the latrines.

Climate and general health. Season was favorable and conducive to health. 56·3 inches of rain fell against an average of 61·4 inches. Food was plentiful and prices moderate.

Sanitary works ... ... None.

Secunderabad.

Water-supply ... ... Is obtained from wells; of fairly good quality. The water is examined quarterly.

Drainage ... ... Of the station generally is fairly satisfactory, but that of the Native Infantry lines indifferent. Stone drains are much needed in the lines. Estimates for constructing some have been submitted for the sanction of Government.

Conservancy and sanitary condition. The system of conservancy is reported to be most unsatisfactory. At the spot where the sewage of the town of Secunderabad is diverted into the Hoossain Saugar tank an intolerable nuisance is created during the hot months of the year, which must affect prejudicially the health of the inhabitants of the staff lines. The sanitary condition of the regimental and public latrines was fairly good, but that of the bazaar unsatisfactory. Dry-earth system is adopted in the regimental latrines, but not in the public ones, they being uncovered.

Climate and general health. Was unsatisfactory. Fevers prevailed largely, and also cholera and small-pox. There were 2 cases of cholera and 1 death among the European troops and 41 cases and 22 deaths among the Native troops. 32·92 inches of rain fell against an average of 28·84.

Sanitary works ... Some wells were sunk and some other minor works were executed.

Sumbulpore.

Water-supply ... Is obtained principally from the river and tanks. The European residents and the military derive their supply from wells well protected from contamination. The quality of water from all the sources is reported to be good.

Drainage ... ... Good. V-shaped drains with a good fall exist, which empty into a nullah at some distance from the lines.

Conservancy and sanitary condition. Conservancy was well attended to and the station, bazaars, and latrines were kept in good sanitary condition. Sewage from private houses flows into two large drains which are daily flushed.

Climate and general health. Was favorable. No epidemics prevailed. 70·3 inches of rain fell against an average of 78·4 inches. Prices of food were moderate.

Sanitary works ... Some drains were repaired.

Thayetmyo.

Water-supply ... The same as last reported. Is obtained principally from wells; of good quality.

Drainage ... ... Satisfactory.

Conservancy and sanitary condition. The station generally, bazaars, and latrines were kept clean and in a good sanitary condition. The sweepings, contents of latrines, and other refuse matters were daily carried to the jungle and buried. Dry-earth system is adopted in the latrines.

Climate and general health. Season was favorable and conducive to health. No epidemics prevailed. 33·48 inches of rain fell against an average of 34·23 inches. Food was plentiful and prices moderate.

Sanitary works ... None.

Trichinopoly.

Water-supply ... Is obtained from wells; of good quality.

Drainage ... ... Fairly good.

Conservancy and sanitary condition. Conservancy is attended to by the Municipality. The station, latrines, &c., were kept clean and in a fair sanitary condition. The sweepings, night-soil, and all refuse matters were carted away to a distance and buried. Dry-earth system is adopted in the regimental latrines.

Climate and general health. Was favorable. Food was plentiful and cheap. The influence of the heavy rains at the end of the year did not affect the food-supplies or their prices. Cholera prevailed among the civil population; among the troops 8 cases occurred, of which 3 proved fatal. 39·0 inches of rain fell against an average of 35.

Sanitary works ... None.

Trichoor.

Water-supply ... The same as last reported. Is obtained from wells; of good quality.

Drainage ... ... Indifferent.

Conservancy and sanitary condition. Indifferent. The conservancy staff is insufficient and not properly supervised. The public latrines are inadequate, and nuisances are permitted to be committed in the drains and sides of houses. The sweepings, &c., are carted to a distance and buried.

Climate and general health. Season was favorable and conducive to health, and food plentiful and cheap. Small-pox prevailed among the civil population to some extent, but not among the troops.

Sanitary works ... None.

Tounghoo.

Water-supply ... The same as last reported. Obtained chiefly from wells; of good quality

Drainage ... ... No improvement since last report. Good V-shaped drains are required.

Conservancy and sanitary condition. The station, bazaars, and latrines were kept in a fair sanitary condition. The sweepings, night-soil, and other refuse matters are daily removed and buried in trenches. Dry-earth system is adopted in the latrines.

Climate and general health. Was fairly satisfactory. Prices of food were moderate. 73·96 inches of rain fell against an average of four previous years of 85 inches.

Sanitary works ... A well was sunk.

Vellore.

Water-supply ... Abundant. Obtained from tanks and wells. The supply from some of the sources is indifferent in quality.

Drainage ... ... Fairly satisfactory.

Conservancy and sanitary condition. Conservancy is attended to by the Municipality. The station, bazaars, and latrines were kept clean and in a fair sanitary condition. The sweepings, contents of latrines, &c., are daily removed and deposited beyond municipal limits. Dry earth is used in the regimental latrines.

Climate and general health. Season was favorable and conducive to health. A few cases of cholera occurred among the civil population at the end of the year; none among the troops. 46·85 inches of rain fell during the year against an average of 39 inches in five years. Food was plentiful and cheap.

Sanitary works ... None.

Vizagapatam.

Water-supply ... Is obtained from wells in abundance and of fair quality.

Drainage ... ... Fairly good; partly natural.

Conservancy and sanitary condition. No change in the system since last report. Conservancy is attended to by the Municipality. The latrines and bazaars were kept fairly clean. The sweepings, sewage from private houses, night-soil, and other refuse were taken to the sea-shore and buried. Dry earth is used in the regimental latrines.

Climate and general health. Was satisfactory. No epidemics prevailed. 33·17 inches of rain fell against an average of 45 inches. Food was plentiful and cheap.

Sanitary works ... Several drains were constructed; some wells were repaired and rank vegetation removed.

Vizianagram.

Water-supply ... Is obtained from wells; indifferent in quality.

Drainage ... ... Fairly satisfactory.

Conservancy and sanitary condition. Conservancy was well attended to. The sweepings, night-soil, &c., were carted to a distance and buried. The bazaars and latrines were kept in a fair sanitary condition. Dry earth is used in regimental latrines.

Climate and general health. The troops suffered much from beri-beri since arrival in this station. Season was favorable. 31·87 inches of rain fell. Food was abundant and prices were moderate.

Sanitary works ... None.

Wellington.

Water-supply ... The same as last reported. Obtained from springs; of good quality.

Drainage ... ... Surface drainage only; good.

Conservancy and sanitary condition. Was well attended to. No change in the system since last report. The sweepings, sewage from barracks, night-soil, &c., are carted away down the hill and buried. The sewage from private houses is buried near the slaughter-house at Wellington bazaar. The latrines and bazaars were kept in a fair sanitary condition. Dry earth is used in the regimental latrines.

Climate and general health. Season was favorable and conducive to health. 53 inches of rain fell against an average for five years of 48·6. Food was plentiful and prices moderate.

Sanitary works ... None.

SECTION IX.

SANITARY WORKS—CIVIL.

HEALTH OF PRISONERS IN JAILS AND ABSTRACT OF SANITARY NOTES OF MUNICIPALITIES AND LOCAL FUND CIRCLES.

HEALTH IN JAILS.

Increase and decrease of jail population.

96. According to the figures of the Inspector-General of Jails, the prison population on the 31st December 1883 numbered 7,437 and during 1884 the additions to it amounted to 14,908, making a total of 22,345 against 24,200 in the previous year. During 1884 there was a decrease of 15,389 made up as follows:—

Liberated	12,713
Transferred to other jails	2,345
Do. beyond sea	126
Escaped	6
Died	147
Executed	52
Total ...	15,389

The number remaining in confinement at the end of 1884 was thus reduced to 6,956 against 7,437 at the close of 1883, which is satisfactory as indicative of prosperity amongst the poor and laboring classes.

Strength, sickness and mortality.

97. The sick admission rate per thousand of strength of the entire jail population in 1884 was 769·5 and the death-rate 20·2, against 865·3 and 29·4 respectively in 1883. Contrasting the results of 1884 with those of a series of previous years, given in the subjoined table, they were comparatively favorable. The death-rate in 1884 was, with one exception, lower than in any year in the statement.

Table showing the Ratio of Admissions and Deaths, contrasted with the ratios for a series of years.

Years.	Ratio of admissions into hospital per 1,000 of strength.	Ratio of deaths per 1,000 of strength.	Years.	Ratio of admissions into hospital per 1,000 of strength.	Ratio of deaths per 1,000 of strength.
1861-62	1,502·6	93·0	1873	599·8	28·3
1862-63	1,319·0	89·4	1874	714·1	26·6
1863-64	1,373·6	107·6	1875	752·6	38·7
1864-65	1,491·1	101·5	1876	703·6	42·4
1865	1,290·6	126·3	1877	971·3	175·4
1866	1,249·7	124·5	1878	944·4	125·4
1867	1,012·4	53·9	1879	890·5	55·8
1868	869·1	33·8	1880	854·0	44·7
1869	804·7	41·8	1881	742·5	41·4
1870	735·2	26·5	1882	800·4	41·9
1871	779·9	17·9	1883	865·3	29·4
1872	681·1	22·2	1884	769·5	20·2

Remarks on the principal diseases.

98. The chief causes of admissions into hospital were intermittent fevers, skin diseases, diarrhœa, dysentery and diseases of the respiratory organs. Contrasting the prevalence of these ailments with the results for 1883, there was an increase in diarrhœa and a fractional increase in respiratory diseases, but a decrease in the remaining causes of sickness.

99. There was a decided reduction in the deaths from some of the chief causes of mortality. Thus the death-rate from cholera was 0·9 per thousand against 1·9, from dysentery 1·2 against 3·8, and from diarrhœa 3·1 against 5·8 in 1883. Next to diarrhœa, the other diseases showing the highest mortality ratios are phthisis pulmonalis, other respiratory complaints and dropsy.

100. The following abstract gives the deaths from some of the principal causes of sickness for a period of years :—

Table showing the principal Causes of Mortality compared with a series of years.

Years.	Death-ratio per mille.				
	Cholera.	Dysentery.	Diarrhœa.	Dropsy.	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	12·1
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	1·3	3·9	4·5	0·9	1·2
1873	0·1	5·9	6·0	2·5	0·4
1874	0·0	5·3	5·3	1·9	0·9
1875	4·1	6·4	7·7	3·5	0·9
1876	10·0	7·7	5·3	2·2	0·9
1877	25·7	32·1	50·1	5·8	2·0
1878	5·1	15·0	28·2	13·1	1·2
1879	1·4	10·3	10·2	5·9	0·9
1880	0·08	10·1	8·9	4·5	0·9
1881	3·2	8·9	6·8	2·9	0·4
1882	3·2	8·7	9·8	2·6	0·9
1883	1·9	3·8	5·8	1·5	0·5
1884	0·9	1·2	3·1	1·1	0·4

101. Taking individual jails, the institutions showing the highest average daily sick rates per thousand inmates are Kurnool (95·7), Chingleput (81·6), Her Majesty's jail, Madras (70·5), Tranquebar (60·6), Mangalore (57·8), Ootacamund European (57·2), Nellore (56·9), and Russellkonda (53·1). Looking at the death-rates per thousand of prison population, the highest are recorded against Rajahmundry District Jail (67·3), Tanjore (60·6), Cuddalore (59·1), Ootacamund Native (46·8), Coimbatore District (46·3) and Calicut (40·9).

Cholera.

102. Cholera appeared in the four jails of Cuddalore, Tanjore, Trichinopoly Central and Vellore Central. There were in all 24 admissions with 7 deaths, of which 17 with 5 deaths occurred in Cuddalore jail. These results may be regarded as satisfactory, considering the great prevalence of the disease among the general population.

Small-pox.

103. Small-pox caused 14 admissions and 2 deaths, and there were 69 admissions from chicken-pox.

104. The following tables give the sickness and mortality amongst the jail population in 1884.

Return showing the principal Diseases which have caused the Admissions in Hospital in each of the Jails of the Madras Presidency during the year 1884.

Jails.	Strength.	Admissions from																									
		Small-pox.	Chicken-pox.	Typhus fever.	Typhoid fever.	Continued fever.	Intermittent fever.	Remittent fever.	Cholera.	Rheumatism.	Phthisis pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsy.	Apoplexy.	Heart diseases.	Respiratory diseases.	Dysentery.	Diarrhœa.	Spleen diseases.	Venereal diseases.	Dracunculus.	Abscess.	Skin diseases.	Wounds and Accidents.	All other causes.	Total.
Bellary	310	...	...	...	...	...	2	...	...	5	...	...	...	...	...	...	6	1	3	2	4	9	...	4	...	28	64
Berhampore	95	...	...	...	1	...	9	3	...	...	...	...	...	...	3	...	1	2	3	2	2	...	7	5	2	5	45
Cannanore Central ...	490	...	...	...	...	4	55	1	...	23	5	3	1	...	...	6	21	10	43	...	35	1	13	103	49	183	556
Calicut	171	2	9	...	...	1	18	...	...	2	2	1	4	2	...	2	14	15	10	...	3	...	5	4	2	21	117
Chingleput	88	...	2	...	...	9	1	...	...	4	...	...	...	...	...	...	1	5	14	...	7	...	10	39	7	46	145
Chittoor	147	...	...	...	...	...	220	4	...	...	...	...	1	...	...	...	2	2	5	1	2	...	4	8	7	14	270
Coimbatore Central ...	641	...	...	...	...	7	60	2	...	3	5	...	2	...	...	...	22	25	49	2	9	8	19	19	12	74	318
Do. District ...	151	...	...	...	...	...	23	...	...	...	...	...	2	1	...	...	...	14	13	...	4	14	17	28	2	23	141
Cuddalore	169	...	...	...	...	4	14	...	17	...	1	...	...	...	...	...	3	6	55	...	4	10	14	35	8	15	186
Cuddapah	100	...	...	...	...	...	52	...	...	2	...	...	...	1	...	...	4	5	12	...	1	6	2	14	2	6	107
Guntúr	158	...	...	...	...	9	10	...	...	7	...	...	...	...	...	...	3	5	10	1	8	4	15	9	7	25	113
H.M.'s Jail, Madras ...	20	...	...	...	...	4	...	...	...	2	...	...	...	...	...	...	2	...	3	...	5	...	4	7	1	4	32
Kurnool	68	...	...	...	...	...	8	1	...	5	...	...	4	...	...	...	1	2	12	3	4	9	10	40	7	13	119
Madura	177	...	...	...	...	1	38	...	...	2	...	...	...	...	...	...	8	14	24	...	16	3	3	4	9	49	171
Mangalore	75	...	...	...	...	...	13	...	...	2	1	...	2	1	...	...	1	2	13	2	2	...	10	27	14	23	113
Nellore	79	...	...	...	...	...	23	...	...	5	...	...	3	...	...	...	...	2	1	...	8	5	10	33	5	13	108
Ootacamund European ...	22	...	...	...	...	...	3	...	...	1	...	...	...	...	...	...	...	2	4	...	2	...	...	...	2	14	28
Do. Native ...	128	...	16	...	...	...	14	...	...	1	...	...	...	...	...	...	24	3	25	...	2	...	2	3	6	14	110
Palamcottah	191	...	...	...	...	2	9	...	...	2	1	...	2	...	...	...	...	9	6	...	7	5	17	9	3	14	86
Penitentiary, Madras ...	592	...	18	...	...	21	4	...	...	8	7	...	...	1	...	1	40	5	55	...	18	...	22	21	38	142	401
Rajahmundry Central ...	645	...	8	...	...	...	477	1	...	4	...	...	3	27	2	1	20	27	63	...	16	1	23	17	33	133	856
Do. District ...	104	3	...	...	...	...	10	...	...	2	...	...	1	1	...	...	2	3	6	...	6	1	1	6	2	17	61
Russellkonda	96	...	2	...	...	7	16	1	...	3	...	...	2	...	...	...	1	1	7	...	...	...	4	31	7	10	92
Salem Central	426	2	5	...	...	...	53	...	...	1	1	...	6	...	...	...	6	23	54	...	5	31	18	37	17	47	206
Tanjore	132	...	2	...	...	...	23	...	3	1	...	...	4	...	...	1	8	21	13	...	1	2	1	3	1	11	95
Tellicherry	56	...	...	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	2	1	4	...	...	8	3	10	30
Tranquebar	85	6	1	...	...	...	9	...	...	...	...	...	2	...	...	...	...	5	6	...	1	...	2	9	3	17	61
Trichinopoly Central ...	516	...	...	...	...	...	58	3	2	1	2	...	1	...	...	...	6	29	18	...	4	1	10	13	14	41	203
Do. District ...	80	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	2	2	6	...	2	6	1	3	1	5	33
Vellore Central	811	1	6	...	...	...	68	2	2	7	10	...	10	...	...	...	11	19	37	...	6	6	29	61	41	76	392
Vizagapatam	194	...	...	...	...	...	6	...	...	...	...	...	2	...	...	...	1	2	3	...	1	...	2	6	2	16	41
Total ...	7,017	14	69	...	1	69	1,302	18	24	94	35	4	52	34	5	11	210	261	575	14	189	122	275	606	307	1,109	5,400
Ratio per 1,000 of strength	...	1·9	9·8	...	0·1	9·8	185·5	2·5	3·4	13·3	4·9	0·5	7·4	4·8	0·7	1·5	29·9	37·2	81·9	1·9	26·9	17·3	39·2	86·3	43·7	158·3	769·5

Return showing the principal Diseases which have caused the Deaths in Hospital in each of the Jails of the Madras Presidency during the year 1884.

Jails.	Strength	Deaths from																									
		Small-pox.	Chicken-pox.	Typhus fever.	Typhoid fever.	Continued fever.	Intermittent fever.	Remittent fever.	Cholera.	Rheumatism.	Phthisis pulmonalis.	Scurvy.	Atrophy and Anæmia.	Dropsy.	Apoplexy.	Heart diseases.	Respiratory diseases.	Dysentery.	Diarrhœa.	Spleen diseases.	Venereal diseases.	Dracunculus.	Abscess.	Skin diseases.	Wounds and Accidents.	All other causes.	Total.
Bellary	310	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	3	8
Berhampore	95	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
Cannanore Central ...	490	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	3	5
Calicut	171	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	1	2	7
Chingleput	88	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chittoor	147	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	2
Coimbatore Central ...	641	...	...	...	...	1	...	1	...	...	2	...	...	...	...	...	...	1	1	...	...	...	...	...	...	10	16
Do. District ...	151	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	5	7
Cuddalore	169	...	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	4	...	...	...	...	...	...	1	10
Cuddapah	100	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Guntúr	158	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	2
H.M.'s Jail, Madras ...	20	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Kurnool	68	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	2
Madura	177	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	2	...	...	...	...	...	...	...	4
Mangalore	75	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3
Nellore	79	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Ootacamund European ...	22	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Do. Native ...	128	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	1	...	...	...	...	...	1	1	6
Palamcottah	191	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2
Penitentiary, Madras ...	592	...	...	...	...	...	...	...	...	...	2	...	...	1	...	1	...	...	...	...	1	...	...	...	...	2	7
Rajahmundry Central ...	645	...	...	...	...	...	...	1	...	1	...	...	...	5	1	1	...	...	1	...	...	...	...	...	...	1	11
Do. District ...	104	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	1	...	...	...	...	...	...	3	7
Russellkonda	96	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2
Salem Central	426	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...	...	3
Tanjore	132	...	...	...	...	...	...	...	2	...	...	...	1	...	...	...	2	2	...	...	...	...	...	...	...	1	8
Tellicherry	56	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tranquebar	85	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Trichinopoly Central ...	516	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	2	2	1	...	...	...	...	...	1	1	9
Do. District ...	80	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Vellore Central	811	1	...	...	...	...	...	...	...	...	4	...	1	...	...	...	2	1	3	...	...	...	...	1	...	3	16
Vizagapatam	194	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	3
Total ...	7,017	2	...	...	...	1	2	4	7	1	9	1	3	8	1	5	18	9	22	1	1	...	...	2	4	41	142
Ratio per 1,000 of strength.	...	0·2	...	...	...	0·1	0·2	0·5	0·9	0·1	1·2	0·1	0·4	1·1	0·1	0·7	2·5	1·2	3·1	0·1	0·1	...	...	0·2	0·5	5·8	20·2

105. In Chittoor jail, which was otherwise healthy, there were 220 cases of intermittent and 4 of remittent fevers, and the Medical Officer attributes their prevalence to the heavy rain and increase of wet cultivation.

106. In Chingleput, which is a small jail, the chief admissions were for skin diseases (39), diarrhœa (14), dysentery (5), and continued fever (9).

107. In Kurnool jail, which is also small, the principal causes of sickness were skin diseases (40), diarrhœa (12), and intermittent fever (8 cases).

108. In the Cuddalore jail the high death-rate was partly due to 5 deaths from cholera, but there were also 4 casualties from other bowel complaints and 1 from carbuncle. The Medical Officer, in referring to cholera, observes :—

"The first case occurred on the 3rd November 1884, and on the 4th there was another case, after which there was an interval of one week; on the 11th there were two cases, and up to 22nd instant 16 cases occurred and there was an intermission of twenty days, and thence again one case occurred on the 12th December 1884. On the 19th November 100 prisoners were," to relieve the main buildings, "sent into camp jail."

109. The jail at Cuddapah enjoyed a wonderful immunity. Although the building is located in the centre of the town and cholera prevailed amongst the townspeople for a couple of months, not a single case occurred amongst the prisoners.

110. In the Ootacamund European jail the chief causes of admission into hospital were dyspepsia, diarrhœa, dysentery and fever. With regard to the native prisoners at Ootacamund, the Medical Officer says: "climate, with its daily extremes of temperature, is the main cause of the principal diseases, as diarrhœa, pneumonia, ague (in men already subject to it), bronchitis": 16 cases of chicken-pox, the origin of which could not be traced, also occurred at Ootacamund.

111. In the Penitentiary at Madras there were two outbreaks, aggregating 18 cases of chicken-pox, viz., one in the early part, and one towards the end, of the year.

112. Regarding Tanjore jail the Medical Officer remarks: "the general health of the population of this jail during 1884 has not been satisfactory. The prevailing diseases were dysentery, fevers and diarrhœa." There were 3 cases of cholera, of which 2 proved fatal, amongst the prisoners, and the Medical Officer remarks: "No cause could be assigned for the occurrence of these cases." With the disease ravaging the general population on all sides, the only wonder is that the prisoners suffered so little.

113. In Trichinopoly Central Jail, which has for some time been remarkable for the great mortality amongst the prisoners, the death-rate per mille of population in 1884 was 17·4. The marginal abstract gives the annual death-rate during the past five years in this jail, and prior to that the mortality was for a series of years on the whole moderate. In 1880 the death-rate was only 33·6, but in 1881 it rose to 121·3 and in 1882 to 162·5. The sudden and alarming increase in 1881 was partly owing to an outbreak of cholera, which caused 84 admissions and 32 deaths, but the greater bulk of the unusual mortality was due to dysentery (44 deaths), diarrhœa (19), and dropsy (12), all diseases indicative, when unduly frequent, of defects in the food and water supplies. In 1882 the warnings of alimentary errors were still more pronounced, as out of a total of 143 deaths in the jail 119, or 83·2 per cent., were due to diarrhœa (58), dysentery (52), and dropsy (9). After much correspondence and inquiry, the prevalence of bowel-complaints was ascribed to the use of badly-prepared and insufficient ragi rations. One remarkable circumstance connected with the outbreak of dysentery and diarrhœa was, that the female convicts, although using exactly the same diet as the men, escaped. This immunity was attributed to the women having managed to get better weight in drawing rations and to their being more skilful cooks than the males. With an improved diet

Year.	Death-rate per 1,000 of population.
1880	33·6
1881	121·3
1882	162·5
1883	55·2
1884	17·4

and special care in other respects, the death-rate in the jail fell to 55·2 per mille in 1883, and last year it was, as already stated, but 17·4. These results are so far satisfactory, but there are certain features in the history of the extraordinary sickness which would seem to indicate that there was probably more than one cause in operation, and special attention should continue to be given to the water-supply as well as to the food.

114. In the 6 central jails the admission, average daily sick, and death rates per thousand of inmates were as per margin.

Central jails.	Admission-rate.	Average daily sick-rate.	Death-rate.
Cannanore	1,134·7	41·9	10·2
Coimbatore	496·1	17·6	24·9
Rajahmundry	1,327·1	40·1	17·1
Salem	718·3	19·5	7·0
Trichinopoly	393·4	11·5	17·4
Vellore	483·3	19·3	19·7

115. Rajahmundry shows high admission and daily sick rates with a moderate mortality. The chief causes of sickness in this jail were intermittent fever (477 cases), diarrhœa (63), dysentery (27), dropsies (27), and respiratory diseases (20).

116. Cannanore also shows a large amount of sickness, but a low death-rate. The principal causes of admissions were intermittent fever (55 cases), diarrhœa and dysentery (53), respiratory diseases (21), rheumatism (23) and skin diseases 103.

117. The highest death-rate pertains to Coimbatore jail, but was not due to epidemic disease or any special cause.

118. The central jails were marvellously free from cholera, as only 4 cases occurred in the whole group, viz., 2 in Trichinopoly and 2 in Vellore.

MUNICIPALITIES.

119. The number of Municipalities, including the town of Madras, was the same as that in former years, viz., 48. Their aggregate population was, according to the census of 1881, 1,733,350, being 3,532 in excess of the number shown in the report for 1883. The difference is accounted for by one village in Ganjam with a population of 1,947 and another in Godávari with a population of 1,585 having been brought, during the year, within the municipal limits of Chicacole and Cocanada respectively.

120. The vital statistics for the year show that among this population there were registered 55,152 * births and 58,989 † deaths. These figures include also, as marginally noted, the events among the European and Eurasian population, and born dead. The total number of deaths exceeds the births by 3,837, the greatest excess being observable in the town of Madras; if Madras be eliminated from the returns, the total deaths of the mofussil towns only fall slightly short of the births, viz., by 153. Taking the occurrences in each individual town, we find that in 21 out of the 48 towns the deaths exceeded the births. An excess of deaths over births is abnormal, and, when it does occur, either birth registration is at fault or there has been something unusual, such as the prevalence of epidemics, to disturb the ordinary death-rate. In the instances under notice, it cannot be said that birth registration was defective, for, excepting Negapatam, whose birth-rate (18·5) fell below the normal standard, all the other towns which show an excess of deaths over births have returned high birth-rates. As will be seen from the table appended, it was the heavy mortality from cholera or small-pox in some, and cholera and small-pox combined in others, of these towns that caused the death-rates to exceed the birth-rates. In some of them the deaths from fevers and bowel-complaints were also high.

* Inclusive of 225 Europeans and 599 Eurasians.

† Inclusive of 180 Europeans, 674 Eurasians, and 1,762 born dead.

121. Of the total number born, 28,543 were boys and 26,609 girls, or in the proportion of 107·2 of the former to 100 of the latter. Of the total deaths, 30,299 occurred among the male and 28,690 among the female population, the proportion between the sexes being as 105·6 males to 100 females. On the whole, then, the

gain and loss among the male town population was proportionately greater than among the opposite sex. In each individual town, however, it is not so; in 11 out of the 48 towns there were more girls born than boys, and in 11 again the returns show more female than male deaths.

122. The ratio of total births to population was 31·8 per mille against 31·3 in the preceding year and 31·3 the average of five previous years, and that of deaths 34·0 against 30·0 in the preceding year and 28·5 the average. These results compared with those obtained in former years stand as shown in the margin. Excepting in some few towns, as Chicacole, Masulipatam, Nellore, &c., registration seems to have been on the whole fairly conducted. A gradual improvement is observable in results year after year. In 16 towns the birth-rates ranged from 16·9 to 25·6; in 14 they were between 26 and 35; in 11 they varied from 35 to 40; and in 7 they were between 40 and 50. Anantapur returned the highest birth-rate, 49·5 per mille, while the lowest, 16·9 per mille, was recorded in Trichinopoly. The death-rates ranged from 14·2 per mille in Masulipatam to 55·8 in Cochin. Next to Cochin comes Madras with the highest death-rate, 49·5, followed by Tuticorin with 49·0, Kumbakónam 45·4, Mannárgudi 42·2, Negapatam 40·6, Conjeeveram 38·9, Cuddapah 37·7, Ellore 37·3, Máyavaram 36·8, Pálghat 36·5, Srírangam 34·3, Karúr 33·5, Rajahmundry and Chidambaram 32·2 each, Vizagapatam 31·8, Kurnool 31·6, Tanjore 31·3, Calicut 31·2, and Madura 30·9. In all other towns the rates were below 30, extending downwards to 14·2 in Masulipatam, which returned the lowest death-rate.

Years.	Birth-rate per mille.	Death-rate per mille.
1869 ...	13·3	21·4
1870 ...	14·1	22·0
1871 ...	23·0	25·1
1872 ...	22·9	26·6
1873 ...	25·9	27·4
1874 ...	29·9	28·4
1875 ...	28·3	32·8
1876 ...	27·6	32·8
1877 ...	28·6	31·3
1878 ...	25·3	38·5
1879 ...	27·8	29·8
1880 ...	31·3	26·6
1881 ...	32·8	28·1
1882 ...	33·1	28·0
1883 ...	31·3	30·0
1884 ...	31·8	34·0

123. The following tables show for 1884 the occurrences among the different classes of the population, and the total births and deaths and different causes of death compared with the results for a series of years:—

Return showing the Births and Deaths registered among the different Classes of the Population in the Municipal Towns of the Madras Presidency during 1884.

—	Population.	Europeans.	Eurasians.	Native Christians.	Hindus.	Muhammadans.	Other classes.	Total.
Births	1,733,350	225	599	2,986	43,644	7,635	63	55,152
Deaths		180	674	2,995	47,058	7,987	95	58,989

Return showing the total Deaths and Births registered in the Municipal Towns of the Madras Presidency for a series of years—1869 to 1884.

Years.	Population.	Total deaths	Total births.	Ratio of deaths per 1,000 of population.	Ratio of births per 1,000 of population.	Causes of death.					
						Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other causes.
1869 ...	1,276,223	27,436	16,993	21·4	13·3	2,048	303	6,359	...	...	18,726
1870 ...	1,335,529	29,428	18,910	22·0	14·1	3,505	586	6,913	...	399	18,025
1871 ...	1,304,711	34,841	30,035	25·1	23·0	1,447	1,484	8,403	3,971	558	18,978
1872 ...	1,571,247	41,865	36,084	26·6	22·9	716	2,660	9,762	5,221	699	22,807
1873 ...	1,561,771	42,897	40,533	27·4	25·9	47	3,913	8,660	5,389	617	24,271
1874 ...	1,588,106	45,216	47,572	28·4	29·9	30	2,265	8,874	5,749	653	27,645
1875 ...	1,607,747	52,806	45,522	32·8	28·3	7,818	1,161	9,749	5,844	579	27,655
1876 ...	1,600,044	52,564	44,281	32·8	27·6	9,430	2,086	8,576	5,608	672	26,192
1877 ...	1,604,188	110,888	43,771	31·3	28·6	19,631	11,592	14,049	30,020	1,667	33,929
1878 ...	1,620,480	62,428	41,133	38·5	25·3	3,794	2,908	14,435	13,195	1,011	27,085
1879 ...	1,620,480	43,305	45,079	29·8	27·8	672	2,091	13,182	6,785	715	24,860
1880 ...	1,613,750	43,051	50,537	26·6	31·3	36	1,892	11,298	5,756	525	23,544
1881 ...	1,613,750	45,373	53,071	28·1	32·8	1,931	2,349	11,274	4,920	504	24,395
1882 ...	1,613,750	45,296	53,150	28·0	33·1	3,512	2,392	9,947	5,076	585	23,784
1883	1,729,818	51,994	54,238	30·0	31·3	4,878	4,555	10,366	5,909	570	25,716
1884 ...	1,733,350	58,989	55,152	34·0	31·8	7,172	7,689	10,668	6,464	550	26,446

124. With the exception of the prevalence of cholera in an epidemic form in the initial and concluding months of the year in some towns, especially those in the southern districts of the presidency, the general health of the people may be said to have been fairly satisfactory. The season was favorable, rainfall copious, and prices of food moderate and within the reach of the poorer people.

125. *Cholera* carried off 7,172 victims, being a greater number than in any year since 1869, excepting 1875 and the famine years 1876 and 1877. The towns in the mofussil that suffered the most were chiefly those situated in the southern districts, as Chingleput, South Arcot, Trichinopoly, Tanjore, Madura, and Tinnevelly. The largest number of cholera deaths (1,193) occurred in the town of Madras. Among the mofussil towns, Negapatam seems to have suffered the most with 791 deaths, and next to it Madura with 709 and Trichinopoly 573 deaths. Tanjore lost 401 persons by cholera, Kumbakónam 400, Tinnevelly 304, Mannárgudi 302, Chidambaram 290, Cuddapah 275, Conjeeveram 259, and Tuticorin 251. Twelve towns were fortunate enough to have been entirely free of the pest. In three towns only 2 cholera deaths were recorded, and in four others they numbered 4, 7, 8 and 9 respectively.

126. *Small-pox.*—7,689 deaths were recorded from small-pox, being a greater loss from this cause than that experienced in any former year since 1869, excepting the famine year of 1877. In this respect also Madras has suffered the most with 4,064 deaths. Among the mofussil towns, Cochin heads the list, having lost 378 persons by small-pox; next to it come Ellore 333, Rajahmundry 287, Cocanada 251, Negapatam 234, Vizagapatam 219, and Adóni 195. In three towns—Mangalore, Coonoor and Anantapur—there were no deaths from small-pox; in two—Cannanore and Karúr—there was only 1 in each. Three other towns—Ootacamund, Wálajápet and Cuddapah—returned only 2 small-pox deaths each, Berhampore returned 3, Chicacole and Bimlipatam 5 each, and Vizianagram 6.

127. *Fevers.*—A total of 10,668 deaths was recorded from fevers against 10,366 in 1883 and 9,947 in 1882, but it is lower than that recorded in any year between 1877 and 1881. All the towns suffered more or less, but Madras again the most, the fever deaths in it amounting to 3,779. Bellary shows the next highest number, as its fever deaths amounted to 523. Of the other towns, Pálghat returned 453 deaths, Vizianagram 343, Kumbakónam 316, Kurnool 300, Madura 293, Trichinopoly 284, Berhampore 260, Tanjore 230, Negapatam 222, and Vizagapatam 205.

128. *Bowel-complaints.*—The death roll under this head amounted to 6,464 against 5,909 in 1883 and 5,076 in 1882. In this respect also Madras was again unfortunate and contributed the largest number of deaths. Tanjore heads the list among the mofussil towns with the largest number of deaths from bowel-complaints, viz., 368; then come Negapatam 313, Trichinopoly 278, Kumbakónam 241, Tuticorin 213, Coimbatore 177, Madura 171, Calicut 154, and Conjeeveram 151. Three towns—Wálajápet, Anantapur and Bimlipatam—returned no deaths from bowel-complaints. Masulipatam and Srírangam returned only 1 and 2 deaths respectively.

129. *Injuries* caused 550 deaths against 570 in 1883 and 585 in 1882, and the mortality from all other causes not specified amounted to 26,446 against 25,716 in 1883 and 23,784 in 1882. Of the deaths from injuries, 63 persons committed suicide, 424 were from wounds and accidents, 47 individuals were killed by snakes and 16 by wild beasts.

130. The following table shows the total births and the principal causes of death registered in each of the municipal towns:—

Return showing the total Births and the principal Causes of Death registered in the Municipal Towns of the Madras Presidency during 1884.

Municipal towns.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Total deaths.	Total births.
Chicacole	...	5	102	13	7	350	511
Berhampore	2	3	260	107	11	707	1 029
Vizagapatam	...	219	205	90	15	964	1,038
Bimlipatam	...	5	59	...	3	245	306
Vizianagram	...	6	343	36	16	550	667
Anakápalle	4	49	118	11	14	334	538
Cocanada	9	251	86	118	11	837	763
Rajahmundry	16	287	115	29	15	792	631
Ellore	7	333	143	68	9	936	541
Masulipatam	17	106	74	1	1	508	799
Guntúr	...	46	84	42	9	380	474
Nellore	24	19	111	8	8	451	564
Ongole	...	20	41	10	11	250	414
Madras	1,193	4,064	3,779	2,574	83	20,123	16,133
Conjeeveram	259	122	176	151	15	1,453	1,401
Cuddalore	214	20	93	110	10	827	1,371
Chidambaram	290	67	132	24	3	640	343
Trichinopoly	573	36	284	278	23	2,007	1,430
Srírangam	126	32	57	2	3	680	589
Tanjore	401	167	230	368	12	1,716	1,397
Kumbakónam	400	119	316	241	10	2,275	1,327
Máyavaram	197	74	103	115	9	849	550
Negapatam	791	234	222	313	15	2,123	1,001
Mannárgudi	302	64	54	114	6	820	555
Madura	709	103	293	171	28	2,286	2,017
Dindigul	45	18	89	36	11	320	502
Tinnevelly	304	107	43	73	9	931	668
Palamcottah	161	37	32	38	8	534	452
Tuticorin	251	23	68	213	6	798	632
Kurnool	...	91	300	21	8	614	705
Cuddapah	275	2	114	24	5	717	479
Bellary	61	43	523	84	20	1,338	1,115
Adóni	2	195	123	8	5	561	890
Anantapur	...	...	9	...	3	123	243
Vellore	77	85	196	88	15	873	1,133
Wálajápet	17	2	21	...	2	233	374
Salem	167	16	180	85	10	875	1,296
Coimbatore	77	34	196	177	11	1,015	1,475
Erode	22	33	34	29	4	218	267
Karúr	54	1	58	103	7	309	404
Ootacamund	2	2	118	40	4	357	332
Coonoor	...	...	28	30	3	113	100
Mangalore	...	...	160	73	13	643	930
Tellicherry	...	27	77	52	18	543	995
Calicut	8	99	191	154	18	1,786	2,693
Pálghat	52	44	453	61	9	1,328	1,368
Cochin	63	378	62	59	4	876	603
Cannanore	...	1	113	22	10	681	1,107

131. *Sanitary works.*—From all the mofussil Municipalities sanitary reports were received, and a brief abstract of the year's work compiled from these reports for each town is given in the succeeding pages. No new work of an important nature was undertaken during the year. All that was done consisted, as usual, in the repairing and cleansing of tanks and wells, and in the repair and construction of latrines, drains, roads, dust-bins, markets, slaughter-houses, &c.

132. *Drainage, Water-supply* and *Conservancy.*—No change has been made in these during the year. They were much the same as reported last year. The sources of water-supply were the same, chiefly tanks and wells, and, in some Municipalities, rivers and irrigation channels. Year after year greater attention is paid and care taken to conserve and preserve the sources supplying drinking-water from pollution. Generally speaking, there is no regular system of drainage. The existing drains consist chiefly of side-cuttings for surface drainage only. In some towns, however, pucka masonry drains exist. Cess-pools abound and drainage from houses flows into these, or into the backyards, or into the streets, or into the side-cuttings. The system of conservancy was the same as last reported. The street sweepings, other refuse matters, and contents of latrines and dust-bins were removed daily by scavengering establishments maintained for the purpose, and carted away beyond municipal limits and disposed of as usual, either by burying in trenches, being thrown into fields, sold as manure, or consumed in cinerators. In the

Trichinopoly Municipality a kind of cinerator, as sketched in the margin, is in use, which works efficiently and is simple and cheap in construction, costing only Rs. 5. It is built of mud, which by the joint action of the sun outside and fire inside becomes quite hard and water-proof. There is an opening at the top, into which the sweepings are thrown, and four small arched openings at the bottom for draught. There are sixteen such cinerators in Trichinopoly, and the Sanitary Commissioner, during a visit to the town, saw them in full work and burning brightly, fed by nothing but the sweepings which they were consuming. It would be well if this form of cinerator could be adopted by all Municipalities.

133. The conservancy staff in the several towns (*i.e.*, the mofussil towns only, Madras excluded) was of varying strength according to the circumstances and requirements of each. Appended is a statement of the strength in each town. From this statement it will be observed that the establishments maintained by the forty-seven mofussil towns (Madras excluded) and their material were as follows:—

Establishment.	Number.	Material.	Number.
Inspectors	111	Carts	1,024
Overseers	34	Dust-bins	6,428
Maistries	71	Public latrines	922
Peons	185	Private do.	17,131
Sweepers	3,189		
Tank Watchers	109		
Total Sanitary Staff ...	3,699		

By "private latrines" are meant, it is presumed, the privies in private houses of which the Municipality undertakes the scavengering; if so, a great advance would appear to have been made in a most important item of conservancy. Private scavengering would enable municipal servants to obtain access into the interior and backyards of dwellings, and by this means the cleansing of the compounds and inside of houses, where proper conservancy is most needed, will, it is to be hoped, be gradually effected.

134. On the whole it may be said that of late sanitation has made some progress in municipal towns. Much still remains to be done and there is ample room for improvement, but as we notice that the work done year after year is progressive, we may reasonably hope that the evils existing at present in many of the towns will be gradually removed.

135. The total estimated income of all the Municipalities, Madras excluded, amounted to Rs. 19,27,462, which represents an incidence of Rs. 1-7-3 per head of population. The incidence in 1882-83 was Rs. 1-3-3 and of 1883-84 Rs. 1-4-9; thus it will be seen that there was a gradual rise in this respect since 1882-83. The excess in the year under review over its predecessor amounted to 2 annas 6 pies, by which means the income increased from Rs. 17,20,210 to Rs. 19,27,462, and with this increased income the sanitary allotment also was raised from Rs. 5,71,199 to Rs. 6,54,536, the difference in favor being Rs. 83,337. Taken as a whole, the allotment may be considered as adequate; it yields a percentage of 33·9 to income against 33·2 in 1883-84. Individually considered also the allotments made by each town except five appear to be fair. In Cocanada (19·6), Mangalore (19·5), Calicut (10·4), Vizagapatam (10·0), and Pálghat (8·9), the percentages are low and below the average. In 1883-84 Ootacamund and Kumbakónam stood first on the

list, with proportionately high sanitary allotments. In 1884-85 also they maintained their positions. The percentages varied from 8·9 in Pálghat to 66·3 in Ootacamund. Next to Ootacamund and Kumbakónam (59·8) come Salem with 55·0, Madura 52·9, Trichinopoly 48·0, Coonoor 44·6, Tinnevelly 43·6, Tuticorin 41·7, and Tanjore 40·1. In fifteen towns the percentages were between 30 and 40, in eighteen between 20 and 30, and in the five others they were below 20 down to 8·9 in Pálghat.

136. Of the total sanitary allotment, Rs. 3,84,751 were spent in the nine months of the year ending December 1884, leaving over Rs. 2,69,785, or something more than one-third, to be spent in the following three months of the year in 1885. The figures for 1883-84 shown in the table below represent the transactions for the whole year, and from them it will be seen that Rs. 5,41,644 out of an allotment of Rs. 5,71,199 were spent, leaving Rs. 29,555 unutilized. Details of the sanitary allotment and expenditure for each Municipality are given in a table appended to this section, of which the following is an abstract :—

—	1883-84. (For the whole year.)		1884-85.	
	Amount sanctioned.	Amount spent.	Amount sanctioned.	Amount spent in 9 months ending with December 1884.
	RS.	RS.	RS.	RS.
For conservancy	3,63,476	3,57,865	3,78,939	2,73,576
„ improvement of town sites	44,656	50,196	36,285	18,676
„ improvement of water-supply, cleansing, repairing, and construction of tanks and wells	45,613	44,009	67,097	42,133
„ sanitary arrangements during fairs and festivals	3,010	3,326	6,935	2,494
„ construction and repair of markets and slaughter-houses	24,688	17,962	80,074	11,842
„ other sanitary objects	89,756	68,286	85,206	36,030
Total ...	5,71,199	5,41,644	6,54,536	3,84,751

Statement showing the Conservancy Establishment in each Municipality of the Madras Presidency.

Municipal towns.	Population as per census of 1881.	Inspectors.	Supervisors.	Overseers.	Maistries.	Peons.	Sweepers.	Toties (Public).	Toties for private scavengering.	Carts.	Dust bins.	Public latrines of various descriptions.	Private latrines.	Tank watchers.
Coonoor	4,778	1	...	...	...	1	14	9	3	12	34	11	60	...
Anantapur	4,907	1	1	...	...	2	9	10	4	4	50	10	140	...
Bimlipatam	8,582	1	..	1	1	2	33	...	...	2	2	3	...	...
Ongole	9,200	1	...	..	...	1	16	4	...	4	60	4	...	...
Karúr	9,205	1	...	...	1	1	19	7	...	6	46	6	...	...
Erode	9,864	1	...	...	...	2	14	9	2	12	60	12	...	...
Wálajápet	10,387	2	...	...	4	...	10	9	2	6	852	9	133	4
Ootacamund	12,335	2	...	1	6	2	46	23	30	36	30	46	139	4
Anakápalle	13,341	2	...	...	...	...	18	18	...	6	...	25	113	1
Dindigul	14,182	...	...	1	...	2	9	21	...	11	32	23	...	4
Cochin	15,698	1	...	4	1	...	24	4	34	6	8	29	204	...
Tuticorin	16,281	1	...	1	...	7	17	13	...	14	43	9	...	2
Chicacole	18,302	...	1	...	...	4	34	2	23	6	22	3	226	1
Palamcottah	17,964	1	...	...	1	2	7	9	4	12	90	6	250	2
Cuddapah	18,982	1	...	...	3	1	27	28	...	18	103	27	...	3
Mannárgudi	19,409	2	...	...	...	2	30	4	...	15	110	11	...	3
Guntúr	19,646	...	...	4	...	4	35	25	4	25	65	18	4,000	4
Srírangam	19,773	4	...	...	1	10	11	9	13	16	82	9	...	...
Chidambaram	19,837	1	...	4	...	1	20	4	...	10	300	9	...	4
Kurnool	20,329	1	...	...	...	9	36	13	2	7	246	40	1,264	...
Adóni	22,441	2	...	...	...	4	25	14	13	8	80	17	597	6
Vizianagrum	22,577	1	...	4	1	...	54	41	...	10	50	23	500	...
Máyavaram	23,044	3	...	1	1	6	13	...	21	22	160	11	297	6
Tinnevelly	23,221	2	...	1	...	4	19	19	1	15	118	9	20	2
Berhampore	23,599	4	...	...	...	...	76	21	26	20	118	23	540	3

Municipal towns.	Population as per census of 1881.	Inspectors.	Supervisors.	Overseers.	Maistries.	Peons.	Sweepers.	Toties (Public).	Toties for private scavengering.	Carts.	Dust-bins.	Public latrines of various descriptions.	Private latrines.	Tank watchers.
Rajahmundry	24,555	1	...	...	...	9	56	33	43	4	140	22	1,011	...
Ellore	25,092	4	...	...	...	...	14	30	3	8	96	16	...	2
Cannanore	26,386	1	...	1	1	...	8	20	...	10	16	24	...	...
Tellicherry	26,410	1	...	1	...	...	34	16	1	9	8	32	...	...
Nellore	27,505	2	...	...	6	1	35	16	18	15	164	17	1,030	...
Cocanada	30,441	...	...	3	...	11	37	29	11	6	...	13	128	5
Vizagapatam	30,291	10	...	...	10	...	36	136	5	4	180	52	119	1
Mangalore	32,099	6	...	...	1	1	26	3	28	7	91	4	2,325	...
Masulipatam	35,056	7	...	...	...	...	38	...	...	19	...	18	...	1
Pálghat	36,339	1	...	...	5	1	25	11	...	18	24	9	...	...
Conjeeveram	37,275	4	...	...	...	...	40	4	...	20	329	8	...	...
Vellore	37,491	3	...	1	...	3	48	38	...	36	413	23	...	3
Coimbatore	38,967	2	...	...	1	7	54	23	...	24	112	30	...	1
Cuddalore	43,545	5	...	...	...	...	43	22	...	25	...	...	...	...
Kumbakónam	50,098	4	...	...	...	8	32	72	9	62	438	24	187	3
Salem	50,667	4	...	...	13	...	131	89	114	75	117	56	785	5
Bellary	53,460	...	...	...	...	20	66	42	31	70	289	23	1,905	2
Negapatam	53,855	5	...	...	...	15	...	100	...	40	565	23	...	6
Tanjore	54,745	4	...	...	12	12	72	34	20	66	216	28	1,158	13
Calicut	57,085	1	...	1	1	1	41	10	2	17	25	16	...	...
Madura	73,807	1	...	2	...	10	79	43	3	102	177	19	...	...
Trichinopoly	84,449	9	...	1	1	19	25	76	...	84	267	72	...	18
Total ...	1,327,502	111	2	32	71	185	1,556	1,163	470	1,024	6,428	922	17,131	109

ABSTRACTS OF SANITARY REPORTS OF MUNICIPALITIES.

ANANTAPUR DISTRICT.

Anantapur.

Population, 4,907.

1. Water-supply. 2. Drainage. 3. Conservancy. No change in these respects since last report. (1) During the year 12 wells and 1 tank were set apart for drinking only. (2) Many cess-pools exist, which are seldom if ever cleaned. (3) Conservancy was well attended to; the roads and streets were kept clean and in fair order. There are 10 latrines (4 for males and 6 for females) and 50 dust-bins.

Sanitary works. No new works were undertaken. Some petty repairs to latrines, dust-bins, &c., were made.

General health and sanitary condition. Was good; no epidemics prevailed.

BELLARY DISTRICT.

Bellary.

Population, 53,460.

1. Water-supply. 2 Drainage. 3. Conservancy. (1) and (2) The same as last reported. (3) In conservancy, however, though the system was the same, some alterations were made in the establishment; the number of sweepers and scavengers was reduced and the number of carts increased. The town was kept fairly clean by an adequate establishment. The Municipality attend to private scavengering also.

Sanitary works.

Mainwaring's tank, which forms one of the principal sources of water-supply, was cleaned out at a cost of Rs. 1,174. A latrine was constructed (Rs. 125) and some latrines, a market and slaughter-house were repaired and drains deepened (Rs. 254).

General health and sanitary condition.

Was on the whole satisfactory. Cholera, however, towards the middle, and small-pox towards the end, of the year appeared and caused 61 and 43 deaths respectively.

Adoni.

Population, 22,441.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) Same as last reported; no change in the system. Over one more well, raising the number to 6, a watchman was employed to prevent it from pollution. (2) Many cess-pools exist which are seldom cleaned; they should be either daily emptied or closed altogether. (3) The roads and streets were kept clean and in a fair sanitary condition. The conservancy establishment employed is adequate. There are 12 latrines, being 2 more than last year. The Deputy Sanitary Commissioner visited the town in October 1884, and he reports "Adóni is, on the whole, a clean, well kept town."

Sanitary works.

A latrine was constructed (Rs. 367), a market was built (Rs. 1,264), some latrines, drains, and fresh-water wells were repaired and cleaned (Rs. 374).

General health and sanitary condition.

With the exception of an epidemic of small-pox in the early part of the year, causing 195 deaths, general health may be said to have been satisfactory. The sanitary condition of the town was good.

CHINGLEPUT DISTRICT.

Conjeeveram.

Population, 37,275.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) Is obtained from the same sources as last reported. Is sufficient, but exposed to all kinds of impurities. No tank, well, or channel is set apart solely for drinking purposes. The Lalakal channel project and the sinking of an artesian well, noted in last year's report, have been abandoned owing to their high cost. (2) Drainage same as last reported. No improvement since. The natural fall of the town is favorable for easy drainage of storm-water. (3) No change in the system since last reported. The establishment of 20 carts and 40 scavengers is reported as being insufficient for a straggling town containing 37,000 inhabitants. It might well be increased, as the sale of refuse, &c., as manure, for which there is a great demand, would pay more than the moiety of the cost of the establishment.

Sanitary works.

Some dust-bins were constructed (Rs. 175) and the Lalakal channel was repaired (Rs. 107).

General health and sanitary condition.

Cholera and small-pox prevailed; the latter throughout the year and caused 122 deaths, and the former for the greater portion of the year and caused 259 deaths. April, May, and November were free of cholera. The sanitary condition is reported as having been on the whole fair.

COIMBATORE DISTRICT.

Coimbatore.

Population, 38,967.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) With the exception of a new well sunk in a parcherry, the sources and the quality are the same as last reported. 20 wells and one tank are set apart for drinking purposes and guarded by watchmen from being polluted. (2) Remains the same as last reported. There is no regular system of drainage. Main streets have side-channels to carry off storm-water. (3) No change in the system since last report. An adequate staff of inspectors, sweepers, toties, drain coolies, &c., is maintained to keep the town clean. There are 19 masonry, 6 tatty, 1 trench, and 4 open latrines, which are freely resorted to by the people.

Sanitary works.

A new well was sunk (Rs. 100), and some tanks, wells, latrines and drains were repaired (Rs. 1,284).

General health and sanitary condition.

With the exception of some cholera in the beginning of the year causing 77 deaths, and a modified form of small-pox causing 34 deaths, the general health is reported as having been on the whole good and the sanitary condition of the town satisfactory.

Erode.

Population, 9,864.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) and (2) There is nothing new to add in these respects; they remain the same as reported last year. (3) There has been no change since last report in the system of conservancy, but the establishment has been increased during the year and a rubbish depôt will soon be opened out. There are 4 masonry and 8 open mud-wall enclosures; the latter are more frequented.

Sanitary works.

A slaughter-house and 2 markets were repaired (Rs. 62) and also a bandy-stand and some latrines and dust-bins (Rs. 89).

General health and sanitary condition.

With the exception of some cholera and small-pox causing 22 and 33 deaths respectively, the general health may be said to have been, on the whole, good and the sanitary condition satisfactory.

Karur.

Population, 9,205.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) In addition to the sources noted in last year's report there have been 4 large wells sunk. These are well constructed, with good masonry platforms properly sloping. The objectionable practice of burying the dead in the bed of the river has been discontinued. (2) Defective; no improvement since last report. (3) System is the same as last reported.

Sanitary works.

A spring was dug in the bed of the Amaravati river (Rs. 20), a new well was sunk (Rs. 169) and another deepened and cleaned (Rs. 10), and 2 new cinerators were constructed (Rs. 20).

General health and sanitary condition.

Was on the whole satisfactory. Towards the close of the year, cholera appeared and caused 54 deaths. There was only 1 death from small-pox throughout the whole year.

CUDDAPAH DISTRICT.

Cuddapah.

Population, 18,982.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) Was obtained from the sources last reported on, viz., wells chiefly and the Bogai channel. Is sufficient and of fair quality. (2) There is no regular system of drainage. Side-channels are cut for the passage of storm-water. Cess-pools abound, but they are well covered and regularly cleaned out. (3) No change in the system of conservancy since last report. A native merchant pays Rs. 200 per annum for the street sweepings and night-soil, which he collects and removes to the municipal depôt and manufactures poudrette from them. There are 27 latrines in the town; 19 are pucka built, 6 are of mud, and 2 are of tatty. They are kept in good order and freely resorted to by the people.

Sanitary works.

Nothing of importance. Market sheds and some latrines were repaired (Rs. 163) and side-drains cleaned (Rs. 128).

General health and sanitary condition.

Public health was comparatively good and sanitary condition of the town fairly satisfactory. Cholera, however, prevailed in the latter part of the year, in November and December, and caused 275 deaths.

GANJAM DISTRICT.

Chicacole.

Population, 18,302.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) and (2) Nothing new to add in these respects since last report. The sources of water-supply and the system of drainage are the same. (3) The system is the same, but the conservancy establishment, which was reported on as inadequate in the last report, was increased during the year under review, and private scavengering, which was met by much opposition, was established, though only on a small scale. In addition to the only latrine noted in last year's report, 2 other tatty latrines were put up during the year.

Sanitary works.

Two latrines were put up (Rs. 19) and some dust-bins constructed (Rs. 12). A market was repaired (Rs. 212) and some minor works executed at a cost of Rs. 38. The construction of a tank (Rs. 150), of new market shops (Rs. 267), and some repair to the extent of Rs. 124 were in progress.

General health and sanitary condition.

Was good. No epidemics prevailed. Only 5 deaths from small-pox were recorded for the whole year.

Berhampore.

Population, 23,599.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) Is obtained from wells and tanks, of indifferent quality. Nothing new has been done in regard to the water-supply since last report, except that, after much discussion, two of the least impure sources were reserved for drinking purposes only and guarded from pollution. (2) The same as last reported. Principal streets have V and U shaped drains to carry off storm-water. House-drainage defective. Many cess-pools exist, which should be done away with. A complete system of drainage is required for the town. (3) The system is the same as last reported. Some changes were made in the conservancy staff, and the latrine accommodation was increased from 18 to 21, 6 of which are pucka latrines and 15 tatty ones on the Salem plan.

Sanitary works.

Some tatty latrines were put up (Rs. 108), a slaughter-house was erected Rs. (38), Rs. 28 were spent on drainage works, and several latrines, dust-bins, and drains were repaired (Rs. 230).

General health and sanitary condition.

Was good. No epidemics prevailed. Only 2 deaths from cholera and 3 from small-pox were registered during the whole year.

GODAVARI DISTRICT.

Cocanada.

Population, 30,441.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1), (2), and (3) No alteration of any importance has been made in these respects since last report. The sources of water-supply and the system of drainage and conservancy are the same. The main sewer, noted in last year's report, is still under construction and approaching completion.

Sanitary works.

Some tanks and channels were repaired and cleaned (Rs. 218), some new latrines were constructed (Rs. 1,191), and others repaired (Rs. 188). Two new wharfs were constructed (Rs. 120) and others repaired (Rs. 90), and some side-drains were dug (Rs. 128) and a culvert repaired (Rs. 19).

General health and sanitary condition.

With the exception of a slight prevalence of cholera, which caused 9 deaths, and an epidemic outbreak of small-pox which caused 251 deaths, general health is reported as having been good and calling for no remarks. The sanitary condition of the town was carefully attended to.

Ellore.

Population, 25,092.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1), (2), and (3) No change has been made in these respects during the year; they are the same as last reported, except that the latrine accommodation has been increased by the erection of 2 more tatty latrines; there are at present 16 latrines, 3 of which are of tatty, against 1 last year.

Sanitary works.

A new well was sunk (Rs. 50), 3 were repaired (Rs. 46), and platforms were constructed around 2 others (Rs. 34). Several drains and latrines were repaired and kept in good order (Rs. 169). 3 tatty latrines, a dust-bin, and a cistern were constructed (Rs. 70).

General health and sanitary condition.

General health was unsatisfactory. Cholera and small-pox prevailed, the latter extensively, causing 333 deaths. From cholera 7 deaths were recorded. The sanitary condition of the town also is reported as not having been satisfactory. Every effort, however, was made to improve it by greater attention being paid to conservancy and water-supply.

Rajahmundry.

Population, 24,555.

1. Water-supply.
2. Drainage.
3. Conservancy.

No change in the system since last report. (1) Water-supply is derived from the Godávari river, a tank, and wells. Is reported to be of good quality, but there are no means of protecting the tanks and wells. (2) In many parts of the town drainage was defective. (3) Conservancy does not appear to have been well attended to, as the

sanitary condition of the town was not satisfactory. The latrines were not kept in good order, the pucka ones required repair, and the tatty latrines were in ruins.

Sanitary works. A drain was constructed (Rs. 558), and a tank, drains, and latrines were repaired (Rs. 140).

General health and sanitary condition. Cholera, small-pox, and fevers prevailed somewhat and caused 16,287, and 115 deaths respectively. The sanitary condition of the town is reported as having been unsatisfactory.

KISTNA DISTRICT.

Masulipatam.

Population, 35,056.

1. Water-supply. 2. Drainage. 3. Conservancy. The system is the same as last reported in all these respects. (1) Water-supply is obtained from the Kistna canal, brought into the town by masonry conduits and stored in cisterns, of which there are 75 scattered all over the town. It is reported to be of good quality. (2) The low-lying nature of the ground renders a proper system of drainage very difficult. (3) Side-cuttings exist which run into neighbouring swamps. The town was kept fairly clean by an adequate conservancy establishment.

Sanitary works. A conduit was constructed (Rs. 271), and repairs to some conduits, markets, latrines, drains, &c., were in progress at the close of the year.

General health and sanitary condition. With the exception of the prevalence of cholera, which was confined principally to the fort, and of small-pox of severe type, the general health is reported as having been good. 17 deaths from cholera and 106 from small-pox were registered during the year. The sanitary condition of the town was fair.

Guntur.

Population, 19,646.

1. Water-supply. 2. Drainage. 3. Conservancy. The same as last reported. Guntúr is very well off in these respects. Its water-supply is excellent and well taken care of; drainage good and conservancy efficient. An addition of a cart and 2 sweepers was made to the staff duri ng the year.

Sanitary works. Shutters to a drinking-water conduit were put up (Rs. 106), two cholera sheds were erected (Rs. 74), some tanks and wells were cleaned and repaired (Rs. 40), and some latrines were repaired (Rs. 35).

General health and sanitary condition. Was on the whole satisfactory. There was no cholera, but small-pox caused 46 deaths.

KURNOOL DISTRICT.

Kurnool.

Population, 20,329.

1. Water-supply. 2. Drainage. 3. Conservancy. (1) Is plentiful and wholesome, obtained from the canal. (2) Most of the principal streets are provided with drains to carry off storm-water; there is no complete system of drainage. (3) The system is the same as last reported; the conservancy of the town was as usual attended to by an establishment maintained for the purpose. There are 40 latrines, 34 of which are pucka built.

Sanitary works. A drain was constructed (Rs. 480), the cart-stand ground was raised and levelled (Rs. 159), a water-supply and drainage channels were repaired (Rs. 161), several tanks and wells were cleaned (Rs. 42), and a few latrines repaired (Rs. 9).

General health and sanitary condition. Was satisfactory. Malarious fever was the most prevalent disease. There was no cholera. Small-pox prevailed somewhat and caused 91 deaths. Kurnool is a clean and well kept town.

MADURA DISTRICT.

Madura.

Population, 73,807.

1. Water-supply. 2. Drainage. 3. Conservancy. Considerable improvements are being made in the water-supply and drainage of Madura. These were noted in last year's report. (1) A masonry well was constructed in the centre of the river bed, the water pumped up and carried through pipes to a cistern which was freely resorted to by the people, but the heavy rains damaged the pipes and the well temporarily. (2) Some drains were relaid and two or three were in course of construction. There are no cess-pools. (3) The system of conservancy was the same as that adopted in previous years. The town was kept clean by an adequate establishment maintained for the purpose.

Sanitary works. The market and slaughter-house were repaired (Rs. 563), some drains were constructed (Rs. 195), and some latrines were repaired (Rs. 155). Several works in connection with the water-supply of the town were in progress.

General health and sanitary condition. The sanitary condition of the town was fair, but the general health is reported as having been unsatisfactory. Cholera and small-pox prevailed and caused 709 and 103 deaths respectively.

Dindigul.

Population, 14,182.

1. Water-supply. 2. Drainage. 3. Conservancy. (1) The sources for drinking purposes are practically the same as last reported; the only change has been in the bringing of the water of Suppanath tank into portions of the town by means of a steam engine and iron pipes; but the water has not been used by the people for drinking or cooking. The Commissioners think that by its use for washing and cleansing, less water will be taken from the two rain-fed tanks and wells supplying drinking water. (2) The drainage of the town and of houses is being gradually improved. (3) The system of conservancy was the same as that adopted in former years. The town was kept clean by an establishment maintained for the purpose; but it is very much to be regretted that the latrine accommodation was reduced by the closing up of 11 latrines: the people experience great inconvenience thereby. The Vice-President considers nothing can be more ill-advised.

Sanitary works. A tank was cleaned and deepened (Rs. 181), a new well was sunk (Rs. 86), and some petty repairs were made (Rs. 44).

General health and sanitary condition. Was indifferent. Cholera and small-pox prevailed to a certain extent, causing 45 and 18 deaths respectively.

MALABAR DISTRICT.

Tellicherry.

Population, 26,410.

Nothing of importance to add to what was formerly reported in these respects.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) The sources and quality of water supply are the same as reported last year, viz., from public and private wells, sufficient and good. (2) The drainage is the same, natural and fairly good. (3) No change has been made in the system of conservancy, which was well attended to during the year, an adequate establishment being maintained for the purpose. There are 5 pucka built, 1 temporary, and 25 sentry-box latrines; the latter are situated on the beach and are very freely resorted to by the fishermen.

Sanitary works.

Some wells were repaired (Rs. 38); Rs. 100 were spent on night-soil carts and Rs. 68 on latrines.

General health and sanitary condition.

Was on the whole good. There were only a few sporadic cases of small-pox and no epidemics. The sanitary condition of the town was satisfactory.

Calicut.

Population, 57,085.

No change has been made in these respects since last report.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) The water-supply is obtained from a tank and some wells, is good and protected from pollution. (2) The drainage consists of side-cuttings on either side of the streets running into four main drains, which are still kept in a filthy condition. Cess-pools still exist and are a nuisance, though many have been closed during the year. (3) Conservancy was fairly well attended to. An establishment was, as usual, maintained for the purpose. No change has been made since last report as regards the disposal of refuse and other matters. There are 4 public and 12 sentry-box latrines, the latter being situated on the beach.

Sanitary works.

Markets, slaughter-houses, dust-bins, hand carts and latrine tubs were repaired (Rs. 799).

General health and sanitary condition.

Was fairly good on the whole. Cholera and small-pox prevailed to some extent; 8 deaths from the former and 99 from the latter were registered during the year.

Palghat.

Population, 36,339.

(1) Is ample, obtained from the river Kalputti and wells, of which there is one in every house.

1. Water-supply.
2. Drainage.
3. Conservancy.

(2) The principal bazaars and streets have masonry side-drains. During the rainy season side-cuttings are made to carry off storm-water. The natural drainage is good. (3) No change has been made since last report in the system of conservancy, which was well attended to, or in the mode of the disposal of refuse and other foul matters. The latrine accommodation was the same as in the preceding year, viz., 6 latrines and 3 urinals; of the former only one is pucka built, the others being made of tatty.

Sanitary works.

Some tanks and wells were cleaned (Rs. 50), and Rs. 52 were spent on drains and Rs. 89 on latrines.

General health and sanitary condition.

With the exception of the prevalence of some cholera and small-pox, the health of the people was fairly good and the sanitary condition of the town satisfactory. 52 deaths were registered from cholera and 44 from small-pox.

Cochin.

Population, 15,698.

(1) An improvement is reported in this respect.

1. Water-supply.
2. Drainage.
3. Conservancy.

The sources are the same as those reported last year, but 21 new iron tanks were added to the 4 in use in former years, and water from the Alwaye was brought into the town in casks and sold to the people at a trifling cost; this arrangement lasted till the setting in of the monsoon. (2) No improvement has been made in the drainage of the town, which is still indifferent both as regards houses and streets. Some streets have masonry side-drains and others side-cuttings forming gutters. (3) No change was made in the system of conservancy or in the disposal of street sweepings and other refuse matters. An establishment was maintained to keep the town clean. The latrine accommodation was less than what it was in the preceding year, only 29 latrines against 36. It consisted of 2 masonry latrines, 5 of the Pálghat pattern, 11 tatty, and 11 on piles over tidal waters.

Sanitary works.

Rupees 177 were spent in putting up iron tanks, Rs. 86 were spent in bringing water from the Alwaye, a tank was dug at Alwaye (Rs. 31), water-pipes were repaired (Rs. 95), a slaughter-house was constructed (Rs. 535), some markets were repaired (Rs. 14), some latrines were erected (Rs. 42), the Calvetty canal bank was constructed (Rs. 1,501), and Rs. 698 were spent in repairing latrines, drains, dust-bins, &c., and in reclaiming Calvetty swamp and levelling and cleaning several sites.

General health and sanitary condition.

Public health was unsatisfactory. Cholera and small-pox prevailed extensively, especially the latter. 63 deaths from cholera and 378 from small-pox were registered during the year. The sanitary condition of the town was fair.

Cannanore.

Population, 26,386.

(1) Is sufficient, obtained from 33 wells, 22 of which are set apart for drinking purposes only.

1. Water-supply.
2. Drainage.
3. Conservancy.

(2) No change to note since last report. Laterite drains exist in the bazaars and some of the streets, which work satisfactorily. Drainage from houses is defective; numerous cess-pools exist. (3) The system of conservancy, and the mode of disposal of refuse and other foul matters, are the same as detailed in last year's report. The latrine accommodation consists of 12 masonry and 12 sentry-box latrines.

Sanitary works.

Several roads were repaired, drains were flushed, and markets, slaughter-houses, drains, latrines, &c., were repaired at a cost of Rs. 787.

General health and sanitary condition.

Was good. There were no epidemics. The sanitary condition of the town was well attended to and somewhat improved.

NELLORE DISTRICT.

Nellore.

Population, 27,505.

No change to note in these respects. They are all the same as detailed in last year's report. (1) Water-supply is obtained from the river Pennér, tanks, channels, and wells, sufficient in quantity. (2) There is no regular system of drainage. In some parts of the town laterite drains exist. The drainage of houses is defective. (3) The conservancy of the town was fairly well attended to, and the street sweepings and refuse matters were disposed of in the usual manner. There are 18 public latrines.

1. Water-supply.
2. Drainage.
3. Conservancy.

Sanitary works. Nothing of importance; a cess-pool was covered (Rs. 18) and a drainage tunnel was repaired (Rs. 14).

General health and sanitary condition. Was fairly satisfactory. There were no epidemics. A few cases of cholera and small-pox occurred.

Ongole.

Population, 9,200.

(1) The water-supply was fairly good, obtained from wells, 7 of which are specially conserved for drinking only. (2) The drainage is the same as last reported. Only four streets are provided with drains; in other parts of the town drainage is natural. (3) No change has been made in the system of conservancy, which appears to have been well attended to by an establishment maintained for the purpose. The street sweepings and other refuse matters were disposed of in the same manner as detailed in last year's report. The latrine accommodation has been increased by the addition of 1 new latrine; it now consists of 4 latrines.

1. Water-supply.
2. Drainage.
3. Conservancy.

Sanitary works. Some prickly-pear was removed (Rs. 14) and certain tanks and wells cleaned (Rs. 42). The construction of some drains and latrines was in progress at the end of the year.

General health and sanitary condition. With the exception of the prevalence of some small-pox, the public health was on the whole fairly good. There was no cholera; 20 deaths were recorded from small-pox. The sanitary condition of the town was satisfactory.

NORTH ARCOT DISTRICT.

Vellore.

Population, 37,491.

No change to note in these respects. They are the same as detailed in former reports. (1) The sources of the water-supply are the same, viz., tanks and wells, the former being subject to all kinds of pollution. (2) The drainage of the town consists of V-shaped drains in some of the principal streets, which run into a channel. (3) The conservancy was attended to by an adequate scavengering staff, but the supervision of the establishment was not sufficient. Night-soil, street sweepings, and other refuse were disposed of in the same manner as in former years; they were collected and carted away outside municipal limits by a contractor and sold as manure. The latrine accommodation consists of 22 latrines on the dry-earth system.

1. Water-supply.
2. Drainage.
3. Conservancy.

Sanitary works. Some trial wells were sunk (Rs. 30), the silt trap and channel bund were repaired (Rs. 52), several roads and streets were repaired (Rs. 1,200), some drains were constructed (Rs. 761) and others covered (Rs. 150), and some latrines were whitewashed and repaired (Rs. 146).

General health and sanitary condition. Public health is reported as having been on the whole fairly good, and the sanitary condition of the town fair. 77 deaths from cholera and 85 from small-pox were registered during the year.

Walajapet.

Population, 10,387.

(1) Is obtained from 6 tanks set apart solely for drinking and guarded from pollution. There are several wells also. The supply is abundant and of fairly good quality. (2) Side-drains exist on both sides of the great and trunk roads, and there are rough stone drains in several of the streets to catch the drainage from houses. (3) There has been no change in the system of conservancy since last report. The town was kept clean by an establishment maintained for the purpose. Street sweepings, night-soil, and other rubbish were deposited in the outskirts of the town and sold as manure. There are 7 latrines and 2 urinals.

1. Water-supply.
2. Drainage.
3. Conservancy.

Sanitary works. Granite slabs were put on the sides of a tank (Rs. 56), a well was rebuilt and revetted (Rs. 36), slaughter-houses and markets were repaired and floored (Rs. 154), and some other minor works and repairs executed.

General health and sanitary condition. Was on the whole fairly satisfactory. There were 17 deaths from cholera and 2 from small-pox. Wálajápet is a clean, well kept town.

NÍLGIRI DISTRICT.

Ootacamund.

Population, 12,335.

(1) Naturally good and fairly abundant, obtained from two reservoirs situated at "Marliamund" and "Dodabetta" and from private wells. The water from the reservoirs is distributed in open channels and pipes and thus liable to pollution. The sources are fairly well conserved. (2) Drainage has of late been considerably improved. The drains are flushed twice a week and they still empty their contents into the lake; this drawback will be removed when the main sewer, which consists of iron pipes, is finished. In one village (Kandal), however, drainage is still very defective. (3) There has been no change in the system of conservancy since last report; the sweepings and other inoffensive refuse are removed daily by an establishment maintained for the purpose at an annual cost of Rs. 23,900; they are either burnt or used in filling up hollows and raising levels. There are in all 43 public latrines, kept in a very satisfactory condition; their contents are carted away daily to a distance of three miles from the town and buried. The slaughter-houses also are kept in a satisfactory condition. All offensive matters are properly removed and buried in pits six feet deep. The town, for the purposes of conservancy, is divided into four sections supervised by two or more Commissioners.

1. Water-supply.
2. Drainage.
3. Conservancy.

Sanitary works. An embankment was constructed (Rs. 65), some fences were put up and avenues planted (Rs. 212 and Rs. 83 respectively), the lines were repaired (Rs. 444), several tanks and wells were cleaned

(Rs. 46), the water-supply channel was repaired (Rs. 660), 4 latrines were renewed (Rs. 79) and another was repaired (Rs. 180). At the close of the year repairs to the markets and slaughter-houses were in progress.

General health and sanitary condition.

The general health of the people was on the whole satisfactory and sanitary condition fair. Measles, however, prevailed somewhat and caused much mortality among the people. There were 2 deaths from cholera, both imported cases, and from small-pox also 2.

Coonoor.

Population, 4,778.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) No improvement has been made in this respect; is derived from natural springs three miles away, but, being brought into the town by an open channel, is subject to general contamination. (2) Drainage is natural. Some improvement has been made during the year. A masonry drain 380 feet in length was constructed in the streets where most needed, and another 600 feet long is in course of construction. (3) The town was kept clean by an adequate conservancy staff; the street sweepings, night-soil, &c., were collected and sold by auction. The latrine accommodation consists of 3 large and 3 small latrines, and 5 of corrugated iron.

Sanitary works.

Three new latrines were constructed (Rs. 1,058), some latrines were repaired and floored (Rs. 504), Rs. 374 were spent on improvement to water-supply, and Rs. 494 on repair and flooring of market sheds. The construction of some drains was in progress at the end of the year.

General health and sanitary condition.

Was satisfactory. No epidemics prevailed.

SALEM DISTRICT.

Salem.

Population, 50,667.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) The only improvement in the water-supply since last report has been the addition of a new drinking well. The sinking of an artesian well is in progress, and if the project succeeds, one of the greatest evils from which Salem suffered, viz., a very bad water-supply, will be removed. The sources are at present tanks, wells, and the river, all of which, more especially the river, are subject to every kind of pollution. (2) Since last report a large drain was constructed in Shivapet and the drainage greatly improved. This drain discharges into a nullah connected with the river. The town sadly requires a complete system of drainage, and the subject is occupying the attention of the Municipal Committee. Some cess-pools still exist; they should be daily emptied or closed altogether. (3) No alteration of any importance has been made since last report or in the disposal of the street sweepings or other refuse matters, which are, as usual, collected, carted out of municipal limits, and sold as manure to the ryots. The conservancy staff was increased during the year and private scavengering introduced. The town was kept tolerably clean. There are 44 latrines, of which 9 are pucka built and the rest are either mud built or made of tatties.

Sanitary works.

A well was repaired (Rs. 33), and the sinking of an artesian well was in progress at the end of the year; a compound was constructed for the bullock slaughter-house (Rs. 19) and several tatty latrines repaired (Rs. 56).

General health and sanitary condition.

Public health was on the whole good, except about the beginning of the year, when cholera prevailed to some extent and caused 167 deaths. The sanitary condition of the town was fair.

SOUTH ARCOT DISTRICT.

Cuddalore.

Population, 43,545.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) Is obtained principally from wells, mostly brackish. Great progress was made in pushing on the old water-supply scheme noted in former reports. Unfortunately the heavy monsoon rains caused much damage to the works. 7 wells were repaired and provided with parapet walls during the year. (2) No improvement was made in drainage since last report; there is no regular system. A few masonry drains exist in some parts of the town; side-channels are occasionally cut in other parts to carry off storm-water. (3) The same system of conservancy was in vogue as in former years, nor has there been any change in the disposal of the street sweepings, night-soil, and other refuse matters. These, as usual, were collected by an establishment maintained for the purpose, carted outside municipal limits, and sold as manure. The latrine accommodation consists of 12 pucka built latrines on the Coimbatore plan, and of 10 tatty latrines on the Salem plan. The people resort to them freely.

Sanitary works.

Some tanks and wells were repaired (Rs. 128), some drains were constructed (Rs. 180), and some latrines and drains were repaired (Rs. 144).

General health and sanitary condition.

With the exception of the prevalence of cholera and some small-pox, which caused 214 and 20 deaths respectively, public health may be said to have been fairly good and the sanitary condition of the town satisfactory.

Chidambaram.

Population, 19,837.

1. Water-supply.
2. Drainage.
3. Conservancy.

No change has been made in these respects since last report. (1) Water is obtained from tanks and wells, of good quality and sufficient. (2) For drainage side-channels were cut to carry off storm-water. The drainage from houses flows into the backyards, and, in some instances, into cess-pools in the streets. (3) The town was cleaned by a staff of 1 inspector, 4 overseers, 20 sweepers, and 10 carts; the sweepings, night-soil and other refuse matters were carted to and collected in four rubbish depôts, eventually to be sold as manure. There are 8 public latrines, freely resorted to by the people.

Sanitary works.

Several tunnels were constructed (Rs. 403), and several tanks were deepened and cleaned (550), 26 iron dust-bins were introduced, and 33 brick ones and 8 tatty latrines were repaired.

General health and sanitary condition.

Public health was indifferent. Cholera and small-pox prevailed and caused 290 and 67 deaths respectively. The sanitary condition of the town was fair.

SOUTH CANARA DISTRICT.

Mangalore.

Population, 32,099.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) Is obtained from a tank and wells, of good quality and abundant. Numerous wells exist, every house having one. (2) Drainage is good; square and saucer-shaped drains are laid on either side of the streets. Drainage from houses flows into nullahs and small streams which empty in the backwater. During the year some pucka drains were constructed. (3) No change in this respect since last report. Conservancy was well attended to by an establishment maintained for the purpose, and the sweepings, night-soil, and other refuse matters were disposed of as detailed in former reports. There are only 5 public latrines; more are greatly wanted as the town occupies a very extensive area.

Sanitary works.

Rupees 120 were spent in the improvement of water-supply, markets and slaughter-houses were repaired (Rs. 335), and 3 side-drains were constructed and others repaired (Rs. 869).

General health and sanitary condition.

Was very good. No epidemic prevailed.

TANJORE DISTRICT.

Tanjore.

Population, 54,745.

1. Water-supply.
2. Drainage.
3. Conservancy.

No change has been made in these respects. Matters remain much the same as in former years. (1) Water-supply is obtained from tanks, wells, and river, and subject to much pollution. The great need of Tanjore is a good water-supply, and, unless this is carried out, the town must remain constantly liable to recurring cholera epidemics. A scheme is on hand. (2) Drainage is fair; masonry drains exist in most of the principal streets. (3) The conservancy of the town was well attended to by an adequate staff maintained for the purpose. The street sweepings, night- soil, and other refuse matters were disposed of in the same way as in former years. The recommendation of the Deputy Sanitary Commissioner to erect cinerators to consume the sweepings and rubbish was not carried out, owing to the want of funds. The latrine accommodation consists of 40 latrines, of which 26 are pucka built and 14 temporary ones.

Sanitary works.

Rupees 819 were spent in improving village sites and Rs. 1,214 in improvement of water-supply, consisting in the deepening and cleansing of several tanks and wells; two butchers' stalls were constructed (Rs. 317), the slaughter-house repaired, and two drains and a latrine were built (Rs. 141).

General health and sanitary condition.

Public health was indifferent. Cholera and small-pox prevailed, the former extensively and caused 401 deaths. From small-pox 167 deaths were recorded. The sanitary condition of the town was fair.

Kumbakonam.

Population, 50,098.

1. Water-supply.
2. Drainage.
3. Conservancy.

Nothing new to add in these respects to what was detailed in former reports. Arrangements remain much the same as in former years. (1) Water-supply is obtained from rivers, tanks and wells, of good quality and abundant. (2) No improvement has been made in drainage; there is no regular system. Side-ditches

exist; drainage from houses either flows into these, forming black seething cess-pools, or runs into masonry cisterns. (3) The conservancy of the town was well attended to by an adequate staff of inspectors, peons, sweepers, scavengers, &c. The street sweepings, contents of latrines, and other refuse matters were carted to depôts outside municipal limits, the night-soil buried, and the sweepings, &c., burnt in cinerators. There are 24 latrines in the town—14 masonry and 10 thatched; they are freely used by the people.

Sanitary works.

Several roads and streets were gravelled, widened, and otherwise improved (Rs. 4,892), a tank was improved (Rs. 565), some dust-bins were repaired (Rs. 73) and other new ones put up (Rs. 91), the slaughter-house was repaired (Rs. 7), and a cinerator constructed (Rs. 20).

General health and sanitary condition.

Public health was indifferent. Cholera and small-pox prevailed, the former very much, causing 400 deaths. From small-pox 119 deaths were registered. The sanitary condition of the town was fair.

Mayavaram.

Population, 23,044.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) The water-supply is obtained from the river Cauvery, wells and tanks, three of the latter being set apart exclusively for drinking purposes. The old Cauvery, which feeds a great number of tanks, is very little attended to; permanent municipal masonry latrines have been erected on the bank at its entrance into the town; this is objectionable. (2) No attempt at systematic drainage has ever been undertaken. Some of the main roads have broad ditches on either side to carry off storm-water, but they are very indifferently looked after. (3) No change has been made in the system of conservancy since last report. The scavengering establishment has been slightly increased. The street sweepings are partly burnt in a cinerator and partly deposited outside municipal limits, and eventually sold as manure. 13 sweepers are employed for removing rubbish and 21 for removing night-soil; the latter do not do their work properly. There are 2 masonry and 9 tatty latrines, which are freely used by the people.

Sanitary works.

Ponds were dug to get water in the Cauvery channel during the hot season (Rs. 76), a well was sunk (Rs. 35) and another repaired (Rs. 11), the market and certain bazaars were repaired (Rs. 29), 2 latrines were constructed (Rs. 164), some tatty latrines and dust-bins were repaired (Rs. 160), a tunnel was constructed and another repaired (Rs. 48), several roads were repaired (Rs. 1,067), and some other minor works executed.

General health and sanitary condition.

Public health was indifferent. Cholera and small-pox prevailed to a certain extent and caused 197 and 74 deaths respectively. The sanitary condition of the town was fair. Máyavaram is a very clean interesting little town.

Negapatam.

Population, 53,855.

1. Water-supply.
2. Drainage.
3. Conservancy.

Same as reported last year. (1) Water-supply is obtained from tanks and wells chiefly and from the river Ooppavaur also during the north-east monsoon; this is a filthy stream and subject to all kinds of pollution. Six tanks are reserved for drinking purposes only and guarded by watchmen from pollution. There are numerous private wells used indiscriminately for all purposes. (2) There is no regular system of drainage; the low situation of the town renders it difficult. Cess-pools abound; there are 750 of them which are, as far as possible, emptied twice a week. (3) For the purposes of conservancy the town is divided into 5

divisions and an adequate scavengering establishment is employed in each to keep it clean. The medical officer reports that the conservancy of the town is not properly attended to. There are 18 pucka built public latrines and 5 temporary ones and 537 masonry dust-bins and 28 bottomless ones of corrugated galvanised iron. The street sweepings and night-soil, &c., are collected and carried to Hathaway's Park to the sea and to a ditch and field in Nagore.

Sanitary works.

Rs. 3,320 were spent in improvements to water-supply; temporary tatty latrines were put up (Rs. 134). A slaughter-house was constructed (Rs. 682) and ten dust-bins of galvanised iron were put up (Rs. 146).

General health and sanitary condition.

With the exception of cholera and small-pox which prevailed to some extent the general health was good, but the sanitary condition of the town is reported by the medical officer as having been indifferent; 791 deaths from cholera and 234 from small-pox were registered during the year.

Mannargudi.

Population, 19,509.

1. Water-supply. 2. Drainage. 3. Conservancy.

No change has been made in these respects since last report. (1) The water-supply is obtained from tanks and rivers and occasionally from wells: 3 tanks and 2 wells are set apart solely for drinking. (2) There is no regular system of drainage. Side-channels exist to carry off storm-water. There are 20 cess-pools which are cleaned daily. Conservancy was well attended to and the town kept clean. The street sweepings and other rubbish are burnt in cinerators, and the ashes mixed with the night-soil buried and ultimately sold as manure. There are 2 masonry and 9 tatty latrines, which are freely resorted to by the people.

Sanitary works.

Several roads were metalled and repaired (Rs. 1,154), a tank was repaired and cleaned (Rs. 1,584), a market and slaughter-house were constructed (Rs. 710), and Rs. 100 were spent in the construction and repair of latrines.

General health and sanitary condition.

With the exception of the prevalence of cholera and small-pox, public health is reported as having been on the whole fairly satisfactory. 302 deaths were registered from cholera and 64 from small-pox. The sanitary condition of the town was satisfactory.

TINNEVELLY DISTRICT.

Tinnevelly.

Population, 23,221.

1. Water-supply. 2. Drainage. 3. Conservancy.

Same as last reported. (1) Is obtained from the river Támbraparni, from channels leading from it, and from two tanks. The channels and tanks are subject to all kinds of pollution. This was noted in last year's report also, but no improvement seems to have been made. (2) No improvement has been made in drainage, which is very unsatisfactory. There is no regular system. (3) The town was kept clean by an establishment maintained for the purpose. The street sweepings, &c., are burnt in cinerators, and the ashes are mixed with night-soil and sold as manure. There are 10 public latrines, 2 of which are temporary mud-wall enclosures.

Sanitary works.

Some channels were repaired (Rs. 145), 7 new wells were sunk (Rs. 497), 2 wells and a tank were repaired and cleaned (Rs. 335), 4 bathing ghâts were constructed (Rs. 726), some temporary side-drains were dug (Rs. 100), and the construction of some side-drains was in progress at the end of the year.

General health and sanitary condition.

Unsatisfactory. Cholera and small-pox prevailed and caused 304 and 107 deaths, respectively.

Palamcottah.

Population, 17,964.

1. Water-supply. 2. Drainage. 3. Conservancy.

No change of any importance has been made in these respects since last report. (1) Water-supply is obtained from channels, tanks and wells, of good quality and sufficient. (2) Drainage is reported to be satisfactory. Most of the streets and lanes have side-cuttings for surface drainage. (3) The town was kept clean by an establishment maintained for the purpose. Palamcottah is a clean, well kept town.

Sanitary works.

Several streets and roads were repaired (Rs. 962), market and slaughter-house were repaired (Rs. 122), drains were cleaned (Rs. 80), and some dust-bins and latrines were constructed and repaired (Rs. 325).

General health and sanitary condition.

With the exception of cholera about the beginning and the end of the year and small-pox, public health is reported as having been on the whole good. 161 deaths from cholera and 37 from small-pox were registered during the year. The sanitary condition of the town was satisfactory.

Tuticorin.

Population, 16,281.

1. Water-supply. 2. Drainage. 3. Conservancy.

(1) The chief sources of water-supply are 2 tanks and wells fed through conduits by the Támbraparni river. At the end of the year, owing to heavy rains, the tanks breached and the people had to depend on wells for their water-supply. (2) Drainage is defective owing to the level nature of the site of the town; there are, however, 2 masonry drains which carry off the storm-water of the major portion of the town. (3) There has been no change in the system of conservancy since last report. The establishment was slightly increased and the town kept fairly clean. The street sweepings, &c., were burnt in cinerators, and the ashes mixed with night-soil were buried outside municipal limits. No improvement has been made in the latrine accommodation, which consists of 12 leaf latrines.

Sanitary works.

Several roads were repaired (Rs. 2,065), a well was repaired (Rs. 5), two cinerators were built (Rs. 50), and some other minor works executed.

General health and sanitary condition.

Public health was unsatisfactory. Cholera and small-pox prevailed and caused 251 and 23 deaths respectively. The sanitary condition of the town was fair.

TRICHINOPOLY DISTRICT.

Trichinopoly.

Population, 84,449.

1. Water-supply. 2. Drainage. 3. Conservancy.

Remain much the same as detailed in former reports. (1) Water-supply is obtained from the Wycondah channel fed by the Cauvery. Some tanks and wells also are used. A few of the former are set apart solely for drinking. With all the precautions taken, contamination does take place, and the water is fouled

in many ways. (2) There is no regular system of drainage. Some side-drains exist. (3) An establishment was maintained to attend to the conservancy of the town. The street sweepings, &c., are burnt in cinerators, of which there are 16. They are simple structures, efficient and cheap, costing only Rs. 5 each. There are 36 latrines in the town, which are freely resorted to by the people.

Sanitary works.

Markets and slaughter-houses were repaired (Rs. 547), a terraced stall and another for petty vendors were built at a cost of Rs. 1,275 and Rs. 1,000 respectively, a slaughter-house was constructed (Rs. 205), several markets were repaired (Rs. 242), some dust-bins were constructed (Rs. 195) and some latrines repaired (Rs. 32).

General health and sanitary condition.

With the exception of cholera which appeared about the middle of the year, public health is reported as having been on the whole fair. 573 deaths were registered from cholera and 36 from small-pox. The sanitary condition of the town was satisfactory.

Srirangam.

Population, 19,773.

1. Water-supply. 2. Drainage. 3. Conservancy.

(1) Water-supply is obtained from the rivers Cauvery and Coleroon, and the Nassoo vaikal, of good quality. There are no tanks or wells set apart for drinking purposes. (2) No improvement has been made in drainage since last report. There is no regular system. Side-cuttings are made in the sides of streets for surface drainage. (3) The system of conservancy is the same as that detailed in last report. The town was kept clean by an adequate scavengering establishment. The street sweepings, &c., are collected and sold as manure. The contents of latrines are buried in trenches in selected spots. There are 7 permanent and 2 temporary latrines, which are freely resorted to by the people.

Sanitary works.

Nothing of importance. Some repairs were made to the extent of Rs. 671.

General health and sanitary condition.

With the exception of the prevalence of some cholera and small-pox, public health is reported as having been on the whole tolerably good. The sanitary condition of the town was satisfactory.

VIZAGAPATAM DISTRICT.

Vizagapatam.

Population, 30,291.

1. Water-supply. 2. Drainage. 3. Draiervancy.

(1) Water-supply is good, obtained from tanks and wells. 46 wells and 3 tanks are set apart solely for drinking purposes and guarded from pollution. (2) Drainage is good. Some improvement was made in this direction during the year. Several V-shaped drains were constructed at a cost of Rs. 1,310. (3) No change has been made in the system of conservancy since last report. The street sweepings are used to fill up pits within the town. The contents of the latrines are conveyed in boats across the ferry and deposited a mile beyond, in the swamp. There are 52 public latrines, 12 of which are on the Coimbatore plan. They are freely resorted to by the people, though numbers still go to the sea shore and unoccupied lands.

Sanitary works.

Several drains were constructed (Rs. 1,210) and others repaired (Rs. 265), some rank vegetation was removed (Rs. 29), basements to several wells were constructed and silt from others was removed (Rs. 217), 2 rest-houses were constructed and 2 others repaired (Rs. 445), 60 dust-bins were put up (Rs. 100), and some repairs to latrines and markets were executed.

General health and sanitary condition.

Small-pox prevailed epidemically in the first half of the year and caused 219 deaths. In other respects public health is reported as having been good. There was no cholera. The sanitary condition of the town was fair.

Bimlipatam.

Population, 8,582.

1. Water-supply. 2. Drainage. 3. Conservancy.

(1) Water-supply is good and abundant, obtained principally from wells. Nothing new to record since last report. (2) Drainage is very good. Nearly all the streets are provided with good stone drains. (3) No change in the system of conservancy since last report. The street sweepings, &c., are carted away to a distance north and west of the town. There are no public latrines. Open spaces of ground are set apart for public convenience.

Sanitary works.

Some drains were constructed (Rs. 245) and several others repaired (Rs. 1,152).

General health and sanitary condition.

Public health was good. No epidemics prevailed. The sanitary condition of the town has much improved, and Bimlipatam is a clean and well kept town.

Vizianagram.

Population, 22,577.

1. Water-supply. 2. Drainage. 3. Conservancy.

Remain much the same as detailed in last report. (1) Water-supply is obtained from tanks and wells, of fairly good quality. Only one large tank is guarded by a watchman from being polluted. (2) Drainage is fairly good; the drains were daily flushed and kept clean. (3) Conservancy was well attended to. The street sweepings, &c., and night-soil are collected and removed outside of the town, where they are sold as manure. There are 23 latrines, which are freely resorted to.

Sanitary works.

Some drains were constructed (Rs. 450) and others repaired (Rs. 370), and a double latrine was built (Rs. 369).

General health and sanitary condition.

Public health was good. No epidemics prevailed. The sanitary condition of the town was satisfactory.

Anakapalle.

Population, 13,341.

1. Water-supply. 2. Drainage. 3. Conservancy.

(1) Water-supply is obtained from tanks and wells, viz., fairly good and sufficient quantity. (2) Drainage is indifferent. The system is incomplete and faulty. Some of the principal streets are provided with V-shaped drains. No change has been made in the system of conservancy since last report. A few alterations, however, were made in the establishment. The number of rubbish carts was increased and also the number of latrines. The street sweepings and other refuse are collected, carted away to a distance, and burnt in cinerators. There are 15 mud-wall latrines on the trench system. They are resorted to freely, but the practice of making use of waste lands for the purposes of nature still continues.

Sanitary works.

A latrine was built (Rs. 17), a tank was cleaned and deepened (Rs. 474), and platforms were constructed around certain wells (Rs. 98).

General health and sanitary condition.

Public health is reported as having been tolerably good, though not so good as in the preceding year. 4 deaths from cholera and 49 from small-pox were registered during the year. The sanitary condition of the town was fair.

Statement showing the Birth and Death Rates, Estimated Income, Allotment for Sanitary Purposes and Vaccination, and Numbers vaccinated, in each Municipality during the year 1884.

Municipalities.	Population as per census of 1881.	Birth-rate.	Death-rate.	Estimated income, 1884-85.	Rate per cent. of sanitary allotment to available income.	1884-85.* Sanitary allotment. Amount sanctioned.	Sanitary allotment. Amount expended in nine months ending with Dec. 1884.	Conservancy. Amount sanctioned.	Conservancy. Amount expended.	Improvement of town sites. Amount sanctioned.	Improvement of town sites. Amount expended.	Improvement of water-supply, including cleansing, repairing and construction of tanks and wells. Amount sanctioned.	Improvement of water-supply, including cleansing, repairing and construction of tanks and wells. Amount expended.
				RS.		RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.
Bellary	53,460	20·8	25·0	78,020	38·3	29,940	25,791	28,990	24,362	...	...	500	1,174
Ádóni	22,441	39·6	24·9	23,870	35·1	8,380	6,439	5,230	4,434	...	...	860	253
Anantapur ...	4,907	49·5	25·0	12,162	34·2	4,160	2,328	2,590	1,834	1,100	300	130	88
Conjeeveram ...	37,275	37·5	38·9	29,350	32·3	9,500	5,829	5,930	4,114	200	...	1,160	107
Coimbatore ...	38,967	37·8	26·0	41,700	23·9	9,970	7,650	8,260	6,366	...	...	610	194
Erode	9,864	27·0	22·1	13,620	23·4	3,190	1,850	2,050	1,538	30	15	220	45
Karúr	9,205	43·8	33·5	17,690	26·5	4,700	1,928	2,600	1,729	...	...	330	179
Cuddapah ...	18,982	25·2	37·7	41,800	22·5	9,440	5,300	7,520	4,790	...	...	380	220
Chicacole ...	18,302	27·9	19·1	14,510	22·9	3,334	2,323	2,270	1,498	...	...	220	193
Berhampore ...	23,599	43·6	29·9	27,730	22·7	6,310	4,621	5,820	4,184	...	...	20	31
Cocanada ...	30,441	25·0	27·4	54,610	19·6	10,731	6,977	6,420	4,694	345	...	886	401
Rajahmundry ...	24,555	25·6	32·2	28,010	38·0	10,655	8,648	9,910	7,549	...	...	20	21
Ellore	25,092	21·5	37·3	22,470	24·3	5,460	4,532	5,020	4,153	...	...	190	140
Masulipatam ...	35,056	22·4	14·2	37,000	20·9	7,755	6,159	6,872	5,107	...	...	433	608
Guntúr	19,646	24·7	19·8	31,380	27·1	8,530	6,126	7,600	5,870	...	...	520	146
Kurnool	20,329	34·6	31·6	33,860	33·2	11,257	7,808	6,972	5,032	...	...	3,860	1,891
Madura	73,807	27·3	30·9	1,08,820	52·9	57,600	36,004	25,000	16,685	...	...	24,300	16,931
Dindigul	14,182	35·3	22·5	14,300	32·8	4,700	3,131	3,670	2,638	...	...	30	449
Tellicherry ...	26,410	37·6	20·5	42,120	21·0	8,870	4,315	6,434	4,174	...	...	2,036	38
Calicut	57,085	47·0	31·2	62,000	10·4	6,450	3,838	4,450	3,039	...	...	...	...
Pálghat ...	36,339	37·6	36·5	60,750	8·9	5,465	3,780	4,280	3,220	...	...	50	51
Cochin	15,698	38·4	55·8	20,990	37·1	7,792	6,988	5,112	3,809	...	...	550	388
Cannanore ...	26,386	41·9	25·8	23,080	39·0	9,010	6,326	6,390	4,605	1,880	1,319	50	1
Nellore	27,505	20·5	16·3	38,100	29·8	11,360	4,913	9,340	4,862	...	...	...	...
Ongole	9,200	45·0	27·1	14,000	22·5	3,150	2,650	2,060	1,432	...	...	...	42
Vellore	37,491	30·2	23·2	48,290	33·9	16,400	9,138	9,720	6,735	...	...	50	84
Wálajápet ...	10,387	36·0	22·4	13,750	22·0	3,025	1,865	2,380	1,483	...	...	325	243
Ootacamund ...	12,335	26·9	28·9	1,20,060	66·3	79,610	22,620	23,900	18,757	2,320	804	1,640	1,450
Coonoor	4,778	20·9	23·6	40,040	44·6	17,890	8,484	5,050	4,460	...	...	1,140	890
Salem	50,667	25·5	17·2	81,170	55·0	44,650	14,747	21,270	14,344	...	...	1,400	300
Cuddalore ...	43,545	31·4	18·7	46,430	33·9	15,772	11,584	9,367	5,920	...	...	5,955	5,205
Chidambaram ...	19,837	17·2	32·2	17,760	29·1	5,170	3,806	3,370	2,464	...	...	1,200	1,162
Mangalore ...	32,099	28·9	20·0	41,790	19·5	8,150	5,673	6,050	4,225	...	...	200	120
Tanjore	54,745	25·5	31·3	58,240	40·1	23,380	14,552	18,730	10,854	1,500	856	900	1,479
Kumbakónam ...	50,098	26·4	45·4	61,330	59·8	36,734	18,549	19,684	12,895	12,200	5,460	50	4
Máyavaram ...	23,044	23·8	36·8	26,780	36·2	9,706	7,193	5,734	4,529	...	...	392	691
Negapatam ...	53,855	18·5	40·6	70,910	30·5	21,690	15,036	15,770	10,436	...	...	3,000	3,321
Mannárgudi ...	19,409	28·5	42·2	24,620	39·8	9,810	6,452	3,610	2,895	2,800	1,154	1,500	1,583
Tinnevelly ...	23,221	28·7	40·0	29,460	43·6	12,850	9,282	4,150	4,166	...	...	3,800	1,026
Palamcottah ...	17,964	25·1	29·7	19,160	21·3	4,090	2,211	2,520	1,854	1,050	192	...	...
Tuticorin ...	16,281	38·8	49·0	27,480	41·7	11,484	6,903	4,384	3,648	4,000	2,065	1,500	243
Trichinopoly ...	84,449	16·9	23·7	89,980	48·0	43,216	27,115	21,540	16,881	8,500	6,266	2,890	...
Srírangam ...	19,773	29·7	34·3	27,010	21·2	5,730	4,208	4,930	3,537	...	...	...	20
Vizagapatam ...	30,291	34·2	31·8	1,46,910	10·0	14,740	9,155	7,410	5,876	...	...	3,300	217
Bimlipatam ...	8,582	35·6	28·5	11,810	24·0	2,840	2,893	2,100	1,496	360	245	100	4
Vizianagram ...	22,577	29·5	24·3	20,280	31·9	6,390	4,820	4,290	2,791	...	...	400	500
Anakapalle ...	13,341	40·3	25·0	12,260	28·5	3,500	2,211	2,160	1,612	...	...	...	...
Total ...	1,327,502	31·8	34·0	19,27,462	33·9	6,54,536	3,84,751	3,78,939	2,73,576	36,285	18,676	67,097	42,133
Madras † ...	405,848	39·7	49·5	10,33,264	45·9	4,74,832	4,56,577	2,53,662	2,53,102	1,000	20	25,600	34,327

* Amount expended is only for 9 months ending with December 1884. † Particulars of this Town are for the Calendar year.

Statement showing the Birth and Death Rates, Estimated Income, Allotment for Sanitary Purposes and Vaccination, and Numbers vaccinated, in each Municipality during the year 1884—(Continued).

Municipalities.	1884-85—(*Continued*). Sanitary arrangements during fairs and festivals. Amount sanctioned.	Sanitary arrangements. Amount expended.	Construction and repair of markets and slaughter-houses. Amount sanctioned.	Construction and repair. Amount expended.	Other sanitary objects, including construction and repair of latrines, dust-bins, drains, &c. Amount sanctioned.	Other sanitary objects. Amount expended.	Amount allotted for vaccination.	Number vaccinated. Total.	Number vaccinated. Successful.	Number vaccinated. Successful under 1 year.	Births registered.	Deaths from small-pox. Total.	Deaths from small-pox. Under 1 year.	Deaths from small-pox. Under 12 years.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.							
Bellary	...	...	200	244	250	11	390	1,624	1,459	868	1,115	43	15	28
Ádóni	...	...	1,300	1,264	990	488	210	817	765	427	890	195	13	182
Anantapur	...	...	150	54	190	52	230	213	200	146	243	...	...	...
Conjeeveram	1,070	985	...	...	1,140	623	340	1,763	1,324	272	1,401	122	41	75
Coimbatore	...	...	100	...	1,000	1,090	320	1,067	990	451	1,475	34	5	26
Erode	120	101	120	62	650	89	150	378	344	91	267	33	1	30
Karúr	...	...	...	...	1,770	20	240	482	448	244	404	1	1	...
Cuddapah	...	...	100	125	1,440	165	250	324	319	48	479	2	...	2
Chicacole	...	...	684	480	160	152	150	638	574	79	511	5	1	...
Berhampore	...	...	40	38	430	368	200	655	611	33	1,029	3	...	1
Cocanada	...	...	...	...	3,080	1,882	230	1,713	1,425	321	763	251	24	183
Rajahmundry ...	...	400	...	...	725	678	220	2,397	1,743	235	631	287	70	179
Ellore	...	...	...	...	250	239	230	837	766	69	541	333	59	238
Masulipatam	...	...	100	60	350	384	260	1,630	1,553	148	799	106	11	65
Guntúr	...	...	...	...	410	110	290	544	429	58	474	46	8	35
Kurnool	...	...	300	...	125	885	180	828	619	137	705	91	...	...
Madura	800	475	2,000	563	5,500	1,350	450	3,013	2,897	1,552	2,017	103	35	68
Dindigul	...	...	590	...	410	44	240	1,668	1,550	279	502	18	7	10
Tellicherry	...	...	...	...	400	103	710	2,131	1,821	53	995	27	6	10
Calicut	...	...	400	412	1,600	387	540	2,900	2,473	64	2,693	99	11	21
Pálghat	25	20	100	94	1,010	395	330	1,521	1,420	21	1,368	44	7	19
Cochin	...	...	300	549	1,830	2,242	230	954	786	101	603	378	56	167
Cannanore	...	...	50	51	640	350	330	1,389	1,248	332	1,107	1	...	...
Nellore	20	19	200	...	1,800	32	180	807	771	88	564	19	6	12
Ongole	...	...	...	...	1,090	1,176	120	370	304	37	414	20	7	8
Vellore	...	...	500	4	6,130	2,315	480	1,507	1,337	531	1,133	85	18	58
Wálajápet	...	...	125	55	195	84	140	171	160	17	374	2	1	...
Ootacamund	...	...	51,150	1,348	600	261	310	665	600	98	332	2	...	2
Coonoor	...	...	7,800	494	3,900	2,640	280	248	174	35	100	...	...	...
Salem	...	...	...	19	21,980	84	370	1,774	1,695	510	1,296	16	6	10
Cuddalore	...	...	50	1	400	458	250	1,165	869	176	1,371	20	3	17
Chidambaram ...	100	40	100	30	400	110	250	795	748	145	343	67	10	57
Mangalore	...	...	1,060	335	840	993	230	1,705	1,682	473	930	...	...	...
Tanjore	...	...	950	746	1,300	617	310	2,037	1,936	318	1,397	167	22	106
Kumbakónam ...	3,500	...	200	7	1,100	183	400	1,480	1,353	360	1,327	119	34	56
Máyavaram	200	237	...	28	3,380	1,708	230	1,157	1,061	139	550	74	...	17
Negapatam	200	134	...	683	2,720	462	380	1,832	1,699	424	1,001	234	34	159
Mannárgudi	200	...	1,500	720	200	100	270	693	661	148	555	64	...	...
Tinnevelly	100	83	600	10	4,200	3,997	500	951	857	200	668	107	11	91
Palamcottah	...	...	125	97	395	68	190	660	525	111	452	37	10	26
Tuticorin	...	...	500	...	1,100	947	230	670	492	116	632	23	5	10
Trichinopoly	...	...	8,180	3,269	2,106	699	1,040	3,544	3,337	1,272	1,430	36	6	29
Srírangam	600	...	...	...	200	651	220	428	402	71	589	32	5	25
Vizagapatam	...	...	500	...	3,500	3,062	300	1,787	1,579	225	1,038	219	40	128
Bimlipatam	...	...	...	...	280	1,148	170	488	470	114	306	5	...	...
Vizianagram	...	...	...	...	1,700	1,529	260	739	726	128	667	6	...	4
Anakapalle	...	...	...	...	1,340	599	190	760	735	43	538	49	6	35
Total ...	6,935	2,494	80,074	11,842	85,206	36,030	14,020	55,919	49,937	11,808	39,019	3,625	595	2,189
Madras	120	107	2,700	611	1,91,750	1,68,410	5,586	56,893	46,459	13,907	116,133	4,064	1,467	2,421

LOCAL FUND CIRCLES.

137. In 1883 the Local Fund Circles in the presidency were 30 in number, accounted for by some districts being divided into two or more circles; but in 1884, by a notification published in the *Fort Saint George* and *District Gazettes*, the districts noted in the margin were declared to be Local Fund Circles, *i.e.*, the separate circles which each of them contained were combined and the whole district formed into one circle; thus there are now only as many circles as there are districts, and these are 21 in number excluding Madras. Sanitary reports were received from all of them, abstracts of which will be found in the following pages.

North Arcot.	Tanjore.
Ganjam.	Madura.
Godávari.	Tinnevelly.
Kistna.	Salem.
Cuddapah.	

138. The 21 circles comprise 52,003 villages, scattered over an area of 118,355 square miles, and contain a population, according to the census of 1881, of 28,109,869, which represents the entire rural population of the Madras Presidency. Among this population there were during the year 1884 registered 771,803 births and 609,479 deaths, which, proportionately considered, yield ratios of 27·4 and 21·6 respectively per thousand of population.

139. By order of Government dated 22nd February 1883, No. 391, Public Department, Civil and Zillah Surgeons were constituted District Medical and Sanitary Officers of their respective districts, and one of their duties therein laid down, paragraph 2 (*c*), is "to inspect, as frequently as is consistent with their other duties, all minor dispensaries in charge of medical subordinates and the working of the vaccine and conservancy establishments of the districts, especially of the larger towns and villages."

140. Judging from the reports received by the Sanitary Commissioner, very little apparently has been done during the year under review by the District Medical and Sanitary Officers in the way of inspection. Of the 19 districts, only the 10 marginally noted, submitted any inspection reports. According to these reports, 135 towns and villages were inspected and reported upon during the year in Godávari, 56 in Malabar, 23 in Tinnevelly, 28 in Nellore, 11 in Cuddapah, 9 in Ganjam, 5 in Bellary, 4 in Tanjore, 3 in Kurnool, and 2 in Kistna—total 276. In Nellore no inspection seems to have been made after March, no reports having been received subsequent to that month.

Godávari.	Ganjam.
Malabar.	Bellary.
Tinnevelly.	Tanjore.
Nellore.	Kurnool.
Cuddapah.	Kistna.

141. The District Medical and Sanitary Officers, to be more useful, should be required to systematically inspect and report upon the towns and villages, especially the larger and more important ones, in their respective districts as it is only by constant inspection and defects being frequently brought to the notice of the authorities concerned, that due attention will be paid to sanitation and the evils, now existing everywhere, be gradually remedied. They should be required to forward a monthly or quarterly report of their inspections in a prescribed uniform form, one copy to the Sanitary Commissioner and another to the local authorities. This will be carried out in communication and concert with the Surgeon-General with the Government of Madras.

142. *Water-supply, Drainage and Conservancy.*—There is nothing particular to note in these respects. The sources of water-supply were the same as those formerly reported upon, viz., tanks, wells, rivers, irrigation channels and canals, and in the generality of instances the quality is favorably reported upon. Greater efforts are being made year by year to conserve some of the principal sources for drinking purposes only, by the employment of watchmen to prevent them from being polluted. Except in a few cusbah towns where some stone drains exist, the drainage is mostly very primitive consisting of ditches cut in the soil in the sides of the streets and thoroughfares, and house drainage either flows into these, into cesspools, or into the backyards where it soaks into the soil. In last year's report a retrograde movement was noted in conservancy; during 1884 it appears to have fallen still further back. Out of a total of 52,003 villages only 565 were conserved against 576 in 1883. This backwardness is observable in 6 out of the 21 circles, viz., in Anantapur the number of villages conserved fell from 13 in 1883 to 7 in 1884, in Chingleput from 17 to 14, in Coimbatore from 79 to 35, in Malabar from 6 to 3, in North Arcot from 28 to 18, and in Tanjore from 39 to 37. Anantapur, Tanjore and Trichinopoly figure in the reports for the past three years also with deficient conservancy year after year. Now that Act V of 1884 (the Madras Local Boards Act) provides for the prohibition and removal of obstructions and the cleansing of tanks, streams, wells, and unwholesome buildings and lands in all rural areas, it may be expected that greater attention will be paid to village and town sanitation under the powers conferred by it.

143. *Sanitary works.*—Details of the sanitary works executed in each circle during the year are given in the abstracts of the sanitary reports which follow. They consisted chiefly in the sinking of wells and excavating tanks, in the erection of latrines and dust-bins, improving and repairing drains, cleansing tanks and wells, removing rank vegetation, improving village sites, &c., and some other minor works. In some circles more was done than in others; in three districts—Malabar, Nellore, and Nílgiris little or nothing seems to have been done. The amount of work executed in any district may be gauged from the amount expended on sanitation. In this way North Arcot, Tanjore and South Arcot stand high on the list. The sanitary expenditure in them amounted to Rs. 20,005, 16,230 and 15,718, respectively.

144. The aggregate available income (one-third of the land cess) for the year 1884-85 amounted to Rs. 14,02,971, against 13,84,627 for 1883-84, *i.e.*, the districts as a whole were richer by Rs. 18,344 during the year under review than its predecessor. Of this amount, Rs. 3,72,946, or 26·5 per cent., were allotted for sanitation, against Rs. 3,99,672, or 28·8 per cent., in 1883-84, being Rs. 26,726, or 2·3 per cent., less; *i.e.*, the more the available income, the less was the amount appropriated for sanitation. "Improvement of village sites" and "other sanitary objects" suffered chiefly by the reduction, while an improvement is observable in the allotments for the other items over the preceding year. The following abstract statement shows the amount sanctioned and expended under each item of sanitation for 1884-85 compared with 1883-84. The expenditure for 1884-85 refers to the transactions of nine months only ending with December 1884, while that for 1883-84 is for the whole year.

—	1883-84. (For the whole year.)		1884-85.	
	Amount sanctioned.	Amount spent.	Amount sanctioned.	Amount spent in nine months ending with December 1884.
	RS.	RS.	RS.	RS.
For conservancy	1,63,006	1,54,985	1,68,271	1,17,799
„ improvement of village sites	40,030	15,611	23,514	7,267
„ improvement of water-supply, cleansing, repairing, and construction of tanks and wells ...	84,581	68,163	85,340	38,331
„ sanitary arrangements during fairs and festivals.	10,971	8,839	19,192	5,240
„ construction and repair of markets and slaughter-houses	58,068	26,725	58,491	14,202
„ other sanitary objects	43,016	33,965	18,138	14,617
Total ...	3,99,672	3,08,288	3,72,946	1,97,457

145. From the above statement it will be seen that out of a sanctioned allotment of Rs. 3,72,946 for 1884-85, only Rs. 1,97,457 were expended, leaving Rs. 1,75,489, or a little less than half, to be spent in the concluding three months of the year. From past experience the whole of this amount would probably not be spent, but some money be left unutilized at the end of the year.

146. In the year 1883-84, which represents the transactions for the entire period, we find that out of Rs. 3,99,672 only Rs. 3,08,288 were expended, leaving Rs. 91,384, or little less than one-fourth of the grant, unexpended. Under no one of the items was the sanctioned amount fully utilized. The same thing occurs year after year, and will most probably occur in 1884-85 also, notwithstanding the recent orders of Government and the Board of Revenue, which enjoined the complete utilization of the funds allotted for sanitation.

147. In some districts larger allotments have been made than in others. Eliminating the Nílgiris for obvious reasons, and Malabar and Canara, the conditions of which are such that no large outlay is devoted to conservancy, the rates varied from 10 per cent. in Coimbatore to 38 per cent. in South Arcot. In 7 districts they were between 25 and 36·7 per cent., and in 9 others between 15·9 and 22·5 per cent. Excepting in Coimbatore 10·0 per cent., Ganjam 15·9, Chingleput 17·3, Madura 18·0, and Godávari 19·2, the sanitary allotments of the other districts may be considered as fairly adequate, the only regret being that they were not always utilized to the full extent.

148. In a table appended will be found full details of the allotment and expenditure for each district.

ABSTRACTS OF SANITARY REPORTS OF LOCAL FUND CIRCLES.

Anantapur.

Area, 5,094 square miles.
Population, 594,982.

1. Water-supply. 2. Drainage. 3. Conservancy.

No change since last report. Water-supply is derived from three sources, viz., tanks, wells, and the river Pennér; is sufficient and of good quality. Some of the tanks used for drinking purposes are watched and guarded from pollution. No improvement has been made in drainage, which is defective and consists principally of side-cuttings of insufficient depth. A few masonry drains also exist. The amount sanctioned for conservancy for 1884-85 was Rs. 5,964, of which Rs. 4,371 were spent in nine months ending December 1884. In 1883 the expenditure for the whole district exceeded the grant by Rs. 717. Scavengering establishments were maintained in only 7 towns and villages, against 13 last year. The number of villages in the circle is 899. The sweepings, &c., are either consumed in cinerators in the towns conserved, or are carted and deposited outside the town limits and sold as manure. Night-soil from the latrines, of which there are 29, is buried in pits outside of the towns. The latrines are freely resorted to by the people.

Sanitary works.

Rupees 86 were spent in certain repairs, 10 dust-bins were constructed (Rs. 40), 3 markets were improved (Rs. 1,436), a well was repaired and cleaned (Rs. 150), and Rs. 136 were spent on sanitary arrangements during fairs and festivals.

General health and sanitary condition.

Public health is reported as having been satisfactory. Small-pox and cholera prevailed, and caused 602 and 239 deaths respectively.

Bellary.

Area, 5,711 square miles.
Population, 650,374.

1. Water-supply. 2. Drainage. 3. Conservancy.

(1) The sources of water-supply are the same as those last reported, viz., tanks, wells and rivers. The District Medical and Sanitary Officer reports that great improvement was effected in the water-supply of the district, but what it consisted of is not stated. Several wells were repaired and a new one sunk. (2) Drainage is still defective. No improvement since last report. Side-channels exist in some places to carry off storm-water. (3) No change in the system of conservancy since last report. In the majority of towns and villages, the rubbish and street collections are removed by the ryots themselves to the fields far out of the town and utilized as manure. In some of the larger towns and villages they are

collected and removed by scavengering establishments. 14 towns and villages out of a total of 1,182 were thus conserved, being the same in number as last year. The latrine accommodation and the number of dust-bins were increased during the year. There are 31 latrines in good order. The conservancy allotment amounted to Rs. 3,600, of which Rs. 3,192 were spent in nine months.

Sanitary works.

Some dust-bins were erected and several wells were repaired, and repairs to others and the sinking of a new one were in progress at the close of the year.

General health and sanitary condition.

Was on the whole satisfactory. Cholera and small-pox prevailed in some parts of the district. 1,007 persons died of the former disease and 820 of the latter.

Chingleput.

Area, 2,833 square miles.
Population, 944,106.

1. Water-supply. 2. Drainage. 3. Conservancy.

No material change has been made in these respects since last report. The water-supply is the same; tanks, wells, rivers and irrigation channels are resorted to. No sources are specially set apart for drinking purposes. No pucka drains exist anywhere; side-channels are cut to carry off storm-water and drainage from houses soaks in the soil. Many cess-pools exist. The system of conservancy is the same as that adopted in former years. 14 towns and villages were conserved out of a total of 2,002, against 17 noted in the last report. The sweepings, &c., from these are daily collected and carted away. There are 7 public latrines in the district, all of which, except a large one in Chingleput which is covered, are simple walled-in enclosures. Rs. 6,425 were sanctioned for conservancy in 1884-85, of which Rs. 4,922 were spent in nine months of the year.

Sanitary works.

Prickly-pear was removed in several places (Rs. 356), and in some the work was in progress. Several wells were repaired, cleaned, and deepened (Rs. 684), and others were being repaired and deepened at the close of the year.

General health and sanitary condition.

Was unsatisfactory. Cholera and small-pox prevailed largely, causing 2,089 and 2,999 deaths respectively.

Coimbatore.

Area, 7,824 square miles.
Population, 1,599;654.

1. Water-supply. 2. Drainage. 3. Conservancy.

Remain much as in former years. Water-supply is obtained from rivers, tanks and wells, of good quality and abundant. There is no regular system of drainage of streets or houses. In some important towns side-cuttings are made to carry off storm-water. 35 towns and villages were conserved during the year, against 79 in the preceding year. The sweepings and other rubbish from these are collected and carted away to a distance, and are either burnt in cinerators or permitted to be taken away by ryots to their fields for manure. The scavengering establishment in some towns was reduced during the year, and in some small villages they were altogether abolished and the villagers themselves made to remove the refuse. The latrine accommodation consists of mud-wall or tatty enclosures; they are not so much resorted to as the neighbouring fields and gardens. Rs. 12,800 were set apart for conservancy for the year 1884-85, of which sum only Rs. 6,387 were spent in nine months.

Sanitary works.

Rs. 113 were spent in clearing village sites of prickly-pear, Rs. 570 in sinking wells and improving tank supply channel, and Rs. 160 in repair and construction of latrines.

Compared with former years the general health of the people cannot be said to have been satisfactory. Cholera and small pox prevailed, and caused 3,305 and 712 deaths respectively. The District Medical and Sanitary Officer visited many villages in the district, and found them all kept in a fair sanitary condition.

General health and sanitary condition.

Cuddapah.

Area, 8,726 square miles.
Population, 1,102,056.

No change in these respects since last report. The sources of water-supply are the same, viz., tanks, wells, streams, rivers and river channels; reported to be good and abundant. There is no regular system of drainage; side-cuttings are made to carry off storm-water. Drainage from houses flows into cess-pools in the backyards and streets. The street sweepings and other rubbish and the contents of latrines are gathered and deposited in pits outside of the towns, and periodically sold by auction. In some cases the contract system of conservancy is adopted; the contractor receives a lump sum of money from Local Funds and is bound to maintain a sufficient establishment to keep the towns clean. 43 towns and villages were conserved against 23 in the preceding year. The number of villages in the district amounts to 1,240. There are 91 public latrines, being stone or mud-wall enclosures; they are pretty freely resorted to and kept in a fair sanitary condition. The conservancy grant for 1884-85 amounted to Rs. 10,603, of which Rs. 7,464 were spent in nine months ending with December 1884.

1. Water-supply.
2. Drainage.
3. Conservancy.

Some prickly-pear bushes were removed and certain village-sites improved (Rs. 124); a tank and a well were repaired (Rs. 320), and the repairing of certain tanks, the sinking of several wells, and improvement to certain village sites were in progress.

Sanitary works.

General health of the people is reported as having been good. Cholera, however, prevailed to some extent and every precaution was taken to arrest its progress. The sanitary condition of the circle was fairly satisfactory.

General health and sanitary condition.

Ganjam.

Area, 3,168 square miles.
Population, 1,463,347.

Tanks, wells, springs, rivers, and irrigation channels form the principal sources of water-supply. In several places some tanks are set apart for drinking purposes, and magisterial orders issued prohibiting their pollution. Except at Chatrapur, where there are stone drains, drainage consists chiefly of side-channels to carry off storm-water. Scavengering establishments were maintained in 28 towns and villages, out of a total of 6,893 in the district. The sweepings, &c., from these are collected and either burnt in cinerators or deposited in the outskirts and sold. There are 6 latrines, which are freely resorted to. The conservancy allotment for 1884-85 amounted to Rs. 7,070, of which Rs. 5,316 were spent in nine months.

1. Water-supply.
2. Drainage.
3. Conservancy.

A latrine was constructed (Rs. 50), several tanks and wells were repaired and improved (Rs. 771), 4 wells were sunk (Rs. 308), and a tank was dug (Rs. 212).

Sanitary works.

Was on the whole satisfactory. The sanitary condition of the town was much improved. Cholera and small-pox prevailed to some extent; from the former 110 deaths were recorded, and from the latter 356.

General health and sanitary condition.

Godavari.

Area, 5,588 square miles.
Population, 1,665,454.

(1) The district possesses a fair water-supply; tanks, wells, the river Godávari, and the Godávari and Kistna canals form the chief sources. (2) Generally speaking there is no regular system of drainage; only one town (Narsápur) is fairly provided with street drains. (3) 64 towns and villages out of 2,246 in the district were conserved, and 92 sweepers employed, at a cost of Rs. 310 per mensem, to keep them clean. The sweepings are collected and carted outside of the villages. There are no public latrines.

1. Water-supply.
2. Drainage.
3. Conservancy.

A well was sunk (Rs. 30), several wells and tanks were repaired and cleaned out (Rs. 1,848), a sluice was built to improve drainage (Rs. 37), and the drainage at Gopálpur was improved (Rs. 84).

Sanitary works.

Public health was indifferent. Cholera and small-pox prevailed largely and caused 824 and 10,474 deaths respectively. The sanitary condition of the district may be said to have been on the whole fair, but many defects exist which would cost a great deal to remedy.

General health and sanitary condition.

Kistna.

Area, 8,454 square miles.
Population, 1,493,778.

(1) Water-supply is good, derived from tanks, wells, and canals from the river Kistna. Every precaution is taken to prevent the sources from being contaminated. (2) There is no regular system of drainage. Side-cuttings are made in the streets to carry off storm-water. Drainage from houses flows into the backyards: most of the houses have cess-pools. (3) 30 towns and villages, out of a total of 1,821 in the district, were conserved, a small scavengering establishment being employed in each of them. The sweepings and other refuse were daily removed, and either deposited in the fields at a distance or used to fill up hollows and low-lying places. In the villages not conserved the refuse, &c., are collected by the ryots in their compounds, whence they are eventually removed to the fields to be used as manure. There are 4 pucka built latrines for the whole district. They are kept fairly clean and are freely resorted to. Rs. 15,370 were sanctioned for conservancy for the year 1884-85, of which Rs. 9,928 were spent in nine months ending December 1884.

1. Water-supply.
2. Drainage.
3. Conservancy.

Rupees 272 were spent in improving village sites by removing prickly-pear and other rank vegetation. Rs. 2,120 were spent in improvement of water-supply, and Rs. 140 for sanitary arrangements during fairs and festivals. Some dust-bins were put up (Rs. 120) and some road drains were constructed (Rs. 632).

Sanitary works.

Was indifferent. Fevers, cholera and small-pox were very prevalent, and caused 13,898, 1,544, and 10,234 deaths respectively.

General health and sanitary condition.

Kurnool.

Area, 7,528 square miles.
Population, 658,222.

(1) The district is well off in regard to its water-supply in quantity and quality. The principal sources are tanks and wells; river, stream and canal water also is used in some places. (2) There is no regular system of drainage. Side-ditches exist to carry

1. Water-supply.
2. Drainage.
3. Conservancy.

off storm-water. (3) In 19 villages scavengering establishments were entertained against 13 last year. The total number of villages in the district amounts to 835. The sweepings, &c., of the conserved villages are disposed of as the peculiar local difficulties permit. In Cumbum they are sold as manure, for which there is a great demand. The latrine accommodation was increased: it now consists of 28 latrines. which are freely resorted to. Rs. 4,080 were allotted for conservancy for 1884-85, of which Rs. 3,210 were spent in nine months.

Sanitary works. Several village sites were improved and improvements in others were in progress (Rs. 1,860), several wells and tanks were repaired and put in good order (Rs. 2,132), a latrine was constructed (Rs. 20) and some other minor works executed.

General health and sanitary condition. Public health was on the whole fairly good. Small-pox prevailed to a certain extent and caused 1,572 deaths. There was cholera also of a mild form which caused 18 deaths. The sanitary condition of the circle was fair.

Madura.

Area, 8,395 square miles.
Population, 2,080,691.

1. Water-supply. 2. Drainage. 3. Conservancy. Remain much the same as in former years. (1) The principal sources of water-supply are tanks, wells, and rivers. (2) There is no regular system of drainage. The usual side-cuttings exist in some of the principal streets to carry off storm-water. (3) In 34, out of a total of 3,290 towns and villages, scavengering establishments are maintained to keep them clean. The sweepings, &c., from some of the villages are used by the people themselves as manure, and from others they are collected and deposited outside of the villages and eventually sold. At Ramnad the Sanitary Association has constructed 2 latrines, and several public ones have been erected by the people themselves, all of which are freely resorted to. The conservancy allotment for 1884-85 amounted to Rs. 12,990, of which Rs. 9,430 were spent in nine months.

Sanitary works. Several tanks and wells were repaired and cleaned (Rs. 2,070).

General health and sanitary condition. With the exception of the prevalence of cholera and small-pox, the general health of the people may be said to have been on the whole good. 3,860 deaths were registered from cholera and 1,229 from small-pox. The sanitary condition of the circle was fair. In Madura several sanitary associations are formed, which look after the sanitation of their respective divisions.

Malabar.

Area, 5,734 square miles.
Population, 2,203,117.

1. Water-supply. 2. Drainage 3. Conservancy. (1) No improvement has been made in these respects since last report. They remain much the same as in former years. Water-supply is abundant, but indifferent in quality and polluted in every way: none of the sources are set apart solely for drinking purposes. (2) Drainage is natural; no regular system. (3) Except in 3 towns where scavengering establishments were employed, there was no attempt whatever at conservancy in the other towns and villages. For two years the District Medical and Sanitary Officer has been budgeting for conservancy in some of the more important towns and villages, but, owing to the want of funds, no action has been taken in the matter.

Sanitary works. Nothing of importance; some latrines were repaired (Rs. 29) and a bandy-stand was improved (Rs. 24).

General health and sanitary condition. Was on the whole fair. Cholera and small-pox carried off 717 and 4,901 persons respectively.

Nellore.

Area, 8,710 square miles.
Population, 1,183,531.

1. Water-supply. 2. Drainage. 3. Conservancy. (1) Water-supply is on the whole good, being obtained from rivers, tanks and wells. (2) Drainage consists of surface drains to carry off storm-water; there is no regular system. (3) 25 towns and villages were conserved out of a total of 1,686 in the district. The sweepings, &c., are collected and deposited in the fields, to be used as manure. Rs. 2,587 were spent on conservancy in nine months, ending December 1884, out of a sanctioned allotment of Rs. 3,906.

Sanitary works. Nothing of importance; a well was improved and enlarged (Rs. 3).

General health and sanitary condition. General health is reported as having been fair. 461 deaths from cholera and 1,639 from small-pox were registered during the year. The sanitary condition of the district was fairly good.

Nilgiri.

Area, 935 square miles.
Population, 73,921.

1. Water-supply. 2. Drainage. 3. Conservancy. No improvement in these respects since last report. (1) The water-supply is defective, obtained from open streams subject to all kinds of pollution. (2) Drainage is natural. (3) In two towns the refuse is removed by the planters for use on their lands. There are no public latrines.

Sanitary works. None.

General health and sanitary condition. Was good. No epidemics prevailed. A few cases of small-pox and cholera occurred among people who came from the Western Coast: from the former there were 9 deaths and from the latter 3.

North Arcot.

Area, 7,251 square miles.
Population, 1,769,936.

1. Water-supply. 2. Drainage. 3. Conservancy. (1) The sources of water-supply are rivers and wells. It varies as regards quantity and quality in the several towns and villages. In some of the principal towns and villages arrangements are made to conserve the water-supply and to prevent pollution; but practically the measures adopted are unsatisfactory, as pollution takes place at night, and, unless the habits of the people are changed, such sanitary precautions are useless. The District Medical and Sanitary Officer invariably examines the water-supply of the places he inspects. His reports are always unfavorable. (2) Drainage has somewhat improved since last report. (3) In 18 towns and villages scavengering establishments were maintained to keep them clean. The sweepings, &c., are either given to the contractor who supplies carts or are sold separately. They are always immediately removed. Villages which have no conservancy staff employed in them are left to the care of the monigars, who are held responsible for

their cleanliness. There are 6 public latrines, which are freely resorted to by the people The conservancy grant amounted to Rs. 13,660, of which Rs. 9,625 were spent in nine months.

Sanitary works.

Some prickly-pear was removed (Rs. 25) and several markets were repaired, cleaned, and otherwise improved (Rs. 4,675), and Rs. 3,801 were spent in the improvement of water-supply.

General health and sanitary condition.

Was unsatisfactory. Cholera and small-pox prevailed and carried off 3,086 and 3,189 persons respectively.

Salem.

Area, 7,650 square miles.
Population, 1,548,928.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) Water-supply is derived from tanks and wells, some of which are set apart for drinking purposes only and watchmen employed to prevent them from pollution; but the people do not care much for them and they are not often at their posts. (2) Drainage consists of side-cuttings to carry off rain-water. There is no regular system of drainage anywhere by pucka built drains. Drainage from houses is disposed of in cess-pools and by evaporation. (3) 38 towns and villages in the district out of a total of 3,971 were conserved. The sweepings, &c., are collected twice daily, and, as a general rule, taken to the nearest prickly-pear bush and there thrown carelessly. There is great room for improvement in the disposal of rubbish. There are 19 latrines in the district, which are freely resorted to. The conservancy allotment for 1884-85 amounted to Rs. 13,470, of which Rs. 9,013 were spent in nine months.

Sanitary works.

Several village sites were improved (Rs. 425) and improvements to others were in progress, a new well was sunk (Rs. 50) and several tanks and wells were repaired and cleaned (Rs. 1,219), 4 shandy sheds were constructed (Rs. 2,260) and some other minor works executed.

General health and sanitary condition.

Was on the whole fairly satisfactory. Cholera and small-pox prevailed and carried off 2,098 and 1,349 individuals respectively.

South Arcot.

Area, 4,859 square miles.
Population, 1,751,356.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) Nothing new to add to former reports in these respects; they remain much the same as last reported. The sources of water-supply are rivers, channels, tanks and wells, some of which are set apart solely for drinking purposes, guarded from pollution by watchmen. (2) There is no regular system of drainage. Side-channels exist in the conserved villages to carry off storm-water. Drainage from houses flows into the backyards. (3) 40 towns and villages, out of a total of 2,848, enjoy the benefit of a scavengering establishment, against 34 in the preceding year. The sweepings, &c., from these are collected and stored outside of them, where they are sold as manure. There is only 1 public latrine; no more are provided as the people will not use them; they prefer to resort to the banks of rivers and tanks for purposes of nature. The conservancy allotment for 1884-85 amounted to Rs. 11,970, of which sum Rs. 8,115 were spent in the first nine months of the year.

Sanitary works.

Several village sites were improved (Rs. 992), several tanks and wells were repaired, cleaned, and deepened (Rs. 5,996), Rs. 487 were spent on sanitary arrangements during fairs and festivals, and Rs. 129 on some minor works.

General health and sanitary condition.

Public health was unsatisfactory. Cholera and small-pox prevailed epidemically and caused 7,568 and 5,771 deaths respectively. The sanitary condition of the district was fair.

South Canara.

Area, 3,893 square miles.
Population, 927,415.

1. Water-supply.
2. Drainage.
3. Conservancy.

Water-supply is obtained chiefly from wells, of which there are numerous private ones and some public. River water also is much used, but is unwholesome. Drainage is exclusively natural. House drainage is indifferent. There are no cess-pools. 7 towns and villages out of a total of 1,281 were conserved. The scavengers clean the streets and remove the contents of the dust-bins periodically. There are no public latrines. The conservancy allotment for 1884-85 amounted to Rs. 1,140, out of which Rs. 911 were spent in nine months.

Sanitary works.

Two wells were sunk (Rs. 78), a market was repaired and the construction of a new market and repairs to some wells were in progress at the close of the year.

General health and sanitary condition.

Fever of a malarious type was very prevalent; with this exception, general health may be said to have been on the whole favorable. There were no epidemics. Some small-pox prevailed sporadically and caused 677 deaths. Increased attention was given to sanitation, but much still remains to be done.

Tanjore.

Area, 3,629 square miles.
Population, 1,929,232.

1. Water-supply.
2. Drainage.
3. Conservancy.

(1) The sources of water-supply are tanks, wells, and the Cauvery and its branches. Several tanks and wells are guarded from pollution by watchmen. (2) Drainage consists of side trenches to carry off storm-water. Drainage from houses empties into the backyards, which are extensive. (3) In 37 towns and villages scavengering establishments were employed to attend to their conservancy. In the preceding year 39 towns were conserved. The total number of towns and villages in the district is 3,546. The sweepings, &c., from the conserved villages are collected and taken to a distance, where they are periodically sold; in some villages they are used for filling up pits. There are only 3 public latrines. Rs. 17,818 were set apart for conservancy in 1884-85, of which Rs. 12,325 were spent in nine months.

Sanitary works.

Some village sites were improved (Rs. 37), a tank was dug (Rs. 100), and several other tanks and wells were repaired, deepened, and cleaned (Rs. 2,752); 4 latrines were constructed (Rs. 448), and Rs. 402 were spent on sanitary arrangements during fairs and festivals.

General health and sanitary condition.

Public health was very unsatisfactory. Cholera and small-pox prevailed largely, especially the former. 21,587 deaths from cholera and 3,382 from small-pox were registered during the year. The sanitary condition of the district was fair.

Tinnevelly.

Area, 5,376 square miles.
Population, 1,642,281.

1. Water-supply.
2. Drainage.
3. Conservancy.

No change since last report in these respects. (1) The sources of water-supply are tanks, wells, and the river Támbraparni and its branches. In some large towns and villages certain tanks and wells are set apart solely for drinking purposes, but the people prefer river water, which, flowing as it does through open channels, is liable to every kind of pollution. (2) There is no regular system of drainage. Side-cuttings

exist in most of the villages for surface drainage. The refuse water from houses is either allowed to flow into the backyards and there accumulate, or to flow into the side-cuttings. (3) In 84 towns and villages against 79 in the preceding year scavengering establishments were employed to attend to their conservancy. The total number of villages in the district is 1,494. The sweepings, &c., from the conserved villages are removed to a distance outside, stored, and eventually sold. In the smaller villages the sweepings and rubbish are collected by the ryots themselves and utilized as manure. There are 1 screen and 4 pucka built latrines, which are freely resorted to by the people. Rs. 7,524 were sanctioned for conservancy for 1884-85, of which sum Rs. 5,513 were spent in the first nine months of the year.

Sanitary works.

Some village sites were improved (Rs. 97), 2 wells were sunk (Rs. 186), several tanks and wells wee repaired, deepened, and cleaned (Rs. 2,534), and repairs to others were in progress at the close of the year. Rs. 638 were spent on sanitary arrangements during fairs and festivals, and Rs. 648 in repairs to tools and conservancy carts, &c.

General health and sanitary condition.

Public health is reported as having been unsatisfactory. Cholera and small-pox prevailed, the former very extensively. 15,732 deaths were recorded from cholera and 1,234 from small-pox. The sanitary condition of the circle was fair.

Trichinopoly.

Area, 3,544 square miles.
Population, 1,110,811.

1. Water-supply. 2. Drainage. 3. Conservancy.

The same as last reported. (1) Water-supply is obtained from rivers, tanks, and wells. 4 tanks and 1 well were solely set apart for drinking, and watchmen were employed to protect them from pollution. (2) There is no regular system of drainage; side-cuttings exist to carry off storm-water. Cess-pools exist. (3) The system of conservancy was the same as that adopted in former years. 12 towns and villages were conserved, same in number as in the preceding year. The total number of villages in the circle is 1,483. The street sweepings, other rubbish, &c., are carted away to a distance and are either sold as manure or burnt. There are 36 latrines, which are generally resorted to by the people, except in some places, where they prefer to resort to paddy-fields for purposes of nature. Rs. 7,336 were sanctioned for conservancy for the year 1884-85, of which sum Rs. 4,428 were spent in nine months.

Sanitary work.

Some tanks and wells were repaired and cleaned (Rs. 776), a dust-bin was constructed and two others repaired, and some other minor works executed.

General health and sanitary condition.

With the exception of the prevalence of cholera throughout the district, the general health of the people is reported as having been fair. Every measure was adopted during the prevalence of cholera, to arrest the progress of the disease and afford medical aid. The sanitary condition of the town was satisfactory.

Vizagapatam.

Area, 3,453 square miles.
Population, 1,715,677.

1. Water-supply. 2. Drainage. 3. Conservancy.

No change since last report. The sources of water-supply are tanks and wells, some of which are set apart solely for drinking purposes, but not guarded. (2) The drainage of the streets in the cusbah towns is attended to by the scavengering establishments maintained in them. In the other towns and villages it is attended to by the itinerating staff employed. (3) In 11 of the larger towns and villages, out of a total of 8,758 in the district, scavengering establishments were maintained to attend to the conservancy. The smaller towns and villages are divided into four groups and an itinerating staff employed, who, under the supervision of the divisional and taluk officers, attend to the conservancy. The latrine accommodation was the same as in the preceding year (54 latrines in 3 villages). No new ones have since been built. Rs. 6,012 were set apart for conservancy for the year 1884-85, and out of it Rs. 4,594 were spent in the first nine months of the year.

Sanitary works.

Four new wells were sunk (Rs. 510), 2 tanks were dug (Rs. 260), several tanks and wells were repaired, cleaned, and deepened (Rs. 1,496), several village sites were improved (Rs. 2,051), some dust-bins were erected (Rs. 47), several latrines and dust-bins were repaired (Rs. 118), and some other minor works executed.

General health and sanitary condition.

With the exception of small-pox, which prevailed somewhat, public health was on the whole satisfactory. 1,326 deaths were recorded from small-pox. A few cases of cholera also occurred, but the disease was not epidemic—only 10 deaths were recorded from it for the whole year. The sanitary condition of the district was fair.

Statement showing the Birth and Death Rates, Estimated Available Income, and Allotment for Sanitation and Vaccination during the year 1884-85, *in the Local Fund Circles of the Madras Presidency.*

Local Fund Circles.	Population as per census of 1881.	Area in square miles.	Birth-rate.	Death-rate.	Number of villages in the circle.	Number of villages conserved.	Available income—one-third land-cess.	Rate per cent. of sanitary allotment to available income.	1884-85.* Sanitary allotment. Amount sanctioned.	Sanitary allotment. Amount expended in nine months ending with Dec. 1884.	1 Conservancy. Amount sanctioned.	1 Conservancy. Amount expended.	2 Improvement of village sites. Amount sanctioned.	2 Improvement of village sites. Amount expended.
							RS.		RS.	RS.	RS.	RS.	RS.	RS.
Ganjam	1,463,347	3,168	16·4	9·5	6,893	28	58,333	15·9	9,280	7,074	7,070	5,316	100	...
Vizagapatam	1,715,677	3,453	20·8	12·3	8,758	11	71,666	21·2	15,250	9,276	6,012	4,594	5,000	2,051
Godávari	1,666,454	5,588	21·7	24·6	2,246	64	1,07,666	19·2	20,673	13,287	4,523	4,849	500	...
Kistna	1,493,778	8,454	31·2	27·3	1,821	30	1,21,000	21·1	25,570	13,092	15,370	9,928	2,000	272
Nellore	1,183,531	8,710	22·2	14·1	1,686	25	90,000	21·4	19,306	4,881	3,906	2,587	4,000	...
Chingleput	944,106	2,833	41·4	29·8	2,002	14	56,000	17·3	9,764	8,136	6,425	4,922	1,320	823
South Arcot	1,751,356	4,859	25·1	24·1	2,848	40	77,633	38·0	29,530	15,718	11,970	8,115	1,962	992
Trichinopoly	1,110,811	3,544	30·8	24·2	1,483	12	42,343	26·7	11,336	5,619	7,336	4,429	1,000	...
Tanjore	1,929,232	3,629	28·8	36·4	3,546	37	1,16,000	26·4	30,726	16,230	17,818	12,325	342	109
Madura	2,080,691	8,395	18·6	13·4	3,969	34	95,000	18·0	17,100	12,322	12,990	9,430	...	...
Tinnevelly	1,642,281	5,376	28·0	32·6	1,494	84	85,000	22·3	18,974	10,739	7,524	5,513	...	97
Kurnool	658,222	7,528	40·2	23·6	835	19	44,000	26·0	11,470	7,411	4,080	3,210	2,800	1,860
Cuddapah	1,102,056	8,726	33·8	17·1	1,240	43	61,666	22·5	13,934	9,084	10,603	7,464	170	124
Bellary	650,374	5,711	45·6	23·5	1,182	14	41,666	34·4	14,340	6,929	3,600	3,192	1,000	...
Anantapur	594,982	5,094	39·2	20·3	899	7	28,333	25·0	7,100	6,207	5,964	4,371	...	...
North Arcot	1,769,936	7,251	30·1	19·7	3,965	18	86,500	35·9	31,078	20,005	13,710	9,625	1,700	251
Salem	1,548,928	7,650	34·8	18·5	3,971	38	54,666	36·7	20,090	13,512	13,470	9,013	650	425
Coimbatore	1,599,654	7,824	25·9	19·1	1,444	35	61,000	10·0	61,200	12,947	12,800	6,387	500	113
Nílgiris	73,921	935	15·5	14·1	8	2	2,166	48·4	1,050	720	630	690	320	...
South Canara	927,415	3,893	28·3	26·2	1,281	7	29,000	9·9	2,885	1,574	1,140	912	...	...
Malabar	2,203,117	5,734	23·9	20·5	432	3	73,333	3·1	2,290	2,694	1,330	927	150	150
Total ...	28,109,869	118,355	27·4	21·6	52,003	565	14,02,971	26·5	3,72,946	1,97,457	1,68,271	1,17,799	23,514	7,267

* Amount expended is only for nine months ending with December 1884.

Statement showing the Birth and Death Rates, Estimated Available Income, and Allotment for Sanitation and Vaccination during the year 1884-85, *in the Local Fund Circles of the Madras Presidency*—(Continued).

Local Fund Circles.	1884-85—(*Continued*). 3 Improvement of water-supply, including cleansing, repairing, and construction of tanks and wells. Amount sanctioned.	3 Amount expended.	4 Sanitary arrangements during fairs and festivals. Amount sanctioned.	4 Amount expended.	5 Construction and repair of markets and slaughter-houses. Amount sanctioned.	5 Amount expended.	6 Other sanitary objects, including construction and repair of latrines, dust-bins, drains, &c. Amount sanctioned.	6 Amount expended.	Amount allotted for vaccination.	Number vaccinated. Total.	Successful.	Successful under 1 year.	Births.	Deaths from small-pox. Total.	Under 1 year.	Under 12 years.
	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.	RS.							
Ganjam	1,500	1,291	190	...	...	...	420	467	6,690	29,297	28,272	1,985	24,109	356	52	142
Vizagapatam	3,500	2,267	500	66	...	...	238	298	7,200	44,484	43,213	3,841	35,790	1,326	260	496
Godávari	5,450	4,626	9,700	1,275	500	390	...	2,147	8,350	31,653	29,346	1,833	35,121	10,474	1,077	3,028
Kistna	4,900	2,120	900	140	...	...	2,400	632	9,180	40,149	33,912	2,735	46,686	10,234	2,004	5,743
Nellore	8,000	3	400	183	...	...	3,000	2,108	11,860	32,974	30,781	1,979	26,333	1,639	333	632
Chingleput	1,519	918	400	289	...	...	100	1,184	5,440	30,957	28,908	2,819	39,114	2,999	824	1,567
South Arcot	14,838	5,996	750	487	...	...	10	128	5,850	27,893	25,851	4,482	44,129	5,771	1,452	2,757
Trichinopoly	3,000	776	...	...	...	...	...	415	3,600	20,794	19,616	2,316	34,242	637	106	239
Tanjore	10,961	2,852	775	402	...	...	830	542	7,720	43,911	41,725	9,817	55,691	3,382	456	1,265
Madura	2,000	2,070	450	270	...	...	1,660	552	11,350	61,078	59,706	19,159	38,726	1,229	346	826
Tinnevelly	* 8,829	3,454	1,325	638	...	...	1,296	1,037	7,480	36,658	33,363	3,828	46,015	1,234	219	731
Kurnool	3,000	2,132	700	50	100	45	790	114	5,640	12,630	11,541	2,644	26,524	1,572	408	764
Cuddapah	1,259	837	90	90	500	...	1,312	569	10,384	12,382	11,531	1,382	37,269	530	155	245
Bellary	6,000	2,657	1,000	119	740	155	2,000	805	7,780	19,092	18,161	10,645	29,680	820	236	556
Anantapur	838	...	298	136	...	1,587	...	113	4,240	14,119	13,066	6,050	23,366	602	196	350
North Arcot	4,896	3,801	1,150	481	8,726	4,675	896	1,172	8,830	28,552	27,347	5,297	53,335	3,189	1,041	1,842
Salem	1,500	1,269	50	15	3,900	2,663	520	127	7,710	33,669	31,803	6,236	53,986	1,349	302	520
Coimbatore	2,000	480	144	144	43,400	4,362	2,356	1,461	8,150	46,881	45,746	14,443	41,482	712	156	458
Nílgiris	...	...	...	...	...	...	100	30	1,130	1,938	1,854	141	1,150	9	...	...
South Canara	540	140	370	196	625	325	210	...	4,200	36,407	34,631	1,231	26,280	677	39	122
Malabar	† 810	642	...	259	...	...	...	716	5,960	33,201	29,866	250	52,775	4,901	57	618
Total ...	85,340	38,331	19,192	5,240	58,491	14,202	18,138	14,617	1,48,744	638,719	600,239	103,114	771,803	53,642	9,719	22,901

* Includes item 2. † Includes items 4 and 6.

SECTION X.

GENERAL REMARKS AND PERSONAL PROCEEDINGS.

149. As I did not take charge of the office till after the close of 1884, I have nothing to say under this head, but Surgeon-General M. C. Furnell, my predecessor in office, has furnished the following notes for insertion in the report :—

During the early part of the year the northern municipalities, Masulipatam, Guntúr, Ellore, Rajahmundry, and Cocanada were visited by the Sanitary Commissioner, and those still further north, Berhampore, Chicacole, Vizianagrum, Bimlipatam, Vizagapatam, and Anakápalle by the Deputy Sanitary Commissioner; besides these he also visited the municipalities in the districts of Cuddapah, Salem, Bellary, Anantapur, Kurnool, and Tinnevelly during the year. The difficulty of communication in the northern districts renders visiting them extremely difficult; and in some of the municipal towns and districts public bungalows have been done away with, so that an inspecting officer, ignorant of the fact, may arrive and find he literally has no where to lay his head. Thus at the port of Masulipatam one is landed after a long and tedious sea passage of some four or five hours, in an open boat, from the steamer, on a hot and shelterless quay, and when one asks where is the public bungalow? is informed there is none; and hotel? none. The municipal town of Masulipatam is some four or five miles further inland, and it is with the utmost difficulty, and after many hours waiting one can obtain a common country bullock cart to get there. In Masulipatam town itself there is no bungalow and one is literally obliged to proceed to the first house *in formâ pauperis* and ask for shelter. Some remedy for this state of things seems demanded; if local authorities cannot keep up public bungalows, the old state of things, when they were kept up by Government, might, with advantage to inspecting officers, be reverted to.

During the hot months cholera raged with great violence in the Tanjore collectorate and Government becoming uneasy repeatedly called attention to the fact; this induced the Sanitary Commissioner (Dr. Furnell) to visit the district; his report is appended.

In the months of November and December, North Arcot, Coimbatore, Trichinopoly, and Malabar were visited by the Sanitary Commissioner. During the latter part of December and January and February 1885, Dr. Furnell acted as Surgeon-General during the absence of Surgeon-General Cornish on leave, and was therefore, unable to tour.

From Deputy Surgeon-General M. C. FURNELL, M.D., F.R.C.S., Sanitary Commissioner for Madras, to the Chief Secretary to Government, dated Madras, 13th August 1884, No. 962.

No. 1180 of 2nd June 1884, Public Department.
No. 1311 of 17th June 1884, Public Department.
Miscellaneous No. 1628 of 21st July 1884, Public Department.

With reference to orders of Government noted in the margin, I have the honor to report that I have just returned from a tour in the Tanjore district, having deemed it best to visit in person the localities affected.

2. There is no doubt cholera has pressed heavily upon the people of Tanjore and is still committing sad havoc; but, when I left, the streams and channels were becoming filled with water, and it may be hoped these freshes giving the people what they so much need—a fair supply of cleaner water—may do much to mitigate the epidemic.

3. As pointed out by Surgeon-General Cornish in paragraph 3 of his letter, No. 224, dated 18th July 1884, cholera seems almost endemic in Tanjore. The peculiar configuration of the country being as it is the outlet of the Cauvery which permeates the district in hundreds of irrigation channels, assimilates it very much to Lower Bengal, the home of cholera. It is not astonishing, therefore, that cholera should linger here longer than in other and less watered districts.

4. But the peculiarity of the water-supply and the habits of the people favor in every possible way the propagation and retention of the disease. The beds of these water-courses in the dry weather are used as *places d'aisances*; but when they contain water the banks are used and the individual proceeds at once to wash his person in the water. These water-courses feed the tanks, and on these tanks the people in almost all the towns and villages of Tanjore depend for their drinking water. Moreover, not only are these tanks filled with a water thus open to contamination, but they are themselves still more polluted in every possible way. The women bathe, wash their clothes *and the clothes taken from sick people* in them, and take home large, bright, clean chatties of the filthy fluid to drink and cook with. At a meeting of the municipal commissioners at Tanjore, I placed upon the table six samples of water taken from different tanks in the town, and one sample of ordinary filtered drinking water from the house of a European gentleman. The native commissioners could scarcely believe that the green offensive fluids exhibited, one especially from the Iyenkolam, were samples of the ordinary drinking water of the people.

5. With the exception of Negapatam, all the towns and villages I visited depend entirely upon tanks for their water-supply. Negapatam has tanks, but it also has several wells which are much resorted to. At the time of my visit, owing to the partial failure of the monsoon the wells were getting dry and the poor people were put to much discomfort. All day long, and far into the night, crowds of women and girls were to be seen waiting patiently for their turn to obtain a scanty supply from the fast-failing wells.

6. At Nagore, which has been suffering much from cholera, the tanks were many quite dry; the two remaining contained very filthy water and were open to every sort of pollution. In the villages of Puthoor, Paravacherry, and Sikkel, which had suffered much, especially the latter, I found the people were entirely dependent on the temple tank for the supply of drinking water. There were no wells whatever, and, I am informed, this is the case generally throughout the district. Tiruválúr has been decimated by cholera, and its only supply of the precious fluid is a particularly holy, and very dirty, tank.

7. I should, therefore, answer the question asked in memorandum, No. 228, dated 26th May 1884, Revenue department, as to the cause of the continued prevalence of cholera in the Tanjore district, by saying it was most probably owing to the peculiarly contaminated water-supply upon which the people are dependent.

8. As regards special measures which have been taken to afford relief, this perhaps falls more immediately under the department of the Surgeon-General, but I may mention that the services of the deputy inspectors of vaccination and all the vaccinators have been utilized in distributing, under the orders of the President of the Local Fund Board, the usual remedies, such as chlorodyne, cholera pills, &c.

9. The measures and precautions which have been suggested by me to the district officers consist principally of strenuously advocating an improvement of the water-supply.

10. I feel confident that a fairly clean and uncontaminable water-supply would prevent a recurrence of such fearful visitations, and protect the district from becoming the seat of endemic cholera.

11. I would propose that in every one of these villages a good deep well be sunk, properly made of brick-work and masonry with parapet, sloping sides, &c., under the superintendence of the Local Fund Engineer; in some of the larger, and more wealthy villages, one or two wells might be constructed. I think the people, as at Negapatam, would soon come to see the advantages of drawing water from such a source to being dependent on tanks. I would even go a step further, and in some of the larger villages, I would have a pump to raise the water into reservoirs, from which it might be drawn by stop-cocks, as is being done now in Madura, and is to be adopted at Negapatam. The use of small pumps to raise water into reservoirs is common at many stations of the South Indian Railway. This not only saves much labor, but keeps the well from the possibility of being defiled by dirty ropes and chatties, &c.

12. The use of "driven tube wells" commonly called "Abyssinian wells" is well worthy of consideration; it would make this communication too lengthy to go into details, but from a small work on the subject lately published by Mr. John Scott ("Irrigation and Water-supply," London, Crosby, Lockwood and Co.), it would seem they are now the form of wells most commonly sunk in many parts of England, and are not expensive as the following extract will show :—

"It may be interesting to refer to some particular instances, where large supplies of water are thus obtained. At West Thurrock, in Essex, a cement company is pumping from two 5-inch tube wells about 80 feet deep, 220,000 gallons per day of 10 hours. Another cement works at North Fleet is pumping 60,000 gallons per day. These have been pumped daily for about four years, and still give a constant supply. As expense is an important feature, it may be mentioned that the cost of these did not exceed £60 each. The coupled tube wells are to be found in greatest numbers at the centres of beer manufacture, where abundance of pure and cool water is an absolute necessity. At Burton-on-Trent about two million gallons are pumped daily from these wells."

13. I think there ought to be no difficulty as regards ways and means, for I find that during the past four years Rupees 1,17,748 have been allotted in the district of Tanjore for improvement of village-sites and water-supply, of which only Rupees 37,274 have been spent. The balance, Rupees 80,474, would sink a good many wells.

Note.—The amounts here given are taken from sanitary reports forwarded to the Sanitary Commissioner by the Local Fund Boards.

14. Nor need we look upon the remedy as chimerical. I have said elsewhere, and I see nothing whatever to change my views on the subject, on the contrary every year much to confirm it that "water is the chief means by which cholera is spread in India *and that is owing to the peculiar treatment water obtains* in this country; that India is the only country in the world subject to such frequently recurring and such terrible epidemics of the dread scourge." I believe this is a great truth, and one that has not yet been sufficiently recognised. I have given elsewhere many facts in support of this assertion, but Madras town itself furnishes perhaps the most striking.

15. I append a table showing deaths from cholera in Madras since 1855. It will be seen that since 1872 when Red Hills water-supply was laid on, the deaths from cholera in this town, if we exclude the famine years, have perceptibly decreased, but the facts shown during the last three years are perhaps the most instructive.

16. During the last three years, *i.e.*, from December 1881 to present time, we have had one of the severest epidemics of cholera that has visited this presidency since 1870 (omitting famine years), but Madras has suffered comparatively very little. The average yearly mortality from this cause has been only 0·8 per 1,000 of population, whereas Madura, Tanjore, Trichinopoly, without an improved water-supply, have suffered heavily, having lost 6·8, 4·9 and 6·0 per mille of population respectively. But the most instructive part of the story is this: Of the 1,024 deaths that occurred in the three years, 472 took place in 8 out of the 36 villages of Madras where no Red Hills water has been laid on, *i.e.*, where the drinking water is still open to the peculiar treatment which is so prolific a cause of the spread of cholera.

17. And this fact of decreased mortality from an improved water-supply is noticeable in all the towns where efforts have been made to lay on water from more or less carefully-protected sources. Guntúr, Masulipatam and Tuticorin may be cited as examples. The water-supply of these places is not perfect, far from it, but it is an immense advance on the foul tank water-supply of most other places.

18. Whilst at Tanjore and Negapatam I attended by invitation the meeting of the municipal commissioners. At these meetings schemes for improvement of their water-supply were fully discussed and resolutions arrived at which, I trust, will place these towns, before another year is over, in a more satisfactory position.

ENCLOSURE.

Return showing the deaths from cholera in the town of Madras from 1855 to 1884.

Years.	Deaths from cholera.	Years.	Deaths from cholera.	
1855	1,956	1871	493	
1856	805	1872	5	Red Hills water-supply opened.
1857	1,378			
1858	1,965	1873	6	
1859	1,082	1874	...	
1860	2,580	1875	879	Famine years.
1861	2,776	1876	2,035	Famine years.
1862	3,635	1877	6,246	Famine years.
1863	1,684	1878	64	
1864	574	1879	34	
1865	944	1880	2	
1866	2,984	1881	126	
1867	614	1882	461	
1868	13	1883	168	
1869	568	1884	269	Up to 31st July 1884.
1870	861			

ORDER—dated 28th August 1884, No. 1889, Public.

Communicated to the President, Tanjore circle, for information and guidance.

2. The Government attach the greatest possible importance to the suggestions of the Sanitary Commissioner regarding the improvement of the supply of drinking water to the people, and desire the Collector to give the subject his immediate and close attention. Copies of these proceedings will be furnished to all Presidents of Local Fund Boards and Municipalities.

23*rd May* 1885. Bidie, C.I.E., Depy. Surgeon-Genl.,
Sanitary Commissioner for Madras.

APPENDIX I.

REPORT ON VACCINATION FOR THE YEAR 1884.

APPENDIX I.

REPORT ON VACCINATION FOR THE YEAR 1884.

1. I have the honor to forward, for your information, the Annual Report of Vaccination for the year 1884.

2. The subjoined table shows the changes in the strength of the vaccine establishment during the years 1883 and 1884.

Table showing the Strength of the Working Establishment during the years 1883 *and* 1884.

Districts.	1883.					1884.				
	Deputy inspectors, first class.	Deputy inspectors, second class.	Vaccinators.			Deputy inspectors, first class.	Deputy inspectors, second class.	Vaccinators.		
			First class.	Second class.	Probationers.			First class.	Second class.	Probationers.
Anantapur	1	1	5	8	3	1	1	5	8	3
Bellary	1	1	8	10	7	1	1	8	10	7
Chingleput	2	...	6	12	2	2	...	6	12	2
Coimbatore	2	...	10	10	5	2	...	10	16	5
Cuddapah	2	...	11	20	3	2	1	11	15	5
Ganjam	2	...	9	19	5	2	...	9	19	4
Godávari	2	...	11	14	5	2	1	12	24	5
Kistna	2	...	13	15	7	2	1	13	20	7
Kurnool	1	...	8	11	3	2	...	8	8	4
Madura	1	1	21	33	7	2	1	21	33	7
Malabar	1	1	10	21	4	1	1	9	19	4
Nellore	2	...	13	18	6	2	1	13	19	6
Nílgiris	...	...	2	...	...	...	...	3	...	...
North Arcot	2	...	14	13	6	2	1	14	16	6
Salem	1	1	9	20	7	1	2	9	20	7
South Arcot	1	1	8	18	...	1	1	8	16	...
South Canara	1	1	5	9	8	1	1	5	9	8
Tanjore	2	...	9	19	3	2	...	9	27	4
Tinnevelly	1	1	9	18	15	1	1	12	18	17
Trichinopoly	1	...	5	11	3	1	...	5	11	3
Vizagapatam	1	1	14	13	6	1	1	14	13	6
Total of districts ...	29	9	200	312	105	31	15	204	333	110
Government.										
Ganjam hill tracts ...	1	...	...	6	...	1	...	...	6	...
Jeypore do. ...	1	...	...	6	...	1	...	...	6	...
Gudem hills	...	...	2	...	...	...	...	2	...	...
Bhadráchalam hill tracts.	...	...	2	...	...	...	...	2	...	...
Total ...	2	...	4	12	...	2	...	4	12	...
Native States (Zemindary).										
Vellore	...	...	...	1	...	...	...	...	1	...
Jeypore	...	...	...	8	...	...	...	...	8	...
Total ...	...	...	...	9	...	...	...	...	9	...
Madras Town	1	...	8	8	4	1	...	8	10	8
Municipalities	...	...	40	30	6	...	...	39	33	6
Total ...	1	...	48	38	10	1	...	47	43	14
Cantonments	...	...	2	2	...	...	...	2	2	...
Grand Total ...	32	9	254	373	115	34	15	257	399	124

3. The totals show an increase under all heads in 1884.

4. Under districts only has there been an increase in the number of deputy inspectors in 1884. It was found that many of the deputy inspectors' ranges were too large, and so 8 more deputy inspectors (2 first-class and 6 second-class) were entertained. One first-class deputy inspector was employed in the Kurnool district and one in the Madura district. To each of the following districts, viz., Cuddapah, Godávari, Kistna, Nellore, North Arcot and Salem, a second-class deputy inspector was appointed.

5. Under first-class vaccinators the totals show an increase of 3 vaccinators in 1884. In the Tinnevelly district 3 additional first-class vaccinators were entertained, in the Godávari district 1 and in the Nílgiris 1. There was a decrease of 1 first-class vaccinator in Malabar district and 1 under municipalities.

6. The total of second-class vaccinators shows an increase of 26 in 1884. The following additional second-class vaccinators were entertained: 6 in the Coimbatore district, 10 in the Godávari district, 5 in the Kistna district, 8 in the Tanjore district, 3 in the North Arcot district, 1 in the Nellore district, 2 in Madras Town and 3 under municipalities. There was a decrease in the following districts: 3 in Kurnool, 2 in Malabar, 2 in South Arcot, and 5 in Cuddapah.

7. There was a total increase of 9 probationers in 1884: 2 additional probationers were entertained in the Cuddapah district, 1 in Kurnool district, 1 in Tanjore district, 2 in Tinnevelly district, and 4 in Madras Town. In the Ganjam district there was a decrease of 1 probationer. As in 1883, no probationers are employed in the Nílgiris and South Arcot district.

8. These variations in the strength of the vaccinators were incidental to the requirements of the year. In some districts small-pox prevailed and additional vaccinators were employed to check the progress of the disease.

9. The following table contrasts the work performed by each establishment during the year 1884 with that for 1883:—

Table contrasting the Work performed by each Establishment during the year 1884 *with that for* 1883.

Establishments.	Primary vaccinations.				Re-vaccinations.				Total vaccinations.			
	1883.	1884.	Increase.	Decrease.	1883.	1884.	Increase.	Decrease.	1883.	1884.	Increase.	Decrease.
Government vaccinators.	16,887	12,386	...	4,501	4	15	11	...	16,891	12,401	...	4,490
Local Fund do. ...	591,352	617,475	26,123	...	3,862	4,337	475	...	595,214	621,812	26,598	...
Cantonment do. ...	3,734	3,434	...	300	817	724	...	93	4,551	4,158	...	393
Native States	4,751	4,506	...	245	1	...	...	1	4,752	4,506	...	246
Municipalities	91,665	97,765	6,100	...	4,609	15,047	10,438	...	96,274	112,812	16,538	...
Private vaccinators ...	...	...	...	...	...	...	...	...	...	...	...	...
Dispensaries	12,579	21,561	8,982	...	651	1,008	357	...	13,230	22,569	9,339	...
Medical Subordinates ...	9,633	8,936	...	697	4,577	5,109	532	...	14,210	14,045	...	165
Army { European ...	1,940	2,640	700	...	9	639	630	...	1,949	3,279	1,330	...
Army { Native ...	4,121	4,415	294	...	2,397	3,472	1,075	...	6,518	7,887	1,369	...
Total ...	736,662	773,118	36,456	...	16,927	30,351	13,424	...	753,589	803,469	49,880	...

10. In 1884 the total vaccinations amounted to 803,469 against 753,589 in 1883, showing an increase of 49,880 operations for the year under report. There was a considerable increase (26,598) under total operations amongst the Local Fund vaccinators.

11. Under primary operations there is an increase of 36,456 for 1884. The establishments which show an increase are the Local Fund vaccinators, Municipalities, Dispensaries, European and Native Army. There is a considerable decrease (4,501) under Government vaccinators, and this is due to the absence of small-pox in 1884. In 1883 small-pox was very prevalent in the Ganjam hill tracts and large numbers were then vaccinated.

12. Under re-vaccinations there is an increase of 13,424 operations for the year under report. All establishments show an increase with the exception of Cantonment vaccinators and Native States. The increase under Municipalities is due to the large number of re-vaccinated cases which were done in Madras Town when small-pox was prevalent.

13. No vaccination work has been done by private vaccinators since 1882.

14. The following table shows the number of primary vaccinations, re-vaccinations (excluding cantonments), and the success for the past ten years:—

Table showing the Number of Primary Vaccinations, Re-vaccinations (excluding cantonments), and the Success for the past ten years.

Years.	Primary vaccinations.			Re-vaccinations.			Total number of operations.		
	Number of operations.	Number of successful cases.	Percentage of success.	Number of operations.	Number of successful cases.	Percentage of success.	Vaccinated.	Vaccinated successfully.	Percentage of success.
1875-76 ...	383,067	319,129	83·3	843	565	67·0	383,910	319,694	83·2
1876-77 ...	478,727	406,398	84·8	4,465	3,176	71·1	483,192	409,574	84·7
1877-78 ...	776,705	648,097	83·4	11,025	7,210	65·3	787,730	655,307	83·1
1878 ...	515,840	442,689	85·8	5,920	3,510	59·2	521,760	446,199	85·5
1879 ...	462,766	410,534	88·7	6,978	3,368	48·2	469,744	413,902	88·1
1880 ...	653,383	579,690	88·7	6,376	3,215	50·4	659,759	582,905	88·3
1881 ...	590,681	538,152	91·1	10,541	6,858	65·0	601,222	545,010	90·6
1882 ...	649,485	601,918	92·6	11,648	5,345	45·8	661,133	607,263	91·8
1883 ...	732,928	679,923	92·7	16,110	7,252	45·0	749,038	687,175	91·7
1884 ...	769,684	713,102	92·6	29,627	16,017	54·0	799,311	729,119	91·2

15. Out of 769,684 primary operations 713,102 (or 92·6 per cent.) were successful, being the largest number of successful primary operations for the past ten years. In 1884 there was a large increase in the number of re-vaccinations when compared with the numbers for the past ten years, and this was due to many people in Madras town having been done when small-pox was prevalent. The number of re-vaccinations was 29,627 in 1884; 16,017 were successful, or 54·0 per cent. The percentage of success in 1883 was 45·0. The total number of vaccinations in 1884 was 799,311, and of these, 729,119 (or 91·2 per cent.) were successful.

16. The following table shows the rates of success in primary and re-vaccinations:—

Table showing the Rates of Success in Primary and Re-vaccinations.

Establishments.	Number of successful vaccinations.				Ratio per cent. of successful cases.				Ratio per cent. of total successful cases.	
	1883.		1884.		1883.		1884.			
	Primary vaccinations.	Re-vaccinations.	Primary vaccinations.	Re-vaccinations.	Primary vaccinations.	Re-vaccinations.	Primary vaccinations.	Re-vaccinations.	1883.	1884.
Local Fund vaccinators.	553,890	1,742	580,624	3,278	93·6	45·1	94·0	75·5	93·3	93·9
Government do. ...	16,319	4	12,033	13	96·6	100·0	97·1	86·6	96·6	97·1
Private do. ...	...	...	...	...	...	...	...	...	...	...
Native States do. ...	4,436	1	4,291	..	93·3	100·0	95·2	...	93·3	95·2
Municipal do. ...	84,452	2,455	88,281	8,115	92·1	53·2	90·2	53·9	90·2	85·4
Cantonment do. ...	3,461	608	3,159	496	92·6	74·4	91·9	68·5	89·4	87·9
Dispensaries	10,185	276	17,201	474	80·9	42·3	79·7	47·0	79·0	78·3
Medical Subordinates.	6,271	1,228	5,280	1,436	65·0	26·8	59·0	28·1	52·7	47·8
Army { European ...	1,158	2	1,737	573	59·6	22·2	65·7	89·6	59·5	70·4
Army { Native ...	3,212	1,544	3,655	2,128	77·9	64·4	82·7	61·2	72·9	73·3
Grand Total ...	683,384	7,860	716,261	16,513	92·7	46·4	92·6	54·4	91·7	91·2

17. In primary vaccinations there were 716,261, or 92·6 per cent. successful in 1884, against 683,384, or 92·7 per cent. in 1883. The greatest success (97·1) was obtained by Government vaccinators and the lowest (59·0) by medical subordinates. There is an improvement in the percentage of success under all establishments with the exception of municipalities, cantonments, dispensaries, and medical subordinates. In successful re-vaccinations the percentage of success

was 54·4 in 1884 against 46·4 in 1883, or 8·0 higher for the year under report. The greatest success (89·6) was obtained by the European army and the lowest (28·1) by medical subordinates.

18. The following table shows the number of operations according to age :—

Table showing the Number of Operations according to Age.

Establishments.	Ages of the successfully vaccinated in 1883.			Total number vaccinated in 1883.	Ages of the successfully vaccinated in 1884.			Total number vaccinated in 1884.
	Under 1 year.	Over 1 and under 6 years.	Above 6 years.		Under 1 year.	Over 1 and under 6 years.	Above 6 years.	
Government	1,099	4,489	10,731	16,891	701	3,867	7,465	12,401
Local Funds	99,188	282,590	172,112	595,214	102,154	316,840	161,630	621,812
Native States ...	253	1,881	2,302	4,752	259	2,119	1,913	4,506
Municipalities ...	25,493	37,576	21,383	96,274	25,715	40,379	22,187	112,812
Cantonments ...	1,971	504	986	4,551	2,050	517	582	4,158
Civil Dispensaries ...	1,448	5,760	2,977	13,230	2,555	9,902	4,744	22,569
Medical Subordinates.	259	1,262	4,750	14,210	318	1,107	3,855	14,045
Army { European ...	524	11	623	1,949	599	71	1,067	3,279
Army { Native ...	1,136	550	1,526	6,518	1,555	885	1,215	7,887
Total ...	131,371	334,623	217,390	753,589	135,916	375,687	204,658	803,469

19. In 1884 there were 803,469 operations performed. The largest number of successful operations were in children over one and under six years of age and the smallest number in infants under one year. Contrasted with the work of 1883 there is an improvement in the number of infants vaccinated under one year of age under all establishments with the exception of Government vaccinators. In the Native army and cantonments the largest number of operations were in infants under one year of age.

20. The following table shows the cost of vaccination :—

Table showing the Cost of Vaccination.

Establishments.	Total expenditure.						Average cost of each successful case.					
	1883.			1884.			1883.			1884.		
	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.	RS.	A.	P.
Government establishment* ...	5,762	3	7	5,618	4	11	0	5	8	0	7	6
Local Fund do. ...	1,31,757	13	11	1,37,894	5	5	0	3	10	0	3	9
Municipal do. ...	18,631	1	8	23,873	9	4	0	3	5	0	4	0
Native States do. (Zemindary).	1,079	0	0	1,077	2	8	0	3	11	0	4	0
Cantonments	696	8	0	711	2	0	0	2	9	0	3	1
Total ...	1,57,926	11	2	1,69,174	8	4	0	3	9	0	3	10

21. The total cost was Rs. 1,69,174-8-4 in 1884 against Rs. 1,57,926-11-2 in 1883. There was an increase under all establishments with the exception of Government vaccinators and Native States. The increase under "Local Fund establishment" is due to the entertainment of 2 first-class and 6 second-class additional deputy inspectors, and also to the employment of extra vaccinators in some districts. The increase under "Municipal establishment" is owing chiefly to the re-arrangement of the vaccine staff and carrying on of animal vaccination throughout the year in Madras town when the compulsory Act of vaccination was introduced. In a few municipalities where small-pox prevailed extra vaccinators were temporarily employed.

22. The average total cost of each successful case was 3 annas 10 pies, or 1 pie more than for the previous year. The average cost of each successful case ranged from 3 annas 1 pie (in cantonments) to 7 annas 6 pies (Government

* Exclusive of the pay and allowances of the Inspector of Vaccination and Deputy Sanitary Commissioner.

vaccinators). The increase under Government establishment is due to fewer cases having been done in 1884 than in 1883. In 1883 small-pox was very prevalent in the hill tracts and a large number of people came willingly forward then to be vaccinated.

23. The average number of operations per vaccinator by the different establishments is given below.

Establishment.	Number of vaccinators.		Average number of operations per man.		Increase or decrease per man.	
	1883.	1884.	1883.	1884.	Increase.	Decrease.
Local Fund vaccinators	618	647	963	961	...	2
Government do.	16	16	1,056	775	...	281
Native States do.	9	9	528	501	...	27
Municipal do.	74	79	748	708	...	40
Madras Town do.	20	26	2,047	2,188	141	...
Cantonment do.	4	4	1,138	1,039	...	99
Total ...	741	781	968	967	...	1

24. The average for all the establishments is 967 per man. The largest number of operations per man was done by Madras Town vaccinators and the fewest by those of Native States.

Work of establishments.

25. The work of the different establishments is as follows :—

Table showing the Work of the Local Fund Vaccinators for each District.

Districts.	Primary vaccinations.				Re-vaccinations.				Total vaccinations.			
	1883.	1884.	Increase.	Decrease.	1883.	1884.	Increase.	Decrease.	1883.	1884.	Increase.	Decrease.
Anantapur	15,600	14,104	...	1,496	24	15	...	9	15,624	14,119	...	1,505
Bellary	19,394	19,088	...	306	17	4	...	13	19,411	19,092	...	319
Chingleput ...	27,886	30,807	2,921	...	157	150	...	7	28,043	30,957	2,914	...
Coimbatore ...	39,666	46,834	7,168	...	34	47	13	...	39,700	46,881	7,181	...
Cuddapah	13,830	12,355	...	1,475	49	27	...	22	13,879	12,382	...	1,497
Ganjam	21,957	21,663	...	294	39	14	...	25	21,996	21,677	...	319
Godávari	18,675	30,210	11,535	...	19	107	88	...	18,694	30,317	11,623	...
Kistna	23,816	38,690	14,874	...	302	1,459	1,157	...	24,118	40,149	16,031	...
Kurnool	27,349	12,630	...	14,719	613	...	...	613	27,962	12,630	...	15,332
Madura	60,066	60,569	503	...	287	509	222	...	60,353	61,078	725	...
Malabar	46,860	33,171	...	13,689	15	30	15	...	46,875	33,201	...	13,674
Nellore	26,519	32,897	6,378	...	196	77	...	119	26,715	32,974	6,259	...
Nílgiris ...	1,886	1,924	38	...	...	14	14	...	1,886	1,938	52	...
North Arcot ...	27,331	27,768	437	...	5	8	3	...	27,336	27,776	440	...
Salem	24,753	33,495	8,742	...	35	174	139	...	24,788	33,669	8,881	...
South Arcot ...	24,659	27,893	3,234	...	998	...	...	998	25,657	27,893	2,236	...
South Canara ...	44,492	36,214	...	8,278	224	193	...	31	44,716	36,407	...	8,309
Tanjore	48,724	43,725	...	4,999	104	186	82	...	48,828	43,911	...	4,917
Tinnevelly	36,000	36,554	554	...	41	104	63	...	36,041	36,658	617	...
Trichinopoly ...	19,116	20,794	1,678	...	...	...	...	...	19,116	20,794	1,678	...
Vizagapatam ...	22,773	36,090	13,317	...	703	1,219	516	...	23,476	37,309	13,833	...
Total ...	591,352	617,475	26,123	...	3,862	4,337	475	...	595,214	621,812	26,598	...

26. The above table shows the work of the Local Fund vaccinators for each district. The total operations performed during the year under notice amounted to 621,812 against 595,214 in 1883, showing an increase of 26,598 for 1884. In 13 of the districts an improvement is shown, but in 8 a retrogression. On the side of retrogression we have the Kurnool, Malabar, South Canara, Tanjore, Anantapur, Cuddapah, Bellary and Ganjam districts in the order mentioned. The following explanations are submitted by the respective deputy inspectors of those districts in which a decrease in the number of vaccinations took place. In the Kurnool district the reduction was due (1) to 4 vaccinators having been dismissed and 3 having resigned, and their places remaining vacant for some time as no competent men were available for the posts; (2) to opposition to vaccination; (3) to some of the revenue officials not having given as much assistance in 1884 as in 1883. In 1883 large numbers were done by the vaccinators who accompanied the Sub-

Collector on his tour; and (4) to the negligence of the deputy inspector, who was reduced to second grade and transferred in 1884. In the Malabar district to (1) the services of a large number of temporary vaccinators having been dispensed with in 1884; and (2) small-pox not having been as prevalent in 1884 as in 1883. In the South Canara district to (1) absence of small-pox, which prevailed greatly in 1883, when extra vaccinators were entertained; (2) fever, which prevailed in some of the taluks; and (3) to many of the vaccinators reporting sick and no substitutes being available to take their places. In the Tanjore district to (1) the prevalence of cholera, when many of the vaccinators were deputed to do cholera duty; (2) some vaccinators having been on leave; and (3) the heavy rains which occurred in the latter part of the year rendering many of the roads impassable. In the Anantapur district to (1) 2 vaccinators having been dismissed and their places remaining vacant for some time as no competent men were found available for the posts; (2) the apathy of the deputy inspector, who has now left the department. In the Cuddapah district to (1) the determined opposition of the people; (2) some vaccinators' places remaining vacant as no men were available to be put into the posts; (3) prevalence of cholera in the district; and (4) difficulty of getting subjects for the *rôle* of *vaccinifers*. In the Bellary district the decrease was only 319 and due to changes in the staff and the prevalence of fever. In the Ganjam district the decrease was also only 319 and due to the services of 2 probationary vaccinators having been dispensed with in 1884.

27. As in 1883, the largest number of cases was done in the Madura district, and the fewest, excluding Nílgiris, in Cuddapah. The greatest increase (16,031) in the number of cases was in the Kistna district, where 40,149 operations were performed in 1884 against 24,118 in 1883. This was due to the prevalence of small-pox in 1884 in the Kistna district, when additional vaccinators were employed. In the Guntúr range of the Kistna district animal vaccination was carried on and so a supply of good lymph was always available.

28. Primary vaccinations show an increase in the same districts which exhibit an increase of totals. In re-vaccinations there is an increase of 475 cases.

29. The following table shows the percentages of success in primary and re-vaccinations in the various districts:—

Table showing the Percentages of Success in Primary and Re-vaccinations in the Local Fund Districts.

Districts.	Number of successful vaccinations.				Ratio per cent. of successful cases.			
	1883.		1884.		1883.		1884.	
	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.	Primary vaccination.	Re-vaccination.
Anantapur	14,958	17	13,064	2	95·8	70·8	92·6	13·3
Bellary	18,152	5	18,157	4	93·5	29·4	95·1	100·0
Chingleput	25,361	100	28,803	105	90·9	63·6	93·4	70·0
Coimbatore	38,691	29	45,707	39	97·5	85·2	97·5	82·9
Cuddapah	12,805	17	11,516	15	92·5	34·6	93·2	55·5
Ganjam	21,390	36	20,871	12	97·4	92·3	96·3	85·7
Godávari	17,384	19	27,985	81	93·0	100·0	92·6	75·7
Kistna	20,297	188	32,831	1,081	85·2	62·2	84·8	74·0
Kurnool	22,127	124	11,541	...	80·9	20·2	91·3	...
Madura	58,306	226	59,265	441	97·0	78·7	97·8	86·6
Malabar	43,291	10	29,843	23	92·3	66·6	89·9	76·6
Nellore	24,719	128	30,721	60	93·2	65·3	93·3	77·9
Nílgiris	1,747	...	1,847	7	92·6	...	95·9	50·0
North Arcot	26,382	5	26,677	6	96·5	100·0	96·0	75·0
Salem	24,445	22	31,686	117	98·7	62·8	94·5	67·2
South Arcot	23,244	12	25,851	...	94·2	1·2	92·6	...
South Canara	41,851	168	34,504	127	94·0	75·0	95·2	65·8
Tanjore	45,845	57	41,581	144	94·0	54·8	95·0	77·4
Tinnevelly	32,906	22	33,322	41	91·4	53·6	91·1	39·4
Trichinopoly	17,878	...	19,616	...	93·5	...	94·3	...
Vizagapatam	22,111	557	35,236	973	97·0	79·2	97·6	79·8
Total ...	553,890	1,742	580,624	3,278	93·6	45·1	94·0	75·5

30. The total percentages of success in both primary and re-vaccinations are greater in 1884 than in 1883. In 1884 there were 580,624 primary successful operations performed against 553,890 in 1883, or 94·0 per cent. against 93·6. In all the districts with the exception of Anantapur, Ganjam, Godávari, Kistna, Malabar, Salem, Tinnevelly, North and South Arcot, the percentages of success were higher. The highest success (97·8) was obtained in the Madura district and the lowest (84·8) in the Kistna district.

31. The next table shows the ages of the successfully vaccinated

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Table showing the Ages of the successfully vaccinated.

Districts.	Total number of persons primarily vaccinated in 1883, excluding unknown.	Ages of the successfully vaccinated in 1883.			Proportion per cent. to total primarily vaccinated, excluding the unknown, in 1883.			Total number of persons primarily vaccinated in 1884, excluding unknown.	Ages of the successfully vaccinated in 1884.			Proportion per cent. to total primarily vaccinated, excluding the unknown, in 1884.		
		Under 1 year.	Over 1 and under 6 years.	Above 6 years.	Under 1 year.	Over 1 and under 6 years.	Above 6 years.		Under 1 year.	Over 1 and under 6 years.	Above 6 years.	Under 1 year.	Over 1 and under 6 years.	Above 6 years.
Anantapur ...	15,424	5,675	7,132	2,151	36·7	46·2	13·9	13,681	6,050	5,914	1,100	44·2	43·2	8·0
Bellary ...	18,780	9,807	7,500	845	52·2	39·9	4·4	18,650	10,645	6,863	629	57·0	36·9	3·3
Chingleput ...	26,936	2,514	16,256	6,591	9·3	60·3	24·4	29,993	2,819	18,761	7,223	9·4	62·5	24·0
Coimbatore ...	39,125	18,144	22,088	3,459	33·5	56·4	8·8	46,278	14,443	27,243	4,021	31·2	58·8	8·6
Cuddapah ...	13,507	1,652	7,331	3,822	12·2	54·2	28·2	12,205	1,382	7,503	2,631	11·3	61·4	21·5
Ganjam ...	21,853	1,489	14,216	5,685	6·8	65·0	26·0	21,422	1,631	14,121	5,119	7·6	65·9	23·8
Godávari ...	18,024	796	9,114	7,474	4·4	50·5	41·4	28,958	1,591	14,495	11,899	5·4	50·0	41·0
Kistna ...	21,900	1,773	11,691	6,833	8·0	53·3	31·2	35,842	2,735	17,096	13,000	7·6	47·6	36·2
Kurnool ...	24,192	4,230	8,976	8,921	17·4	37·1	36·8	12,014	2,644	6,072	2,825	22·0	50·5	23·5
Madura ...	59,065	18,681	29,419	10,206	31·6	49·8	17·2	59,918	19,159	30,473	9,633	31·8	50·8	16·0
Malabar ...	44,698	835	9,611	33,345	0·7	21·5	74·6	31,140	250	6,946	22,647	0·8	22·3	72·7
Nellore ...	25,776	1,943	13,538	9,238	7·5	52·5	35·8	32,164	1,979	19,280	9,462	6·1	59·9	29·4
Nílgiris ...	1,830	136	797	814	7·4	43·5	44·4	1,881	141	958	748	7·4	50·9	39·7
North Arcot ...	27,032	5,959	15,114	5,909	22·0	55·9	19·6	27,489	5,240	16,473	4,964	19·0	59·9	18·0
Salem ...	24,720	5,432	15,692	3,321	21·9	63·4	13·4	33,244	6,236	21,451	3,999	18·7	64·5	12·0
South Arcot ...	23,851	3,512	14,553	5,179	14·7	61·0	21·7	26,511	4,482	15,597	5,472	16·9	59·9	20·6
South Canara ...	42,952	1,558	13,031	27,262	3·6	30·3	63·4	35,286	1,231	10,658	22,805	3·4	30·2	64·0
Tanjore ...	46,849	12,545	23,059	10,241	26·7	49·2	21·8	42,429	9,817	22,738	9,026	23·1	53·5	21·2
Tinnevelly ...	34,147	4,068	19,126	9,712	11·9	56·0	28·4	34,647	3,828	20,778	8,716	11·0	59·9	[illegible]
Trichinopoly ...	18,542	1,919	11,342	4,617	10·3	61·1	24·9	20,263	2,316	12,482	4,818	11·4	[illegible]	23·[illegible]
Vizagapatam ...	22,627	2,020	13,004	7,087	8·9	57·4	31·3	35,778	3,535	20,608	11,093	9·8	[illegible]	31·0
Total ...	571,820	99,188	282,590	172,112	17·3	49·4	30·0	599,793	102,154	316,840	161,630	17·0	52·8	[illegible]

32. The numbers under each period primarily vaccinated in 1884 were respectively 102,154, 316,840, and 161,630, against 99,188, 282,590, and 172,112 during the preceding year. There was an increase for the year under report in the numbers of children vaccinated under one year of age as well as those above one year and under six years, but a decrease in the number of cases vaccinated above six years. As in 1883, children over one and under six years of age were the most largely protected; next, those above six years; and lastly, children under one year of age. In many parts of the presidency it is a common practice for the parents to hide their children when the vaccinator appears, and this will continue as long as registration of births is not compulsory. The largest number of infants vaccinated was in the Madura district and the fewest (excluding Nílgiris) in Malabar.

33. The subjoined table shows the comparative proportion of males to females vaccinated during the year :—

| | 1884. | | |

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33. The subjoined table shows the comparative proportion of males to females vaccinated during the year :—

Districts.	Population.		1883.						1884.					
			Total number vaccinated.		Proportion per cent. to total number vaccinated.		Proportion per cent. to population.		Total number vaccinated.		Proportion per cent. to total number vaccinated.		Proportion per cent. to population.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Anantapur ...	303,026	291,956	8,457	7,167	54·1	45·9	2·7	2·4	7,503	6,616	53·1	46·9	2·4	2·2
Bellary ...	335,567	325,389	9,895	9,516	50·9	49·1	2·9	2·9	9,851	9,241	51·6	48·4	2·9	2·8
Chingleput ...	474,520	469,586	15,079	12,964	53·7	46·3	3·1	2·7	16,703	14,254	53·9	46·0	3·5	3·0
Coimbatore ...	779,006	820,648	20,113	19,587	50·6	49·4	2·5	2·3	23,830	23,051	50·8	49·1	3·0	2·8
Cuddapah ...	560,394	541,662	7,785	6,094	56·0	44·0	1·3	1·1	6,801	5,581	54·9	45·0	1·2	1·0
Ganjam ...	850,604	869,046	11,898	10,098	54·0	46·0	2·0	1·8	11,494	10,183	53·0	46·9	1·3	1·1
Godávari ...	849,908	863,101	11,135	7,559	59·5	40·5	1·4	0·9	16,975	13,342	56·0	44·0	1·9	1·5
Kistna ...	753,987	739,791	13,268	10,850	50·8	49·2	1·7	1·4	21,693	18,456	54·0	46·0	2·8	2·4
Kurnool ...	349,717	339,259	17,148	10,814	61·3	38·7	4·9	3·1	7,027	5,603	55·6	44·4	2·0	1·7
Madura ...	1,088,448	1,092,248	31,379	23,974	51·9	48·1	3·1	2·6	31,828	29,250	52·1	47·9	3·2	2·7
Malabar ...	1,092,233	1,110,884	35,534	11,341	75·8	24·2	3·2	1·0	25,364	7,837	76·3	23·7	2·3	0·7
Nellore ...	597,353	586,178	14,065	12,650	52·6	47·4	2·3	2·1	17,128	15,846	51·9	48·1	2·8	2·7
Nílgiris ...	41,950	31,971	1,051	835	55·7	44·3	2·5	2·6	1,113	825	57·4	42·6	2·6	2·5
North Arcot ...	884,882	885,054	14,513	12,823	53·8	46·2	1·6	1·4	14,771	13,005	53·1	46·9	1·6	1·4
Salem ...	753,899	795,029	12,712	12,076	51·2	48·8	1·6	1·5	17,307	16,362	51·3	48·7	2·2	2·0
South Arcot ...	875,054	876,302	14,138	11,519	55·1	44·9	1·6	1·3	15,205	12,688	54·5	45·5	1·7	1·4
South Canara ...	455,697	471,718	24,522	20,194	54·8	45·2	5·3	4·2	19,924	16,483	54·8	45·2	4·3	3·4
Tanjore ...	980,826	998,406	25,432	23,396	52·0	48·0	2·7	2·3	22,902	21,009	52·1	47·9	2·4	2·1
Tinnevelly ...	797,821	844,460	21,017	15,024	58·3	41·7	2·6	1·7	20,757	15,901	56·6	43·4	2·6	1·8
Trichinopoly ...	535,854	574,967	10,283	8,833	53·6	46·4	1·9	1·5	10,939	9,855	52·5	47·5	2·0	1·7
Vizagapatam ...	1,217,939	1,192,411	13,141	10,335	55·9	44·1	1·4	1·1	20,099	17,210	53·8	46·2	1·6	1·4
Total ...	14,428,680	14,710,006	332,565	262,649	55·8	44·2	2·3	1·8	339,214	282,598	54·6	45·4	2·2	1·9

34. In 1884 there were more males vaccinated than females. In Malabar district the difference was very great, viz., 25,364 males and 7,837 females. In comparison with the preceding year there is a decrease in the percentage of male operations calculated on the total number vaccinated and an increase in the percentage of female operations. Calculated on the population there is an increase in the percentage of female operations while that for males is the same.

35. The total expenditure for each district is given in the following table :—

Table showing the Total Expenditure for each Local Fund district.

District.	Total cost.		Average cost of each successful case.			
	1883.	1884.	1883.	1884.	Increase.	Decrease.
	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.
Anantapur ...	4,614 12 11	3,965 0 5	0 4 11	0 4 10	...	0 0 1
Bellary ...	7,048 0 7	6,828 12 7	0 6 3	0 6 0	...	0 0 3
Chingleput ...	4,805 0 1	5,313 6 4	0 3 0	0 2 11	...	0 0 1
Coimbatore ...	7,012 5 3	6,946 15 4	0 2 11	0 2 5	...	0 0 6
Cuddapah ...	8,913 6 6	7,316 12 10	0 11 1	0 10 2	...	0 0 11
Ganjam ...	6,504 12 5	6,476 10 5	0 4 1	0 5 0	0 0 11	...
Godávari ...	7,678 1 9	8,601 4 10	0 7 1	0 4 11	...	0 2 2
Kistna ...	7,368 4 5	9,062 8 5	0 5 9	0 4 3	...	0 1 6
Kurnool ...	3,565 13 8	4,292 1 8	0 2 7	0 5 11	0 3 4	...
Madura ...	10,928 13 0	12,063 14 8	0 3 0	0 3 3	0 0 3	...
Malabar ...	6,344 3 10	5,516 7 4	0 2 4	0 2 11	0 0 7	...
Nellore ...	8,489 15 8	9,938 4 6	0 5 6	0 5 2	...	0 0 4
Nílgiris ...	909 6 4	1,063 6 1	0 8 4	0 9 2	0 0 10	...
North Arcot ...	7,783 1 8	8,467 4 7	0 4 8	0 5 1	0 0 5	...
Salem ...	6,191 5 11	7,319 10 9	0 4 1	0 3 8	...	0 0 5
South Arcot ...	5,445 10 2	5,525 13 4	0 3 9	0 3 5	...	0 0 4
South Canara ...	4,803 14 5	4,710 0 2	0 1 10	0 2 2	0 0 4	...
Tanjore ...	6,753 12 8	7,403 4 9	0 2 4	0 2 10	0 0 6	...
Tinnevelly ...	6,997 0 11	7,324 12 9	0 3 5	0 3 6	0 0 1	...
Trichinopoly ...	3,517 14 1	3,532 15 8	0 3 2	0 2 11	...	0 0 3
Vizagapatam ...	6,082 1 8	6,224 14 0	0 4 4	0 2 9	...	0 1 7
Total ...	1,31,757 13 11	1,37,894 5 5	0 3 10	0 3 9	...	0 0 1

36. The total cost was Rs. 1,37,894-5-5 against Rs. 1,31,757-13-11 for 1883, showing an increase of Rs. 6,136-7-6 in 1884. This increase was chiefly due to 8 additional deputy inspectors having been entertained during 1884. The average cost of each successful case was 3 annas 9 pies against 3 annas 10 pies in 1883, or 1 pie less for the year under report. It varied, ranging from 2 annas 2 pies in South Canara to 10 annas 2 pies in Cuddapah. In all the districts with the exception of Tinnevelly, Tanjore, South Canara, North Arcot, Nílgiris, Ganjam, Kurnool, Madura, and Malabar, the cost was lower.

37. The subjoined table shows the average number of operations per vaccinator :—

Districts.	Number of vaccinators.		Average number of operations per man.		Increase or decrease per man.	
	1883.	1884.	1883.	1884.	Increase.	Decrease.
Anantapur	19	16	822	882	60	...
Bellary	25	25	767	764	...	2
Chingleput	17	20	1,650	1,548	...	102
Coimbatore	25	31	1,588	1,512	...	76
Cuddapah	31	31	448	400	...	48
Ganjam	31	32	710	677	...	33
Godávari	30	41	623	739	116	...
Kistna	35	40	689	1,004	315	...
Kurnool	22	20	1,271	631	..	640
Madura	61	61	989	1,001	12	...
Malabar	38	32	1,234	1,038	...	196
Nellore	39	38	685	868	183	...
Nílgiris	2	3	943	646	...	297
North Arcot	33	36	828	772	...	56
Salem	36	36	688	935	247	...
South Arcot	26	24	987	1,162	175	...
South Canara	24	22	1,863	1,655	...	208
Tanjore	31	40	1,575	1,098	...	477
Tinnevelly	42	47	858	780	...	78
Trichinopoly	18	19	1,062	1,093	31	...
Vizagapatam	33	33	711	1,131	420	...
Total ...	618	647	963	961	..	2

38. The average number of operations done by each vaccinator was 961 or 2 less than in 1883. In the following districts, viz., Anantapur, Godávari, Kistna, Madura, Nellore, Salem, South Arcot, Trichinopoly and Vizagapatam, there is an increase in the average number of operations per vaccinator. The largest average number of operations per vaccinator was done in South Canara district and the fewest in Cuddapah.

Work of Municipal vaccinators.

39. All the municipalities of the presidency employed at least one vaccinator who carried on the work of vaccination within municipal limits. A few municipal vaccinators also carried on work in the villages of the immediate neighbourhood. There was a decrease of 1 first-class vaccinator, but an increase of 5 second-class vaccinators and 4 probationers in the staff in 1884 when compared with that for 1883.

40. The following table shows the work of vaccination in the different municipalities :—

Municipalities.		Population.	Total number vaccinated.			Primary vaccination.				Re-vaccination.		Proportion per cent. to total primarily vaccinated.			Number of all successful vaccinations and re-vaccinations.	Percentage of success.		Births registered.	Number of infants under 1 year who died.	Number of infants under 1 year who remained unprotected.	Average cost of each successful case.
			Males.	Females.	Total.	Total.	Successful.			Total.	Successful.	Under 1 year.	Above 1 and under 6 years.	Above 6 years.		Primary vaccination.	Re-vaccination.				RS. A. P.
							Under 1 year.	Over 1 and under 6 years.	Above 6 years.												
Ádóni ...	1883	22,441	405	482	947	947	528	361	4	...	...	55·7	38·1	0·4	893	94·2	...	998	72	398	0 3 8
	1884		399	418	817	817	427	369	29	...	...	52·2	37·8	3·5	765	93·6	...	890	109	354	0 3 10
Anantapur ...	1883	4,907	201	109	310	287	168	22	58	23	17	58·5	7·6	20·2	265	86·4	73·9	263	35	60	0 9 8
	1884		103	110	213	210	146	33	19	3	2	69·5	15·7	9·0	200	94·2	66·6	243	33	64	0 14 9
Anakápalle ...	1883	13,341	350	271	621	598	20	262	291	23	13	3·3	43·8	48·6	586	95·8	56·5	349	15	314	0 4 11
	1884		435	325	760	656	43	331	268	104	93	6·5	50·4	40·8	735	97·8	89·4	538	40	455	0 4 4
Bellary ...	1883	53,460	951	561	1,512	1,512	785	194	399	...	...	51·9	12·8	26·3	1,378	91·1	...	914	338	...	0 3 11
	1884		934	690	1,624	1,605	868	324	253	19	14	54·0	20·1	15·7	1,459	90·0	73·6	1,115	354	...	0 3 7
Berhampore ...	1883	23,599	422	234	656	656	8	238	273	...	...	1·2	45·4	41·6	579	88·2	...	744	136	600	0 5 8
	1884		402	253	655	649	33	388	184	6	6	5·0	59·7	28·3	611	93·2	100·0	1,029	195	801	0 3 7
Bimlipatam ...	1883	8,582	260	205	465	419	99	206	109	46	46	23·6	49·1	26·0	460	98·8	100·0	191	28	64	0 6 1
	1884		294	194	488	362	114	138	92	126	126	31·4	38·1	25·4	470	95·0	100·0	306	34	158	0 6 0
Calicut ...	1883	57,085	2,747	974	3,721	3,709	151	1,191	1,882	12	8	4·0	32·1	50·7	3,232	86·9	66·6	1,579	226	1,202	0 2 5
	1884		2,308	592	2,900	2,877	64	573	1,819	23	17	2·2	19·9	63·2	2,473	85·3	73·9	2,693	331	2,298	0 3 3
Cannanore ...	1883	26,386	767	581	1,348	1,348	229	589	341	...	...	16·9	43·6	25·2	1,159	85·9	...	1,086	134	723	0 4 5
	1884		814	575	1,389	1,389	332	657	259	...	...	23·9	47·3	18·6	1,248	89·8	...	1,107	161	614	0 4 3
Chicacole ...	1883	18,302	374	244	618	618	88	272	221	...	...	14·2	44·0	55·7	581	94·0	...	301	25	188	0 4 2
	1884		373	265	638	638	79	294	201	...	...	12·3	46·0	31·5	574	89·9	...	511	65	367	0 4 3
Chidambaram ...	1883	19,837	441	433	874	874	120	604	129	...	...	13·7	69·1	14·7	853	97·5	...	300	66	114	0 3 8
	1884		393	402	795	795	145	496	107	10	10	19·5	62·4	13·4	748	94·0	100·0	343	77	121	0 3 11
Cochin ...	1883	15,698	652	359	1,041	1,031	202	322	312	2	2	10·6	31·2	30·2	846	81·0	100·0	560	169	189	0 3 11
	1884		647	307	954	952	101	226	457	61	5	33·9	23·7	48·0	786	82·3	100·0	603	134	368	0 3 11
Cocanada ...	1883	30,441	440	443	883	822	279	469	58	348	121	23·5	57·7	7·0	811	98·0	8·1	633	123	231	0 4 4
	1884		962	751	1,713	1,365	321	788	195	...	...	52·3	29·4	14·2	1,425	95·5	34·7	768	134	308	0 3 1
Coimbatore ...	1883	38,967	673	571	1,244	1,244	651	366	102	16	16	42·9	39·7	9·9	1,119	89·8	...	1,405	213	541	0 4 0
	1884		584	483	1,067	1,051	451	418	105	24	17	12·0	34·8	29·8	990	92·6	100·0	1,475	240	784	0 4 11
Conjeeveram ...	1883	37,275	630	394	1,024	1,000	120	348	298	33	20	16·2	43·4	18·3	783	76·6	70·8	1,354	333	901	0 3 4
	1884		992	771	1,763	1,670	272	726	306	59	57	16·0	49·9	22·1	1,324	78·8	21·5	1,401	384	745	0 5 10
Coonoor ...	1883	4,778	404	290	694	635	102	317	147	19	15	15·2	46·2	7·8	623	89·1	96·6	64	9	...	0 5 8
	1884		142	106	248	229	35	106	18	14	12	15·6	36·7	39·4	174	69·4	78·9	100	28	37	1 1 4
Cuddalore ...	1883	43,545	656	537	1,193	1,179	185	433	464	25	1	15·4	43·5	17·2	1,094	91·7	85·7	1,431	102	1,144	0 4 6
	1884		678	487	1,165	1,140	176	496	196	13	9	23·2	24·4	51·1	869	76·1	4·0	1,371	85	1,110	0 5 6
Cuddapah ...	1883	18,982	289	133	422	409	95	100	209	20	20	15·8	19·0	63·4	319	98·3	100·0	479	64	271	0 7 0
	1884		272	52	324	304	48	58	193	...	...	18·5	56·3	20·6	2,115	90·5	...	583	78	367	0 8 11
Dindigul ...	1883	14,152	1,331	1,004	2,335	2,335	317	1,316	482	...	...	16·7	63·4	12·7	1,550	92·9	...	502	52	138	0 1 5
	1884		906	762	1,668	1,668	279	1,059	212	...	7	8·3	49·3	34·2	356	91·9	28·5	599	124	171	0 2 3
Ellore ...	1883	25,092	262	130	392	385	32	190	132	2	2	8·9	50·7	33·7	766	93·4	68·2	541	151	443	0 10 0
	1884		435	352	837	774	69	393	261	63	43	8·9	50·7	33·7	766	93·4	68·2	541	151	321	0 5 8

Municipalities.		Population.	Total number vaccinated.			Primary vaccination.				Re-vaccination.		Proportion per cent. to total primarily vaccinated.			Number of all successful vaccinations and re-vaccinations.	Percentage of success.		Births registered.	Number of infants under 1 year who died.	Number of infants under 1 year who remained unprotected.	Average cost of each successful case.
							Successful.														
			Males.	Females.	Total.	Total.	Under 1 year.	Over 1 and under 6 years.	Above 6 years.	Total.	Successful.	Under 1 year.	Above 1 and under 6 years.	Above 6 years.		Primary vaccination.	Re-vaccination.				RS. A. P.
Erode	1883	9,864	395	470	865	862	411	381	55	3	3	47·6	44·2	6·3	850	98·2	100·0	343	41	...	0 2 7
	1884		200	178	378	378	91	218	35	...	...	24·0	57·6	9·2	344	91·0	...	267	40	136	0 5 2
Guntúr	1883	19,646	503	314	817	771	72	357	196	46	30	9·3	46·3	25·4	655	81·0	65·2	358	69	217	0 6 8
	1884		313	231	544	515	58	256	96	29	19	11·2	49·7	18·6	429	79·6	65·5	474	63	353	0 11 5
Karúr	1883	92,095	285	204	489	489	243	109	76	...	...	49·6	22·3	15·5	428	87·5	...	425	94	88	0 8 10
	1884		276	206	482	480	244	130	72	2	2	50·8	27·0	15·0	448	92·9	100·0	404	58	102	0 8 4
Kumbakónam ...	1883	50,098	945	777	1,722	1,706	399	844	268	16	10	23·3	49·4	15·7	1,521	88·5	62·5	1,453	375	679	0 5 9
	1884		825	655	1,480	1,446	360	664	317	14	12	24·5	45·2	21·6	1,353	91·4	85·7	1,327	419	548	0 6 11
Kurnool	1883	20,329	533	320	853	853	179	372	255	...	...	20·9	43·6	29·9	806	94·4	...	738	155	404	0 3 5
	1884		530	298	828	695	137	267	130	133	85	19·7	38·4	18·7	619	76·8	63·9	705	185	383	0 4 0
Madras	1883	405,848	24,138	16,802	40,940	37,776	13,789	14,769	7,057	3,164	1,523	36·5	39·0	18·7	37,138	94·2	48·1	16,464	5,869	...	0 2 5
	1884		36,044	20,849	56,893	44,293	13,907	17,626	8,396	12,600	6,530	31·3	39·7	18·9	46,459	90·1	51·8	16,133	7,064	...	0 3 6
Madura	1883	73,807	1,627	1,358	2,985	2,957	1,529	1,119	195	28	22	51·7	37·8	6·5	2,865	96·1	78·5	2,434	496	409	0 2 3
	1884		1,694	1,319	3,013	2,995	1,552	925	409	18	11	51·8	30·8	13·6	2,897	96·3	61·1	2,017	324	141	0 2 4
Mannárgudi ...	1883	19,409	402	286	688	624	141	317	122	64	62	22·5	50·8	19·5	642	92·9	96·8	590	116	333	0 5 2
	1884		343	350	693	642	148	278	185	51	50	23·0	43·3	28·8	661	95·1	98·0	555	107	300	0 6 1
Mangalore	1883	32,099	1,910	1,582	3,492	3,286	686	1,790	691	206	123	20·8	54·4	21·0	3,290	96·3	59·7	1,012	170	156	0 1 9
	1884		883	822	1,705	1,676	473	890	296	29	23	28·2	53·1	17·6	1,682	98·9	79·3	930	163	294	0 2 1
Masulipatam ...	1883	35,056	509	257	766	758	73	394	266	8	6	9·6	51·9	35·0	739	96·7	75·0	707	41	593	0 5 5
	1884		961	669	1,630	1,518	148	727	592	112	86	9·7	47·8	39·0	1,553	96·6	76·7	799	53	598	0 2 5
Máyavaram ...	1883	23,044	610	570	1,180	1,180	268	619	152	...	...	22·7	52·4	12·8	1,039	88·0	...	746	164	314	0 3 8
	1884		601	556	1,157	1,157	139	722	200	...	...	12·0	62·4	17·2	1,061	91·7	...	550	138	273	0 3 4
Negapatam ...	1883	53,855	1,018	731	1,749	1,738	408	843	317	11	6	23·4	48·5	18·2	1,574	90·2	54·5	881	154	319	0 3 6
	1884		1,066	766	1,832	1,765	424	807	422	67	46	24·0	45·7	23·9	1,699	93·6	68·6	1,001	243	334	0 4 11
Nellore	1883	27,575	444	298	742	697	79	428	172	45	27	11·3	61·4	24·6	706	97·4	60·0	595	101	415	0 4 0
	1884		439	368	807	760	88	480	176	47	27	11·5	63·1	23·1	771	97·8	57·4	564	71	405	0 3 7
Ongole	1883	9,200	197	153	350	350	34	140	135	...	...	9·7	40·0	38·5	309	88·2	...	320	39	247	0 6 6
	1884		193	177	370	370	37	161	106	...	...	10·0	43·5	28·6	304	82·1	..	414	75	302	0 6 2
Ootacamund ...	1883	12,335	385	256	641	641	127	354	88	...	...	19·8	55·2	13·7	569	88·7	...	312	27	158	0 9 2
	1884		352	313	665	516	98	263	122	149	117	19·0	50·9	23·6	600	93·6	78·5	332	39	195	0 8 4
Palamcottah ...	1883	17,964	449	313	762	720	78	333	223	42	36	10·8	46·2	30·9	670	88·0	85·7	628	129	421	0 4 4
	1884		380	280	660	522	111	251	86	138	77	21·2	48·0	16·4	525	85·8	55·7	452	101	240	0 6 5
Pálghat	1883	36,339	1,035	548	1,583	1,583	31	507	895	...	...	19·5	32·0	56·5	1,433	90·5	...	1,362	264	1,067	0 3 4
	1884		947	574	1,521	1,521	21	502	897	...	...	1·3	33·0	58·9	1,420	93·3	...	1,368	303	1,044	0 3 8
Rajahmundry ...	1883	24,555	493	374	867	867	169	394	260	...	...	19·4	45·4	29·9	823	94·9	...	788	114	505	0 4 4
	1884		1,475	922	2,397	2,397	235	836	672	..	...	9·8	34·8	28·0	1,743	72·7	...	631	143	253	0 3 11
Salem	1883	50,667	492	439	931	927	313	472	77	4	4	33·7	50·9	8·3	866	92·9	100·0	1,260	190	757	0 6 3
	1884		911	863	1,774	1,774	510	1,073	112	...	...	28·7	60·4	6·3	1,695	95·5	...	1,296	232	554	0 3 4

Municipalities.		Population.	Total number vaccinated.			Primary vaccination.				Re-vaccination.		Proportion per cent. to total primarily vaccinated.			Number of all successful vaccinations and re-vaccinations.	Percentage of success.		Births registered.	Number of infants under 1 year who died.	Number of infants under 1 year who remained unprotected.	Average cost of each successful case.
							Successful.														
			Males.	Females.	Total.	Total.	Under 1 year.	Over 1 and under 6 years.	Above 6 years.	Total.	Successful.	Under 1 year.	Above 1 and under 6 years.	Above 6 years.		Primary vaccination.	Re-vaccination.				RS. A. P.
Srírangam ...	1883	19,773	277	202	479	479	94	262	69	...	...	19·4	54·6	14·4	425	88·7	...	635	137	404	0 7 11
	1884		222	206	428	428	71	269	62	...	...	16·5	62·8	14·4	402	93·9	...	589	127	391	0 8 5
Tanjore	1883	54,745	1,367	721	2,088	2,083	229	833	899	5	5	10·9	39·9	43·1	1,966	94·1	100·0	1,230	156	845	0 2 5
	1884		1,385	652	2,037	2,037	318	741	877	...	...	15·6	36·3	43·0	1,936	95·0	...	1,397	165	914	0 2 11
Tellicherry ...	1883	26,410	1,570	1,040	2,610	2,528	113	824	1,310	82	82	4·4	32·5	51·8	2,329	88·8	100·0	717	61	543	0 4 7
	1884		1,299	832	2,131	2,109	53	749	997	22	22	2·5	35·5	47·2	1,821	85·3	100·0	995	76	866	0 5 9
Tinnevelly	1883	23,221	568	364	932	907	149	444	224	25	14	16·4	48·9	24·6	831	90·0	56·0	715	154	412	0 7 11
	1884		533	418	951	937	200	470	179	14	8	21·3	50·1	19·1	857	90·6	57·1	668	149	319	0 6 10
Trichinopoly ...	1883	84,449	1,920	1,456	3,376	3,072	758	1,346	417	304	95	24·6	43·8	13·5	2,616	82·0	31·2	1,793	316	719	0 5 8
	1884		2,204	1,340	3,544	3,463	1,272	1,535	500	81	30	36·7	44·3	14·4	3,337	95·4	37·0	1,430	303	...	0 4 8
Tuticorin	1883	16,281	365	275	640	636	95	188	91	4	...	14·9	29·5	14·3	374	58·8	...	548	108	345	0 8 1
	1884		375	295	670	663	116	298	74	7	4	17·4	44·9	11·1	492	73·6	57·1	632	133	383	0 6 5
Vellore	1883	37,491	686	727	1,413	1,413	534	578	260	...	...	37·7	40·9	18·4	1,372	97·0	...	1,302	182	586	0 5 6
	1884		738	769	1,507	1,437	531	538	233	70	35	36·9	37·4	16·2	1,337	90·4	50·0	1,132	136	466	0 5 1
Vizagapatam ...	1883	30,291	641	424	1,065	826	148	350	305	239	191	17·9	42·3	36·9	994	97·2	79·9	1,005	219	638	0 4 5
	1884		948	839	1,787	1,221	225	515	430	566	409	18·4	42·1	35·2	1,579	95·8	72·2	1,038	185	628	0 3 8
Vizianagram ...	1883	22,577	373	309	682	661	91	220	348	21	20	13·7	33·2	51·8	674	98·9	95·2	690	121	478	0 5 1
	1884		405	334	739	708	128	269	303	31	26	18·0	37·9	42·7	726	98·8	83·8	667	117	422	0 4 10
Wálajápet	1883	10,387	161	106	267	267	74	129	54	..	...	27·7	48·3	20·2	257	96·2	...	415	101	240	0 7 8
	1884		88	83	171	171	17	106	37	...	...	9·9	61·9	21·6	160	93·5	...	374	56	301	0 11 0
Total ...	1883	1,733,350	56,643	39,631	96,274	91,665	25,493	37,576	21,383	4,609	2,455	27·8	40·9	23·3	86,907	92·1	53·2	54,238	12,471	16,274	0 3 5
	1884		68,753	44,059	112,812	97,765	25,715	40,379	22,187	15,047	8,115	26·3	41·3	22·6	96,396	90·2	53·9	55,152	13,939	15,498	0 4 0

41. The total number of operations was 112,812 in 1884 against 96,274 in 1883, showing an increase of 16,538 cases for the year under report. In Madras town there was a large increase (15,953) in the number of cases, and this was due chiefly to the great number of people who were re-vaccinated when small-pox was prevalent. The largest number of cases (3,544) was done (excluding Madras) in Trichinopoly and the smallest (171) in Wálajápet.

42. In both primary and re-vaccinations there was an increase in the number of cases in 1884 when compared with those for 1883. Excluding Madras, the largest number of primary cases (3,463) was done in Trichinopoly and the fewest (171) in Wálajápet. Vizagapatam returned the highest number of re-vaccinations.

43. The percentage of success is lower in primary vaccinations in 1884, viz., 90·2 per cent. against 92·1 in 1883, but in re-vaccinations the success is higher, viz., 53·9 against 53·2. The highest percentage of success in primary operations (98·9) was obtained in Mangalore and the lowest (69·4) in Coonoor.

44. As in 1883, the largest number of operations was done in children over one year and under six years of age. There was an increase under all ages in the work for 1884 when compared with that for 1883. More males were vaccinated than females. In 5 municipalities, viz., Adóni, Anantapur, Chidambaram, Mannárgudi, and Vellore, there were more females vaccinated than males. In Pálghat there was a great increase in the number of males vaccinated when compared with the number of females. The average cost of each successful case was 4 annas against 3 annas 5 pies, or 7 pies more than that for 1883. The cost per case varied, ranging from 2 annas 1 pie in Mangalore to Rs. 1-1-4 in Coonoor. The high rate per case in Coonoor was due to very few cases having been done in 1884, viz., 694 in 1883 against 248 in 1884. The average number of operations per man was 1,084 against 1,003 in 1883, showing an increase of 81 cases per man for the year under report. The largest number of operations per vaccinator was done at Rajahmundry and the fewest at Wálajápet.

Work of Government vaccinators.

45. There are 16 Government vaccinators paid from Provincial funds who work in the Gudem hills, Ganjam, Jeypore, and Bhadráchalam hill tracts. There were no changes in the staff in 1884. The total number of operations performed in 1884 was 12,401 against 16,891 in 1883, showing a decrease of 4,490 cases for the year under report. The decrease was principally in the Ganjam hill tracts, and due to small-pox having been very prevalent in 1883 and not in 1884. In outbreaks of small-pox, the people in the hill tracts willingly, even eagerly come forward to be vaccinated. In primary vaccinations there was a decrease in the number of operations, but in re-vaccinations an increase, when compared with the work done in 1883. The percentage of success was higher in 1884 than in 1883, viz., 97·1 against 96·6. In primary operations the percentage of success in 1884 was 97·1 against 96·6 in 1883 In re-vaccination the percentage of success was 86·6 in 1884 against 100·0 in 1883. In primary operations the highest percentage of success (99·2) was obtained in Gudem hills and the lowest (95·8) in Bhadráchalam hill tracts. Of the successful operations, 701 were children under one year of age, 3,867 children above one and under six years, and 7,465 persons above six years of age. The total cost was Rs. 5,618-4-11 against Rs. 5,762-3-7 in 1883, showing a decrease of Rs. 143-14-8 for the year under report. The average cost of each successful case was 7 annas 6 pies or 1 anna 10 pies more than in 1883. The cost per case varied, ranging from 4 annas 6 pies in Ganjam hill tracts to 13 annas 7 pies in Gudem hills. The average number of cases done by each vaccinator was 775. The largest average number of cases done by each vaccinator was 1,270 in the Ganjam hill tracts and the smallest (407) in Gudem hills.

Native States (Zemindaries).

46. There has been no change in the staff of Native States' vaccinators. The following table shows the work of the Native States' vaccinators :—

Table showing the Work of the Native States Vaccinators.

Native States (Zemindaries).		Number vaccinated.			Primary vaccination.				Re-vaccination.		Percentage of success.		Cost of each successful case.	Average number of operations per man.
						Successful.								
		Males.	Females.	Total.	Total.	Under 1 year.	Over 1 and under 6 years.	Above 6 years.	Total.	Successful.	Primary vaccination.	Re-vaccination.	A. P.	
Arní ...	1883	364	311	675	675	61	391	141	...	...	87·8	...	3 3	675
	1884	406	370	776	776	57	477	130	...	...	85·5	...	2 11	776
Jeypore ...	1883	2,428	1,649	4,077	4,076	192	1,490	2,161	1	1	94·2	100·0	4 0	510
	1884	2,085	1,645	3,730	3,730	202	1,642	1,783	...	...	97·2	...	4 3	466
Total ...	1883	2,792	1,960	4,752	4,751	253	1,881	2,302	1	1	93·3	100·0	3 11	528
	1884	2,491	2,015	4,506	4,506	259	2,119	1,913	...	...	95·2	...	4 0	501

47. In 1884 there were 4,506 cases done against 4,752 in 1883, showing a decrease of 246 operations for the year under report. This decrease was due to some of the vaccinators in Jeypore having been sick. and unable to work throughout the year. No re-vaccinations were done in 1884. The percentage of success is higher in 1884, viz., 95·2 against 93·3 in 1883. It is higher in the Jeypore estates than in Arní. There were more children vaccinated in 1884 under one year of age than in 1883, and also more above one and under six years. More males were vaccinated than females. The average cost of each successful case was 4 annas, or 1 pie more than in 1883. The average number vaccinated by each vaccinator was 501.

Work of dispensary officers.

48. There were 279 dispensaries, or 12 more than in the preceding year, from which returns of vaccination were received. The returns for 9 dispensaries were *nil*. The following table is an abtract of Statement No. III, which shows the particulars of work done in each dispensary :—

Districts.		Number of dispensaries.	Number vaccinated.			Number vaccinated successfully.			Percentage of success.			Average number vaccinated at each dispensary.	Success of primary vaccination.		
			Primary vaccination.	Re-vaccination.	Total.	Primary vaccination.	Re-vaccination.	Total.	Primary vaccination.	Re-vaccination.	Total.		Under 1 year.	Above 1 and under 6 years.	Above 6 years.
Anantapur ...	1883	6	435	...	435	388	...	388	89·1	...	89·1	73	81	174	133
	1884	8	783	14	797	677	8	685	86·4	57·1	85·9	100	216	372	89
Bellary ...	1883	9	149	14	163	132	9	141	88·5	64·2	86·5	18	60	58	14
	1884	12	544	30	574	473	17	490	86·9	56·6	85·3	48	210	199	64
Chingleput ...	1883	14	1,457	219	1,676	1,009	58	1,067	69·2	26·4	63·6	120	183	612	214
	1884	14	1,711	272	1,983	1,201	77	1,278	70·1	28·3	64·4	142	145	771	285
Coimbatore ...	1883	13	861	6	867	791	5	796	91·8	83·3	91·8	67	265	445	81
	1884	13	911	4	915	814	3	817	89·3	75·0	89·2	70	323	390	101
Cuddapah ...	1883	10	336	5	341	253	1	254	75·2	20·0	74·4	34	26	114	113
	1884	10	907	27	934	646	9	655	71·2	33·3	70·1	93	150	296	200
Ganjam ...	1883	10	675	9	684	570	3	573	84·4	33·3	83·7	68	42	357	171
	1884	10	1,174	7	1,181	1,010	2	1,012	86·0	28·5	85·6	118	135	673	202
Godávari ...	1883	15	406	2	408	331	2	333	81·5	100·0	81·6	27	32	164	135
	1884	15	3,216	98	3,314	2,674	44	2,718	83·1	44·8	82·0	221	179	1,533	962
Kistna ...	1883	16	731	22	753	575	14	589	78·6	63·6	78·2	47	42	374	159
	1884	16	1,012	37	1,049	764	11	775	75·4	29·7	73·8	66	77	431	256
Kurnool ...	1883	8	143	1	144	99	1	100	69·2	100·0	69·4	18	17	47	35
	1884	8	502	7	509	353	5	358	70·3	71·4	70·3	64	73	197	83
Madras Town...	1883	4	9	21	30	8	8	16	88·8	38·0	53·3	8	3	3	2
	1884	4	15	51	66	14	47	61	93·3	92·1	92·4	17	7	4	3
Madura ...	1883	15	406	16	422	361	10	371	88·9	62·5	87·9	28	99	229	33
	1884	19	446	40	486	354	25	379	79·3	62·5	77·9	26	97	198	59
Malabar ...	1883	12	968	51	1,019	605	11	616	62·5	21·5	60·4	85	45	235	325
	1884	11	680	75	755	392	19	411	57·6	25·3	54·4	69	17	181	194
Nellore ...	1883	12	837	24	861	699	7	706	83·5	29·1	81·9	72	77	363	259
	1884	11	753	4	757	599	3	602	79·5	75·0	79·5	69	43	360	196
Nílgiris ...	1883	4	97	2	99	76	1	77	78·3	50·0	77·7	25	14	46	16
	1884	5	133	52	185	99	43	142	74·4	82·6	76·7	37	39	37	23

41. The total number of operations was 112,812 in 1884 against 96,274 in 1883, showing an increase of 16,538 cases for the year under report. In Madras town there was a large increase (15,953) in the number of cases, and this was due chiefly to the great number of people who were re-vaccinated when small-pox was prevalent. The largest number of cases (3,544) was done (excluding Madras) in Trichinopoly and the smallest (171) in Wálajápet.

42. In both primary and re-vaccinations there was an increase in the number of cases in 1884 when compared with those for 1883. Excluding Madras, the largest number of primary cases (3,463) was done in Trichinopoly and the fewest (171) in Wálajápet. Vizagapatam returned the highest number of re-vaccinations.

43. The percentage of success is lower in primary vaccinations in 1884, viz., 90·2 per cent. against 92·1 in 1883, but in re-vaccinations the success is higher, viz., 53·9 against 53·2. The highest percentage of success in primary operations (98·9) was obtained in Mangalore and the lowest (69·4) in Coonoor.

44. As in 1883, the largest number of operations was done in children over one year and under six years of age. There was an increase under all ages in the work for 1884 when compared with that for 1883. More males were vaccinated than females. In 5 municipalities, viz., Adóni, Anantapur, Chidambaram, Mannárgudi, and Vellore, there were more females vaccinated than males. In Pálghat there was a great increase in the number of males vaccinated when compared with the number of females. The average cost of each successful case was 4 annas against 3 annas 5 pies, or 7 pies more than that for 1883. The cost per case varied, ranging from 2 annas 1 pie in Mangalore to Rs. 1-1-4 in Coonoor. The high rate per case in Coonoor was due to very few cases having been done in 1884, viz., 694 in 1883 against 248 in 1884. The average number of operations per man was 1,084 against 1,003 in 1883, showing an increase of 81 cases per man for the year under report. The largest number of operations per vaccinator was done at Rajahmundry and the fewest at Wálajápet.

Work of Government vaccinators.

45. There are 16 Government vaccinators paid from Provincial funds who work in the Gudem hills, Ganjam, Jeypore, and Bhadráchalam hill tracts. There were no changes in the staff in 1884. The total number of operations performed in 1884 was 12,401 against 16,891 in 1883, showing a decrease of 4,490 cases for the year under report. The decrease was principally in the Ganjam hill tracts, and due to small-pox having been very prevalent in 1883 and not in 1884. In outbreaks of small-pox, the people in the hill tracts willingly, even eagerly come forward to be vaccinated. In primary vaccinations there was a decrease in the number of operations, but in re-vaccinations an increase, when compared with the work done in 1883. The percentage of success was higher in 1884 than in 1883, viz., 97·1 against 96·6. In primary operations the percentage of success in 1884 was 97·1 against 96·6 in 1883 In re-vaccination the percentage of success was 86·6 in 1884 against 100·0 in 1883. In primary operations the highest percentage of success (99·2) was obtained in Gudem hills and the lowest (95·8) in Bhadráchalam hill tracts. Of the successful operations, 701 were children under one year of age, 3,867 children above one and under six years, and 7,465 persons above six years of age. The total cost was Rs. 5,618-4-11 against Rs. 5,762-3-7 in 1883, showing a decrease of Rs. 143-14-8 for the year under report. The average cost of each successful case was 7 annas 6 pies or 1 anna 10 pies more than in 1883. The cost per case varied, ranging from 4 annas 6 pies in Ganjam hill tracts to 13 annas 7 pies in Gudem hills. The average number of cases done by each vaccinator was 775. The largest average number of cases done by each vaccinator was 1,270 in the Ganjam hill tracts and the smallest (407) in Gudem hills.

Native States (Zemindaries).

46. There has been no change in the staff of Native States' vaccinators. The following table shows the work of the Native States' vaccinators :—

Table showing the Work of the Native States Vaccinators.

Native States (Zemindaries).		Number vaccinated.			Primary vaccination.				Re-vaccination.		Percentage of success.		Cost of each successful case.	Average number of operations per man.
						Successful.								
		Males.	Females.	Total.	Total.	Under 1 year.	Over 1 and under 6 years.	Above 6 years.	Total.	Successful.	Primary vaccination.	Re-vaccination.	A. P.	
Arní ...	1883	364	311	675	675	61	391	141	...	...	87·8	...	3 3	675
	1884	406	370	776	776	57	477	130	...	...	85·5	...	2 11	776
Jeypore ...	1883	2,428	1,649	4,077	4,076	192	1,490	2,161	1	1	94·2	100·0	4 0	510
	1884	2,085	1,645	3,730	3,730	202	1,642	1,783	...	...	97·2	...	4 3	466
Total ...	1883	2,792	1,960	4,752	4,751	253	1,881	2,302	1	1	93·3	100·0	3 11	528
	1884	2,491	2,015	4,506	4,505	259	2,119	1,913	...	...	95·2	...	4 0	501

47. In 1884 there were 4,506 cases done against 4,752 in 1883, showing a decrease of 246 operations for the year under report. This decrease was due to some of the vaccinators in Jeypore having been sick, and unable to work throughout the year. No re-vaccinations were done in 1884. The percentage of success is higher in 1884, viz., 95·2 against 93·3 in 1883. It is higher in the Jeypore estates than in Arní. There were more children vaccinated in 1884 under one year of age than in 1883, and also more above one and under six years. More males were vaccinated than females. The average cost of each successful case was 4 annas, or 1 pie more than in 1883. The average number vaccinated by each vaccinator was 501.

Work of dispensary officers.

48. There were 279 dispensaries, or 12 more than in the preceding year, from which returns of vaccination were received. The returns for 9 dispensaries were *nil*. The following table is an abtract of Statement No. III, which shows the particulars of work done in each dispensary :—

Districts.		Number of dispensaries.	Number vaccinated.			Number vaccinated successfully.			Percentage of success.			Average number vaccinated at each dispensary.	Success of primary vaccination.		
			Primary vaccination.	Re-vaccination.	Total.	Primary vaccination.	Re-vaccination.	Total.	Primary vaccination.	Re-vaccination.	Total.		Under 1 year.	Above 1 and under 6 years.	Above 6 years.
Anantapur ...	1883	6	435	...	435	388	...	388	89·1	...	89·1	73	81	174	133
	1884	8	783	14	797	677	8	685	86·4	57·1	85·9	100	216	372	89
Bellary ...	1883	9	149	14	163	132	9	141	88·5	64·2	86·5	18	60	58	14
	1884	12	544	30	574	473	17	490	86·9	56·6	85·3	48	210	199	64
Chingleput ...	1883	14	1,457	219	1,676	1,009	58	1,067	69·2	26·4	63·6	120	183	612	214
	1884	14	1,711	272	1,983	1,201	77	1,278	70·1	28·3	64·4	142	145	771	285
Coimbatore ...	1883	13	861	6	867	791	5	796	91·8	83·3	91·8	67	265	445	81
	1884	13	911	4	915	814	3	817	89·3	75·0	89·2	70	323	390	101
Cuddapah ...	1883	10	336	5	341	253	1	254	75·2	20·0	74·4	34	26	114	113
	1884	10	907	27	934	646	9	655	71·2	33·3	70·1	93	150	296	200
Ganjam ...	1883	10	675	9	684	570	3	573	84·4	33·3	83·7	68	42	357	171
	1884	10	1,174	7	1,181	1,010	2	1,012	86·0	28·5	85·6	118	135	673	202
Godávari ...	1883	15	406	2	408	331	2	333	81·5	100·0	81·6	27	32	164	135
	1884	15	3,216	98	3,314	2,674	44	2,718	83·1	44·8	82·0	221	179	1,533	962
Kistna ...	1883	16	731	22	753	575	14	589	78·6	63·6	78·2	47	42	374	159
	1884	16	1,012	37	1,049	764	11	775	75·4	29·7	73·8	66	77	431	256
Kurnool ...	1883	8	143	1	144	99	1	100	69·2	100·0	69·4	18	17	47	35
	1884	8	502	7	509	353	5	358	70·3	71·4	70·3	64	73	197	83
Madras Town...	1883	4	9	21	30	8	8	16	88·8	38·0	53·3	8	3	3	2
	1884	4	15	51	66	14	47	61	93·3	92·1	92·4	17	7	4	3
Madura ...	1883	15	406	16	422	361	10	371	88·9	62·5	87·9	28	99	229	33
	1884	19	446	40	486	354	25	379	79·3	62·5	77·9	26	97	198	59
Malabar ...	1883	12	968	51	1,019	605	11	616	62·5	21·5	60·4	85	45	235	325
	1884	11	680	75	755	392	19	411	57·6	25·3	54·4	69	17	181	194
Nellore ...	1883	12	837	24	861	699	7	706	83·5	29·1	81·9	72	77	363	259
	1884	11	753	4	757	599	3	602	79·5	75·0	79·5	69	43	360	196
Nílgiris ...	1883	4	97	2	99	76	1	77	78·3	50·0	77·7	25	14	46	16
	1884	5	133	52	185	99	43	142	74·4	82·6	76·7	37	39	37	23

Districts.		Number of dispensaries.	Number vaccinated.			Number vaccinated successfully.			Percentage of success.			Average number vaccinated at each dispensary.	Success of primary vaccination.		
			Primary vaccination.	Re-vaccination.	Total.	Primary vaccination.	Re-vaccination.	Total.	Primary vaccination.	Re-vaccination.	Total.		Under 1 year.	Above 1 and under 6 years.	Above 6 years.
North Arcot ...	1883	12	402	40	442	352	19	371	87·5	47·5	83·9	37	46	198	108
	1884	14	929	26	955	811	19	830	87·2	73·0	86·9	68	131	504	176
Salem	1883	12	414	11	425	354	4	358	85·5	36·3	84·2	35	88	211	55
	1884	12	804	19	823	597	9	606	74·2	47·3	73·6	69	164	331	102
South Arcot ...	1883	10	501	3	504	424	1	425	84·6	33·3	84·3	50	58	283	83
	1884	11	500	19	519	405	10	415	81·0	52·6	79·9	47	85	234	86
South Canara ...	1883	8	330	19	349	273	9	282	82·7	47·3	80·8	44	7	126	140
	1884	8	386	35	421	270	18	288	69·9	51·4	68·4	53	12	78	180
Tanjore ...	1883	38	1,978	142	2,120	1,619	84	1,703	81·8	59·1	80·3	56	145	1,038	436
	1884	37	3,609	127	3,736	2,964	66	3,030	82·1	51·9	81·1	101	260	1,971	733
Tinnevelly ...	1883	20	702	17	719	586	9	595	83·4	52·9	82·7	36	61	265	260
	1884	21	1,411	34	1,445	1,053	19	1,072	74·6	55·8	74·1	69	84	636	433
Trichinopoly ...	1883	6	163	9	172	159	4	163	97·5	44·4	94·7	29	7	78	74
	1884	7	274	6	280	234	1	235	85·4	16·6	83·9	40	19	152	63
Vizagapatam ...	1883	13	579	18	597	521	16	537	89·9	88·8	89·9	46	50	340	131
	1884	13	861	24	885	797	19	816	92·5	79·1	92·2	68	89	454	254
Total ...	1883	267	12,579	651	13,230	10,185	276	10,461	80·9	42·3	79·0	50	1,448	5,760	2,977
	1884	279	21,561	1,008	22,569	17,201	474	17,675	79·7	47·0	78·3	81	2,555	9,902	4,744

49. There were 22,569 operations performed in 1884 against 13,230 in 1883, showing an increase of 9,339 cases for the year under report. There was an increase in all districts with the exception of Nellore and Malabar. This increase was due to the Surgeon-General having issued a circular on the subject, and also to the Presidents of some Local Fund Board districts having ruled that in places where there are dispensaries vaccination is to be carried on entirely by the medical officers in charge of those dispensaries.

50. The largest number of operations was done (excluding Madras Town and Nílgiris) in the Tanjore district and the smallest in South Canara. The highest number of operations (667) was done at a dispensary in Peddapuram and the fewest (1) at Triplicane. The percentage of success was 78·3, being a little below that (79·0) for 1883. The highest percentage of success was obtained in Vizagapatam district and the lowest in Malabar district. The average number of operations performed at each dispensary was 81 against 50 in 1883. The primary successful operations were greater under all ages in 1884 than in 1883.

51. The number of operations performed by the medical subordinates attached to jails, police hospitals, revenue and other departments was 14,045 against 14,210, showing a decrease of 165 for the year under report.

Work of cantonment vaccinators.

52. There are 4 cantonment vaccinators, 2 work in Bangalore and 2 in Secunderabad. The total number of operations performed by these men was 4,158 against 4,551 in 1883, showing a decrease of 393 cases for the year under report. The cantonment of Secunderabad returned the largest number of operations, viz., 2,393. The percentage of success was 87·9, being lower than that (89·4) in 1883. There was an increase in the number of operations performed in children under one year of age as well as in children over one and under six years of age, but a decrease in the number vaccinated above six years of age. The numbers under each period were respectively 2,060, 517, and 582 against 1,971, 504, and 986 during the preceding year. The total cost was Rs. 711-2-0 against Rs. 696-8-0 in 1883. The average cost of each successful case was 3 annas 1 pie, or 4 pies more than in 1883. Each vaccinator on an average operated on 1,039 persons.

Work performed by the army.

53. The following table shows the work of vaccination in the army :—

—		Primary vaccination.				Re-vaccination.		Percentage of success.		
		Total.	Successful.			Total.	Successful.	Primary vaccination.	Re-vaccination.	Total.
			Under 1 year.	Over 1 and under 6 years.	Above 6 years.					
European army	1883 ...	1,940	524	11	623	9	2	59·6	22·2	59·5
	1884 ...	2,640	599	71	1,067	639	573	65·7	89·6	70·4
Native army	1883 ...	4,121	1,136	550	1,526	2,397	1,544	77·9	64·4	72·9
	1884 ...	4,415	1,555	885	1,215	3,472	2,128	82·7	61·2	73·3
Total ...	1883 ...	6,061	1,660	561	2,149	2,406	1,546	72·1	64·2	69·8
	1884 ...	7,055	2,154	956	2,282	4,111	2,701	76·4	65·7	72·4

54. There was an increase in both primary and re-vaccinations in 1884 when compared with the work done in 1883. The percentages of success were higher in 1884 in both primary and re-vaccinations. There was a large increase in the number of re-vaccinations in 1884 in the European army when compared with 1883. In 1884 there were 639 re-vaccinations in the European army, but in 1883 only 9.

55. The following table shows the inspection work of the deputy inspectors of vaccination :—

Circles.	Number of inspecting officers.		Number of villages visited.		Total number of persons vaccinated.	Number of days spent on inspection duty.	Number of cases verified.		Proportion per cent. of inspection to total number vaccinated.	
	First-class deputy inspectors.	Second-class deputy inspectors.	First-class deputy inspectors.	Second-class deputy inspectors.			First-class deputy inspectors.	Second-class. deputy inspectors.	First-class deputy inspectors.	Second-class deputy inspectors.
Gooty	...	1	...	472	6,010	239	...	4,227	...	70·3
Penukonda	1	...	193	...	8,109	139	2,467	...	30·4	...
Bellary	1	...	340	...	11,846	238	5,178	...	43·7	...
Harpanahalli	...	1	...	437	7,246	263	...	4,374	...	60·3
Chingleput...	1	...	571	...	15,630	279	11,088	...	70·9	...
Saidápet	1	...	587	...	15,327	251	9,358	...	61·0	...
North Coimbatore ...	1	...	469	...	23,226	275	8,033	...	34·5	...
South Coimbatore ...	1	...	271	...	23,655	280	8,675	...	36·6	...
Cuddapah	1	...	333	...	3,508	174	3,035	...	86·5	...
Madanapalle	1	...	322	...	5,562	230	2,828	...	50·8	...
Sidhout	...	1	...	295	3,312	169	...	2,545	...	76·8
Chatrapur	1	...	238	...	11,873	148	5,305	...	44·6	...
Chicacole	1	...	241	...	9,804	168	6,967	...	71·0	...
Ganjam Hill Tracts ...	1	...	222	...	7,620	144	5,274	...	69·2	...
Ellore	1	...	235	...	12,963	237	5,908	...	45·5	...
Pittapur	...	1	...	134	6,258	101	...	3,686	...	58·9
Rajahmundry	1	...	305	...	12,432	284	8,090	...	65·0	...
Guntúr	1	...	363	...	13,806	174	10,242	...	74·1	...
Masulipatam	1	...	396	...	19,495	229	8,374	...	42·9	...
Vinukonda	...	1	...	264	6,848	189	...	8,975	...	...
Cumbum	1	...	180	...	7,337	143	4,675	...	63·7	...
Kurnool	1	...	250	...	5,293	178	4,297	...	81·1	...
Dindigul	1	...	506	...	19,416	255	10,601	...	54·5	...
Madura	...	1	...	305	13,586	177	...	4,758	...	35·0
Permagudi	1	...	238	...	28,076	176	8,878	...	31·6	...
North Malabar	...	1	...	233	12,099	216	...	5,092	...	42·0
South Malabar	1	...	145	...	21,102	140	3,182	...	15·0	...
Kávali	...	1	...	367	10,301	229	...	7,053	...	68·4
Nellore	1	...	544	...	10,756	237	8,239	...	76·5	...
Ongole	1	...	227	...	11,917	193	7,783	...	65·3	...
Chittoor	1	...	544	...	11,818	202	6,926	...	58·6	...
Kárvetnagar	...	1	...	413	6,404	172	...	5,137	...	80·2
Vellore	1	...	214	...	10,330	182	4,696	...	45·4	...

Circles.	Number of inspecting officers.		Number of villages visited.		Total number of persons vaccinated.	Number of days spent on inspection duty.	Number of cases verified.		Proportion per cent. of inspection to total number vaccinated.	
	First-class deputy inspectors.	Second-class deputy inspectors.	First-class deputy inspectors.	Second-class deputy inspectors.			First-class deputy inspectors.	Second-class deputy inspectors.	First-class deputy inspectors.	Second-class deputy inspectors.
Hosúr	...	1	...	458	10,756	178	...	4,790	...	44·5
Salem	1	...	445	...	14,459	190	11,793		81·5	...
Tirupatúr	...	1	...	341	8,454	215	...	5,900		69·7
Cuddalore	1	...	445	...	20,121	237	7,898		39·2	
Vriddháchalam ...	...	1	...	323	7,772	193	...	5,827	...	74·9
No. I, South Canara ...	1	...	285	...	26,515	229	12,565		47·3	
No. II, South Canara ...	...	1	...	188	9,892	220	...	5,695		57·5
Negapatam	1	...	380	...	17,863	170	10,574	...	59·1	...
Tanjore	1	...	390	...	26,048	201	10,854		41·6	...
Shermadevi	...	1	...	284	13,814	137	...	4,952		35·8
Tinnevelly	1	...	347	...	22,844	174	3,622	...	15·8	...
Trichinopoly	1	...	307	...	20,794	200	13,156	...	63·2	...
Jeypore Hill Tracts ...	1	...	343	...	6,360	267	3,762	...	59·1	...
Vizagapatam	1	...	546	...	22,352	249	16,769		75·0	
Vizianagram	...	1	...	371	15,772	266	...	9,770		61·9
Total ...	33	15	11,422	4,885	636,781	205	251,092	82,781	39·4	12·9

56. Of the 636,781 cases vaccinated, 333,873 or 52·1 per cent. were inspected by the deputy inspectors. The largest number of cases inspected (16,769) by a deputy inspector was in the Vizagapatam range and the fewest (2,467) in the Penukonda range. The proportion per cent. of inspected cases to total number vaccinated varied, ranging from 86·5 in the Cuddapah range to 15·0 in South Malabar. The largest number of villages visited was by the deputy inspector of the Saidápet circle and the fewest by the deputy inspector of Pittapur circle.

57. The conduct of the deputy inspectors, with a few exceptions, has been satisfactory on the whole, and there has been an improvement in their work in 1884. During the year the following changes took place: 2 deputy inspectors resigned, 1 deputy inspector was reduced to second class for unsatisfactory work, 4 second-class deputy inspectors were promoted to first class, and 2 deputy inspectors died.

58. Fines to the extent of Rs. 50 were recovered from deputy inspectors for unsatisfactory work.

59. I visited during the year the following vaccine circles, viz., Chatrapur, Chicacole, Vizianagram, Vizagapatam, North Coimbatore, Salem, Hosúr, Tirupatúr, Bellary, Harpanahalli, Gooty, Penukonda, Kurnool, Cumbum, Cuddapah, Tinnevelly, Shermadévi, Madura and Vriddháchalam.

Quality of lymph.

60. The quality of the lymph in use was on the whole satisfactory. In many districts it is very difficult to keep up a good supply of lymph owing to the unwillingness of parents to allow lymph to be extracted from the arms of their vaccinated children. It is a common thing for parents to hide their vaccinated children on the appearance of the vaccinator, from fear that lymph would be taken from their arms. In districts where this difficulty in obtaining good lymph to meet current requirements is experienced, animal vaccination should be started.

Animal vaccination.

61. Animal vaccination was carried on in Madras Town, Bangalore, Tanjore, Negapatam, Guntúr, Bellary, and Harpanahalli circles. The use of animal lymph in districts in which it has been introduced is popular and the results have been satisfactory. If animal vaccination was established in all the districts of the presidency, it would do away with the difficulties attending the consent of suitable vaccinifers and a good supply of lymph would always be available.

62. In Madras animal vaccination was begun in January 1884 and carried on throughout the year. 549 heifers were inoculated, on all of which the operations proved successful and 8 died. The total cost was Rs. 3,895-10-7, of which Rs. 546-4-1 was borne by the Government and the remainder by the municipality. The number of cases vaccinated from animal lymph was 16,151. Of these, 11,810 were successful or 73·1 per cent.

63. In the Guntúr circle, owing to the difficulty of obtaining suitable vaccinifers, animal vaccination was again introduced and carried on from May to December 1884. 46 calves were inoculated. The number of cases vaccinated from animal lymph was 863 with a percentage of 88·6 of success, excluding the unknown. The cost was Rs. 236-13-1, and of this sum Rs. 38-13-8 were recovered from the Guntúr municipality and Rs. 7 from the Guntúr jail. The deputy inspector states that animal vaccination is popular with the people and suggests that it be carried on throughout the year.

64. In the Tanjore district animal vaccination was carried on in both the Tanjore and Negapatam circles in 1884. In the Tanjore circle it was kept up from May till nearly the close of the year. 42 heifers were inoculated and the cost was Rs. 176-9-1. In the Negapatam circle animal vaccination was only carried on for four months. The total cost was Rs. 276-2-9. The deputy inspector of vaccination recommends that it be carried on throughout the year as it is popular with the people, and there was always a good supply of lymph available.

65. In the Bellary district animal vaccination was introduced this year as the difficulties in obtaining good vaccinifers were very great. In the Harpanahalli circle it was introduced in October, and up to 31st December there were 16 heifers inoculated. The number of cases vaccinated was 103 and the total cost Rs. 31-2-0. The heifers are kept at dispensaries and not taken by the deputy inspectors on tour. In the Bellary circle animal vaccination was established in September and carried on to 31st December.

Inoculation.

66. In some districts inoculation is still extensively practised and encouraged by the people. As there are many evils attending it, and as it also interferes greatly with the progress of vaccination, I am anxious that an Act be introduced prohibiting the practice of inoculation in places where there are satisfactory arrangements for vaccination.

Small-pox.

67. Small-pox prevailed throughout the presidency, but to the greatest extent in the Godávari and Kistna districts. In many districts in which it prevailed extra vaccinators were appointed to help the permanent staff, and the people were urged to bring their children to be vaccinated.

68. The Compulsory Vaccination Act (Act I of 1884) was brought into force in Madras Town on 23rd May 1884. Eight vaccine depôts were opened in different parts of the town and the people were informed by beat of drum of the enforcement of the law. The operations are performed at these depôts and a good supply of lymph is always available as animal vaccination is now carried on throughout the year. The results for the year are satisfactory and the law has worked well. It will be interesting to watch the effect this law will have on future epidemics of small-pox.

69. There is still in most parts of the presidency a feeling against vaccination, although not as strong as it was. In some parts a healthier view of vaccination is gaining ground, and people willingly come forward to be vaccinated, especially when small-pox prevails. The cause of vaccination has also progressed in places where the officials take personal interest in pushing it on. In one circle the tahsildars and deputy tahsildars have been made responsible for the quantity of work turned out. In many parts of the presidency it is very difficult to obtain suitable men as vaccinators, and nothing tends more to injure the cause of vaccination than incompetent and untrustworthy agency. Another obstruction frequently experienced in carrying on vaccination is the difficulty in obtaining vaccinifers, and to remedy this animal vaccination has been introduced in a few districts. If animal vaccination was established throughout the presidency it would greatly improve the state of vaccination.

JAS. ANDERSON LAING, Surgeon-Major,
Inspector of Vaccination and Deputy Sanitary Commissioner.

ABSTRACTS OF REPORTS OF THE DEPUTY INSPECTORS OF VACCINATION, 1884.

The following are abstracts from the reports of the deputy inspectors of vaccination :—

Gooty circle.

The Gooty circle extends over an area of 2,460 square miles and has a population of 296,470. The establishment consists of 1 second-class deputy inspector of vaccination, 3 first-class, 3 second-class, and 2 probationary vaccinators, and 1 peon. There were 6,010 cases vaccinated in 1884 against 7,448 in 1883. The successful cases were 5,288 or 87·9 per cent. The cost of each successful case was 5 annas 3 pies. The decrease in the number of cases vaccinated in 1884 is ascribed to fewer vaccinators being employed and to some vaccinators' posts remaining vacant for some time. Small-pox appeared slightly in the range for a few months and necessary steps were taken to check the disease. The number of infants vaccinated under one year of age is 2,650, of which 1,359 were males and 1,291 females. The deputy inspector suggests that vaccination be made compulsory in this range.

Penukonda circle.

This circle extends over an area of 2,634 square miles and has a population of 298,512. The establishment consists of 1 first-class deputy inspector, 2 first-class and 5 second-class vaccinators, 1 probationer, and 1 peon. During the year under report the total number of operations performed was 8,109, of which 7,778 proved successful, 227 unsuccessful, and 104 unknown. The percentage of success is 95·9. On comparison with the work of the previous year there has been a decrease of 67 operations, and this is mainly due to the sickness of the vaccinators. The number of children vaccinated under one year of age is 3,826, of which 1,918 were males and 1,908 females. The cost of each successful case is 4 annas 7 pies against 4 annas 11 pies in 1883. The deputy inspector states that the staff is insufficient.

Bellary circle.

The Bellary circle extends over an area of 3,707 square miles and has a population of 429,492. The establishment consists of 1 first-class deputy inspector, 5 first-class, 6 second-class, and 5 probationary vaccinators, and 1 peon. During the year under report 11,846 operations were performed, of which 11,188 proved successful, or 94·4 per cent., 376 unsuccessful, and 282 unknown. On comparison with the work of 1883 there is a decrease of 345 cases. This decrease is chiefly due to the absence of 3 vaccinators on leave during the working season and to the prevalence of fever among the people during the greater part of the year. The number of subjects vaccinated under one year of age is 6,903 (of which 8,449 were males and 3,459 females) against 6,633 for 1883. The cost of each successful case was 6 annas 2 pies.

Owing to the great difficulty there is in getting good lymph, animal vaccination was introduced in this range during the latter part of the year. All necessary precautions were taken in procuring healthy calves for inoculation.

Harpanahalli circle.

The Harpanahalli circle extends over an area of 2,004 square miles with a population of 220,882. The establishment consists of 1 second-class deputy inspector, 3 first-class, 4 second-class, and 2 probationary vaccinators, and 1 peon. There were 7,246 cases vaccinated in 1884, or 26 more than in 1883. The average number vaccinated by each vaccinator amounts to 805. The total number of cases vaccinated under one year of age is 4,287, comprising 2,119 males and 2,168 females, with a success of 96·5 per cent. The average cost of each successful case was 5 annas 10 pies. Animal vaccination has been successfully established in this range and a good supply of vaccine lymph is now always available. Calves are vaccinated during the deputy inspector's circuit in every Local Fund dispensary.

Chingleput circle.

The Chingleput circle extends over an area of 1,637 square miles and has a population of 488,659. The establishment consists of 1 first-class deputy inspector, 3 first-class and 6 second-class vaccinators, 1 probationer, and 1 peon. The total number of persons vaccinated during 1884 was 15,630 against 14,049 in 1883, showing an increase of 1,581 cases for the year under report. Of the total vaccinated, 14,732 were successful, or 94·2 per cent., 500 unsuccessful, and 398 unknown. The number vaccinated under one year of age was 1,328, and of these, 1,245 were successful. The cost of each successful case was 2 annas 8 pies.

Saidapet circle.

This circle extends over an area of 1,196 square miles with a population of 455,447. The staff consists of 1 first-class deputy inspector, 3 first-class and 6 second-class vaccinators, 1 probationer, and 1 peon. There were 15,327 cases vaccinated in 1884 against 13,994 in 1883, showing an increase of 1,333 cases for the year under report. Vaccination in the divisions of Tiruvallúr, Ootukota (Tiruvallúr taluk) and Poonamallee (Saidápet taluk) is gradually improving owing to the assistance rendered by the revenue officials, but it is still backward in the divisions of Sathiavadoo, Ponnéri, Pulicat, Puduvoil, Sembiam and Saidápet. The number of children operated on under one year of age was 1,642, comprising 801 males and 841 females. The cost of each successful case was 3 annas 3 pies.

North Coimbatore circle.

The North Coimbatore circle extends over an area of 4,346 square miles, with a population of 737,600. The staff consists of 1 first-class deputy inspector, 5 first-class, 5 second-class, and 3 probationary vaccinators, and 1 peon. The total number vaccinated during 1884 was 23,226 against 21,128 in 1883, showing an increase of 2,098 cases for the year under report. There were 22,526 cases successfully vaccinated in 1884 against 20,461 in 1883. The number vaccinated under one year of age was 5,985, of which 2,918 were males and 3,067 females. The cost of each successful case was 2 annas 6 pies, or 5 pies less than for 1883.

South Coimbatore circle.

This circle extends over an area of 3,478 square miles with a population of 862,054. The establishment consists of 1 first-class deputy inspector, 5 first-class, 11 second-class, and 2 probationary vaccinators, and 1 peon. The total number vaccinated during 1884 was 23,655, of which 23,220 were successful. On comparison with the number of cases done in 1883 there is an increase of 5,083, due to the assistance rendered by the tahsildars and deputy tahsildars. 8,688 infants under one year of age were vaccinated during the year under review. The cost of each successful case was 2 annas 5 pies, or 6 pies less than the previous year.

Cuddapah circle.

This circle extends over an area of 2,545 square miles and has a population of 406,699. The establishment consists of 1 first-class deputy inspector, 4 first-class, 3 second-class, and 3 probationary vaccinators, and 1 peon. The total number vaccinated during 1884 was 3,508. The percentage of successful cases was 89·2. The people of this range are very averse to vaccination, and when they allow their children to be vaccinated, they strongly object to the lymph being extracted from the vesicles. On hearing of the vaccinator's arrival at the village, they take their vaccinated children far away from their residence and conceal them among bushes. Small-pox was slightly prevalent in some parts of the range during the year, but immediate steps were taken to check the disease. The number of infants vaccinated under one year was 581 (males 284 and females 297). The cost of each successful case was 13 annas 9 pies.

Madanapalle circle.

The Madanapalle circle extends over an area of 3,837 square miles with a population of 419,470. The staff consists of 1 first-class deputy inspector, 4 first-class, 8 second-class, and 2 probationary vaccinators, and 1 peon. During the year under report 5,562 persons were vaccinated against 5,442 in 1883, showing an increase of 120 cases for 1884. Throughout the year there was small-pox in the circle, and the taluk most affected was Madanapalle. Every means was adopted to check the progress of the disease. Vaccinators were sent to the affected localities immediately on the appearance of the

disease. The number vaccinated under one year of age was 607 (males 308 and females 299). Each successful case cost 7 annas 10 pies.

Sidhout circle.

This circle was constituted on the 14th February 1884 by dividing the Cuddapah circle into two ranges, as it was found too large for one deputy inspector to efficiently carry on the work. It extends over an area of 2,344 square miles with a population of 275,887. The staff consists of 1 second-class deputy inspector, 3 first-class and 4 second-class vaccinators, and 1 peon. The total number vaccinated during the year under report was 3,312, of which 3,070 were successful. The number of subjects vaccinated under one year of age was 295. Of these, 143 were males and 152 females. The cost of each successful case was 10 annas 7 pies.

Chatrapur circle.

The Chatrapur circle extends over an area of 1,983 square miles and has a population of 906,219. The establishment consists of 1 first-class deputy inspector, 7 first-class, 11 second-class, and 2 probationary vaccinators, and 1 peon. The total number vaccinated during 1884 was 11,873 against 11,861 in 1883. The number of successful cases under one year of age was 603. The cost of the establishment was Rs. 3,926-13-1. The cost of each successful case was 5 annas 5 pies. The deputy inspector suggests an increase in the number of vaccinators and the introduction of animal lymph.

Chicacole circle.

The Chicacole circle extends over an area of 1,185 square miles and has a population of 557,128. The staff consists of 1 first-class deputy inspector, 2 first-class, 8 second-class, and 2 probationary vaccinators. In 1884 there were 9,804 cases vaccinated against 10,135 in 1883, showing a decrease of 331 cases for the year under report. This decrease was due to the incompleteness of the staff and to a minimum number not having been fixed for the vaccinators. The number of persons vaccinated under one year of age was 1,074, of which 521 were males and 553 females. The cost of each successful case was 4 annas 5 pies.

Ganjam hill tracts.

These hill tracts extend over an area of 5,205 square miles with a population of 246,303. The establishment consists of 1 first-class deputy inspector, 6 second-class vaccinators, and 1 peon. The total number of persons vaccinated in 1884 was 7,620, of which 7,389 were successful. On comparison with the work of 1883 there is found a decrease of 3,903 cases, chiefly due to the non-prevalence of small-pox during the year. 397 subjects under one year of age were vaccinated, of which 355 were successful. The cost of each successful case was 4 annas 6 pies, or 1 anna 7 pies more than in 1883.

Ellore circle.

The Ellore circle extends over an area of 2,519 square miles, and has a population of 580,485. The establishment consists of 1 first-class deputy inspector, 5 first-class, 14 second-class, and 2 probationary vaccinators, and 1 peon. The total number vaccinated during 1884 was 12,963, with a percentage of 95·5 of success. On comparison with the number vaccinated during the preceding year 1883, there is an increase of 5,458 cases in 1884, due to the prevalence of small-pox and to 8 additional vaccinators having been employed. Out of 12,963 cases vaccinated, 12,391 proved successful. The average cost of each successful case was 4 annas 7 pies.

Pittapur circle.

This circle was only made in 1884. It extends over an area of 1,257 square miles and has a population of 331,238. The staff consists of 1 second-class deputy inspector, 3 first-class and 5 second-class vaccinators, 1 probationer, and 1 peon. The total number of cases vaccinated during the year under report was 6,258, comprising 3,520 males and 2,738 females. The successful cases numbered 5,457 or 87·2 per cent. The number of cases vaccinated under one year of age was 201, of which 109 were males and 92 females. The cost of each successful case was 5 annas 6 pies. The deputy inspector states that the staff is insufficient.

Rajahmundry circle.

This circle extends over an area of 2,723 square miles and has a population of 790,387. The staff consists of 1 first-class deputy inspector, 4 first-class, 5 second-class, and 2 probationary vaccinators, 2 Government first-class vaccinators, and 1 peon. The total number of cases vaccinated during 1884 was 12,432; of these 11,096 cases were vaccinated by the Local Fund vaccinators and 1,336 by the two Government vaccinators employed in the Bhadráchalam hill tracts. The successful operations numbered 11,498 or 92·4 per cent. The number of successful cases vaccinated under one year of age was 791.

Guntur circle.

The Guntúr circle extends over an area of 2,524 square miles and has a population of 562,803. The establishment consists of 1 first-class deputy inspector, 4 first-class, 6 second-class, and 2 probationary vaccinators, and 1 peon. At the end of March 1884 the Guntúr circle was divided into two vaccine circles and an additional second-class deputy inspector of vaccination was appointed to the Deputy Collector's division, comprising the taluks of Vinukonda, Palnád and Narsaraopet. The taluk of Répalle, which belonged to the Sub-Collector's division, was added to the Guntúr range. This range consists of four taluks, viz., Guntúr, Bápatla, Sattenapalle and Répalle. The total number of persons vaccinated during the year in those four taluks was 13,806. Of the total, there were 7,488 males and 6,318 females. The percentage of success, excluding the unknown cases, is 82·1. The results of 1,264 cases vaccinated are reported as absent. The work turned out in 1884 is far greater than any of the previous years, thus exceeding that of 1883 by 6,049 cases. The increase in the number of operations is mainly attributed to the continued prevalence of small-pox for the past two years, and to the employment of 4 additional vaccinators for ten months in the year. The demand for vaccination was also great and the vaccine staff was able to meet the wants of the people by introducing animal vaccination into the affected villages. Animal vaccination was started in the month of May 1884 as the lymph used by the vaccinators was found to be insufficient. Calves were hired from villages at Rs. 2 each, and they were weekly inoculated so as to preserve lymph and renew the stock in the hands of vaccinators for operation. Vaccination from calf lymph was carried on in the taluks of Guntúr, Krósúr and Bápatla, and the total number thus vaccinated was 863, with a percentage of 88·6 of success, excluding the unknown results. The largest number of cases was done among children over one and under six years of age, viz., 6,936 operations. Infantile vaccination is very backward; only 1,205 operations were performed during the year, showing an increase of 70 cases over that of 1883. The average cost of each successful case is 4 annas 5 pies, and it is less than the cost of 1883 by 1 anna 4 pies.

Masulipatam circle.

The Masulipatam circle extends over an area of 3,495 square miles with a population of 609,408. The staff consists of 1 first-class deputy inspector, 6 first-class, 6 second-class, and 4 probationary vaccinators, and 1 peon. There were 19,495 cases vaccinated in 1884 against 12,342 in 1883, showing an increase of 7,153 cases for the year under report. This increase was due to small-pox, which prevailed in 1884, and also to employment of 5 additional temporary vaccinators. Of the 19,495 cases vaccinated, 16,461 were successful, or 84·4 per cent. There were 1,114 infants successfully vaccinated under one year of age. The cost of each successful case was 3 annas 11 pies.

Vinukonda circle.

The Vinukonda circle extends over an area of 2,435 square miles and has a population of 321,567. The staff consists of 1 second-class deputy inspector, 3 first-class and 4 second-class vaccinators, 1 probationer, and 1 peon. The total number of persons vaccinated in this range since January 1884 was 6,848, of which 3,654 were males and 3,194 females, with a percentage of success of 89·1; and the results in 361 cases were unknown. Vaccination in this range is in a very backward condition, partly owing to the ignorance and prejudices of the people, and partly to the want of interest evinced by the village and revenue officials of the taluks. Great difficulty is experienced in this range in keeping up a supply of good vaccine virus, as the people decline to allow lymph to be taken from the arms of their vaccinated children, and the deputy inspector suggests that animal vaccination be started. The vaccinations in infants under one year of age were 739, of which 378 were males and 361 females. The cost of each successful case was 4 annas 11 pies.

Cumbum circle.

This circle was newly created in 1884. It extends over an area of 4,100 square miles and has a population of 323,837. The staff consists of 1 first-class deputy inspector, 3 first-class and

4 second-class vaccinators, 1 probationer, and 1 peon. There were 7,337 cases vaccinated in 1884; of these, 4,034 were males and 3,303 females. Of the total vaccinated 6,809 or 92·8 per cent. were successful. The number vaccinated under one year of age is 1,036, of which 958 proved successful. The average cost of each successful case was 4 annas 2 pies. During the year small-pox prevailed, and immediate measures were adopted to vaccinate the unprotected.

Kurnool circle.

This circle extends over an area of 3,428 square miles and has a population of 334,385. The staff consists of 1 first-class deputy inspector, 5 first-class, 4 second-class, and 3 probationary vaccinators, and 1 peon. During 1884 the Kurnool vaccine circle was divided into two, viz., Cumbum and Kurnool. 2,993 males and 2,300 females (total 5,293) were vaccinated in the Kurnool range during the year. The people in this range are very averse to get their children vaccinated for fear of offending the goddess "Ammavaroo," and they will not allow lymph to be taken from the arms of their vaccinated children. The total number of infants vaccinated under one year of age is 1,857, of which 919 were males and 938 females. Of the total number 5,293 vaccinated, 4,732 or 89·4 were successful. The cost of each successful case was 8 annas 7 pies.

Dindigul circle.

The Dindigul circle extends over an area of 3,148 square miles and has a population of 694,239. The staff consists of 1 first-class deputy inspector, 6 first-class, 11 second-class, and 3 probationary vaccinators. From 1st April 1884 the Madura district was divided into three vaccine ranges instead of two as in 1883. The Dindigul range consists of three taluks, viz., Dindigul, Palni and Periyakulam. The total number vaccinated during the year under report was 19,416 (males 9,892 and females 9,524). Of these cases, 19,041 were successful, 186 unsuccessful, and 189 unknown. Compared with the numbers obtained in the preceding year there appears a decrease of 1,031 operations, due to the absence of a few vaccinators on leave, to the discontinuance of the grant of travelling batta to the vaccinators, and to cholera, which prevailed in the latter part of the year. Small-pox made its appearance in the early part of the year and vaccinators were immediately sent to the infected parts to vaccinate all the unprotected. The vaccinations in infants under one year of age numbered 7,484, of which 3,683 were males and 3,801 females. Much difficulty is experienced in carrying out arm-to-arm vaccination in this range as well as in the Dindigul municipality owing to the parents of the successfully vaccinated cases refusing to furnish lymph. In order to overcome this difficulty and to renew periodically the stock of lymph at the command of municipal and taluk vaccinators in this range, the deputy inspector suggests that a vaccine depôt in the head-quarters town (Dindigul) be opened, where animal vaccination might be established. The percentage of success was 98·06 and the cost of each successful case 3 annas 7 pies.

Madura circle.

The Madura circle extends over an area of 1,584 square miles and has a population of 501,438. The staff consists of 1 second-class deputy inspector, 5 first-class, 7 second-class, and 2 probationary vaccinators, and 1 peon. The total number of persons vaccinated in this range during the year 1884 was 13,586 (males 7,122 and females 6,464). Of these, 13,231 proved successful or 97·4 per cent. The cost of each successful case was 3 annas. Vaccination is backward in some parts of the range. Great difficulty is also experienced in procuring lymph for carrying on vaccination. Small-pox was prevalent in Madura and Melur taluks and steps were at once taken to have all the unprotected vaccinated. The number of infants successfully vaccinated under one year of age was 5,140.

Permagudi circle.

The Permagudi circle extends over an area of 3,663 square miles with a population of 885,014. The establishment consists of 1 first-class deputy inspector, 10 first-class, 15 second-class, and 2 probationary vaccinators, and 1 peon. The total number of cases vaccinated during the calendar year 1884 is 28,076; of these, 27,434 were successful. The average number vaccinated by each vaccinator for the year is 1,040. The total number of subjects vaccinated under one year of age is 6,759 (males 3,459 and females 3,300). The total cost of vaccination is Rs. 5,294-0-8 and the cost of each successful case was 3 annas 1 pie.

North Malabar circle.

This circle consists of four taluks with a population of 734,763 and an area of 2,639 square miles. The establishment consists of 1 second-class deputy inspector, 2 first-class, 5 second-class, and 3 probationary vaccinators, and 1 peon. The total number vaccinated during 1884 was 12,099 against 20,190 in 1883, showing a decrease of 8,091 cases for the year under report. This decrease is due to the non-employment of 9 temporary vaccinators who were employed during 1883. The number of infants vaccinated under one year of age was 169. The average cost of each successful case was 2 annas 10 pies.

South Malabar circle.

The South Malabar circle extends over an area of 3,095 square miles and has a population of 1,468,354. The establishment consists of 1 first-class deputy inspector, 7 first-class and 8 second-class vaccinators, 1 probationer, and 1 peon. There were 21,102 cases vaccinated in 1884 against 26,685 in 1883, showing a decrease of 5,583 for the year under report. The decrease is due to the non-employment of temporary vaccinators and to neglect of work of some of the Local Fund vaccinators. During the year 1883 there were 8 temporary vaccinators and in 1884 their services were dispensed with. Small-pox prevailed in all the taluks with the exception of Vayitri. There were 96 children vaccinated under one year of age. The average cost of each successful case was 3 annas.

Kavali circle.

This circle was newly opened in the beginning of 1884, and comprises the taluks of Atmakúr, Udayagiri, Kávali and Kandukúr. It extends over an area of 2,823 square miles, with a population of 373,748. The establishment consists of 1 second-class deputy inspector, 4 first-class and 5 second-class vaccinators, 1 probationer, and 1 peon. The number of cases vaccinated during the year is 10,301 (males 5,401 and females 4,900). There were 9,591 cases successful. Small-pox was prevalent in all the four taluks of the circle. 428 subjects under one year of age were vaccinated; of these, 227 were males and 201 females. The average cost of each successful case was 3 annas 10 pies.

Nellore circle.

The Nellore circle extends over an area of 2,900 square miles and has a population of 397,873. The establishment consists of 1 first-class deputy inspector, 7 first-class, 6 second-class, and 4 probationary vaccinators, and 1 peon. In 1884 the Nellore district was divided into three vaccine ranges. The total number of subjects vaccinated during 1884 was 10,756, and the percentage of success was 95·4. When compared with the work done in 1883 there is found a decrease of 1,563 cases for the year under report. Small-pox prevailed in almost all parts of the circle. The total number of infants vaccinated under one year of age was 833; of these, 410 were males and 423 females. The average cost of each successful case was 7 annas.

Ongole circle.

The Ongole circle extends over an area of 2,987 square miles and has a population of 411,910. The staff consists of 1 first-class deputy inspector, 2 first-class and 8 second-class vaccinators, 1 probationer, and 1 peon. This range now consists of two taluks and two zemindary divisions, *i.e.*, Ongole and Kanigiri, Podili and Darsi respectively. The total number vaccinated during 1884 was 11,917 against 14,396 in 1883, showing a decrease of 2,479 cases for the year under report. There were 862 children under one year of age successfully vaccinated. Vaccination is very backward in the taluk and division of Ongole and Addanki.

Chittoor circle.

The Chittoor circle extends over an area of 2,912 square miles and has a population of 674,485. The staff consists of 1 first-class deputy inspector, 6 first-class, 6 second-class, and 3 probationary vaccinators, and 1 peon. This range was divided into 2 vaccine ranges during 1884. The total number vaccinated during the year was 11,818 against 18,835 in 1883. The decrease is attributable to the prevalence of cholera and to the order of the Local Fund Board issued in the latter part of the year refusing extra remuneration to vaccinators for cases done above 100. The successful cases numbered 11,578 or 97·9 per cent. The cost of each successful case was 4 annas 9 pies. The number of infants vaccinated under one year of age was 3,044, of which 2,993 were successful.

Karvetnagar circle. This circle was newly created in 1884. It extends over an area of 2,365 square miles and has a population of 487,003. The staff consists of 1 second-class deputy inspector, 3 first-class and 3 second-class vaccinators, 1 probationer. The total number of cases vaccinated in this circle during the year 1884 amounted to 6,404. Of the total number vaccinated, 3,431 were males and 2,973 females. The successful cases numbered 6,162 or 96·2 per cent. The cost of each successful case was 4 annas 6 pies.

Vellore circle. This circle extends over an area of 1,974 square miles and has a population of 608,448. The establishment consists of 1 first-class deputy inspector, 5 first-class, 7 second-class, and 2 probationary vaccinators, 1 zemindary second-class vaccinator, and 1 peon. In 1884 there were 10,330 cases vaccinated against 9,176 in 1883, showing an increase of 1,154 cases for the year under report. Small-pox was prevalent in Arcot, Polúr and Wandiwash taluks, and the services of 3 temporary vaccinators were entertained. The total number of cases vaccinated under one year of age was 1,517. The average cost of each successful case was 5 annas 8 pies.

Hosur circle. The Hosúr circle extends over an area of 2,812 square miles and has a population of 388,525. The establishment consists of 1 second-class deputy inspector, 3 first-class, 6 second-class, and 3 probationary vaccinators, and 1 peon. The Hosúr circle consists of three taluks, viz., Hosúr, Krishnagiri and Dharmapuri. The total number of persons vaccinated during the year was 10,756, of which 10,613 proved successful, 138 unsuccessful, and 5 unknown. The total number vaccinated during the previous year was 9,843. On comparison with the total of the previous year there has been an increase of 913 operations. The number of operations under one year of age amounted to 4,465, of which 2,224 were males and 2,241 females. Infantile vaccination is still backward in this range, though there was a slight increase in the number vaccinated in 1884. Great difficulty is experienced in extracting lymph from the arms of the successfully vaccinated children. The cost of each successful case was 5 annas 6 pies.

Salem circle. This circle extends over an area of 2,551 square miles and has a population of 689,642. The staff consists of 1 first-class deputy inspector, 3 first-class, 8 second-class, and 2 probationary vaccinators, and 1 peon. The Salem district was divided this year into three vaccine ranges. The Salem range now consists of the three taluks of Salem, Namakal and Atúr. During the year under report the total number vaccinated was 14,459 against 7,388 in 1883, showing an increase of 7,071 cases for the year under report. Small-pox was prevalent in the taluks. The number of infants vaccinated under one year of age is 1,328 (males 673 and females 655). The average cost of each successful case was 3 annas 6 pies.

Tirupatur circle. The Tirupatúr circle extends over an area of 2,287 square miles and has a population of 470,761. The establishment consists of 1 second-class deputy inspector, 3 first-class, 6 second-class, and 2 probationary vaccinators, and 1 peon. This range comprises three taluks, viz., Tirupatúr, Uttankarai and Tiruchengód. The total number vaccinated during the year under report was 8,454; of these, 7,877 were successful, 466 unsuccessful, and 111 unknown. Small-pox prevailed in some parts of the circle and precautionary measures were adopted to check its progress.

Cuddalore circle. This circle extends over an area of 3,295 square miles and has a population of 1,122,846. The establishment consists of 1 first-class deputy inspector, 5 first-class and 10 second-class vaccinators, and 1 peon. The total number of cases vaccinated during 1884 was 20,121, with a percentage of 91·86 of success. On comparing the work done in 1883 and 1884 there is an increase of 3,258 cases for the year under report. The number of cases vaccinated under one year of age was 3,453—1,756 males and 1,698 females; of these, 3,298 were successful, 97 unsuccessful, and 68 unknown. Small-pox has been prevalent in all the taluks of the district. The cost of each operation was 2 annas 8 pies, and of each successful case 3 annas.

Vriddhachalam circle. This circle extends over an area of 1,564 square miles and has a population of 628,510. The establishment consists of 1 second-class deputy inspector, 3 first-class and 6 second-class vaccinators, and 1 peon. The total number vaccinated in 1884 was 7,772—males 4,138 and females 3,634; of these, 7,366 were successful, or 94·7 per cent. On comparing the total number of cases vaccinated in 1884 with that of 1883 there is found a decrease of 1,022 cases for the year under report. 1,228 subjects were vaccinated under one year of age: of these, 611 were males and 617 females. The cost of the permanent establishment was Rs. 2,085-15-3 and the value of each successful case 4 annas 6 pies.

No. I, South Canara circle. This circle extends over an area of 1,910 square miles and has a population of 573,167. The establishment consists of 1 first-class deputy inspector, 3 first-class, 6 second-class, and 4 probationary vaccinators, and 1 peon. The total number of cases vaccinated during the year under report was 26,515 against 29,845 in the previous year, showing a decrease of 3,330 cases for 1884. This decrease was due to the absence of small-pox and to the prevalence of fever in the Udipi, Mangalore and Coondapoor taluks for some months in the year. There were 1,028 infants under one year of age vaccinated. The cost of each successful case was 1 anna 9 pies.

No. II, South Canara circle. This circle extends over an area of 1,983 square miles and has a population of 354,248. The establishment consists of 1 second-class deputy inspector, 2 first-class, 3 second-class, and 4 probationary vaccinators, and 1 peon. The total number vaccinated during the year under report was 9,892 against 14,871 in 1883, showing a decrease of 4,979 cases for 1884. Of the sexes vaccinated, 5,735 were males and 4,157 females. The successful vaccinations amounted to 9,321, or a percentage of 94·29. The decrease in the number of vaccinations was due to the absence of small-pox. The present staff, the deputy inspector states, is insufficient. There were 256 infants under one year of age vaccinated. 244 were successful and 8 unsuccessful. The cost of each successful case was 3 annas 3 pies.

Negapatam circle. This circle extends over an area of 1,465 square miles and has a population of 881,308. The establishment consists of 1 first-class deputy inspector, 5 first-class, 9 second-class, and 2 probationary vaccinators, and 1 peon. The number of cases vaccinated in 1884 was 17,863 against 20,093 in 1883, showing a decrease of 2,230 for the year under report. The decrease was due to the vaccinators having been put on cholera duty. There were 4,690 infants vaccinated under one year of age. The average cost of each successful case was 3 annas 1 pie.

Tanjore circle. This circle extends over an area of 2,164 square miles and has a population of 1,047,924. The establishment consists of 1 first-class deputy inspector, 4 first-class, 18 second-class, and 2 probationary vaccinators, and 1 peon. 26,048 persons (13,744 males and 12,304 females) were vaccinated in this circle during 1884 against 28,735 in 1883, showing a decrease of 2,687 operations for the year under report. The percentage of success was 93·8. The decrease in the number of cases done in 1884 (when compared with those of 1883) was due to the vaccinators having been withdrawn from their work to pay attention to cholera cases and to some of the vaccinators having been absent on leave. The vaccinations under one year of age were 5,558. Of the sexes, 2,709 were males and 2,849 females, with a success of 94·2 per cent. The cost of each successful case was 2 annas 8 pies.

Shermadevi circle. This circle extends over an area of 1,595 square miles and has a population of 479,904. The establishment consists of 1 second-class deputy inspector, 5 first-class, 8 second-class, and 5 probationary vaccinators, and 1 peon. The total number of cases vaccinated in 1884 was 13,814 against 13,246 in 1883, showing an increase of 568 cases for the year under report. 12,967 were successful, or 93·8 per cent. The number of cases vaccinated under one year of age was 1,510 against 1,406 in 1883. The cost of each successful case was 3 annas 6 pies.

Tinnevelly circle.

This circle extends over an area of 3,781 square miles and has a population of 1,162,377. The establishment consists of 1 first-class deputy inspector, 7 first-class, 10 second-class, and 12 probationary vaccinators, and 1 peon. There were 22,844 cases vaccinated in 1884 against 22,795 in 1883, showing an increase of 49 cases for the year under report. The average number vaccinated by each vaccinator is 788. Small-pox prevailed in some parts of the circle, and the vaccinators promptly visited the infected localities. The number of subjects under one year of age vaccinated was 2,613, of which 1,385 were males and 1,228 females. The average cost of each successful case was 3 annas 6 pies.

Trichinopoly district.

This district extends over an area of 3,544 square miles and has a population of 1,110,811. The establishment consists of 1 first-class deputy inspector, 5 first-class, 11 second-class, and 3 probationary vaccinators, and 1 peon. The number of cases vaccinated in 1884 was 20,794 against 19,116 in 1883. No irregularities in the progress of vaccination were noticed and there were no ill-effects from vaccination. The total number of cases vaccinated under one year of age was 2,444, of which 2,316 were successful, 61 unsuccessful, and 67 unknown. The average cost of each successful case was 2 annas 11 pies.

Jeypore hill tracts.

Jeypore hill tracts extend over an area of 13,903 square miles and has a population of 694,673. The establishment consists of 1 first-class deputy inspector, 14 second-class vaccinators, and 1 peon. The total number of cases vaccinated in 1884 was 6,360 against 7,358 in 1883, showing a decrease of 998 for the year under report. Small-pox prevailed in some of the taluks and precautionary measures against the spread of the disease were taken. There were 272 cases vaccinated under one year of age; 138 were males and 134 females. The average cost of each successful case was 7 annas 6 pies.

Vizagapatam circle.

This circle extends over an area of 1,761 square miles and has a population of 803,291. The establishment consists of 1 first-class deputy inspector, 9 first-class, 6 second-class, and 3 probationary vaccinators, and 1 peon. There were 22,352 cases vaccinated in 1884 against 12,613 in 1883, showing an increase of 9,739 for the year under report. Inoculation is still practised in the range, and is a great hindrance to vaccination. There were 1,714 infants under one year of age vaccinated. The average cost of each successful case was 2 annas 11 pies.

Vizianagram circle.

This circle extends over an area of 1,692 square miles and has a population of 912,386. The establishment consists of 1 second-class deputy inspector, 7 first-class, 7 second-class, and 3 probationary vaccinators, and 1 peon. The total number of operations done in 1884 was 15,772 against 11,480 in 1883, showing an increase of 4,292 cases for the year under report. Small-pox has prevailed in all the taluks of the range during the year. The number of infants vaccinated in 1884 was 1,913—males 980 and females 933. The average cost of each successful case was 3 annas 1 pie.

VACCINATION RETURNS.

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing Particulars of Vaccination in the Madras Presidency during the calendar year* 1884.

Number.	Circles and districts.	Population of district or circle according to the census of 1881.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.		Persons successfully vaccinated per 1,000 of population.	Average annual number of persons successfully vaccinated during previous 5 years.		Average annual number of deaths from small-pox during previous 5 years.	
									Total.	Successful.			Total.	Successful.	Primary vaccination.	Revaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Anantapur district.				Males.	Females.	Total.														
1	Gooty circle— Permanent vaccinators ...	296,470	120	8	3,287	2,723	6,010	751	6,010	2,366	2,364	5,288	...	...	87·9	...	...	...	...	...	...
	Total of circle ...	296,470	120	8	3,287	2,723	6,010	751	6,010	2,366	2,364	5,288	...	...	87·9	...	17·8	5,815	19·6	...	...
2	Penukonda circle— Permanent vaccinators ...	298,512	113	8	4,216	3,893	8,109	1,014	8,094	3,684	3,550	7,776	15	2	96·0	13·3	...	...	...	...	...
	Total of circle ...	298,512	113	8	4,216	3,893	8,109	1,014	8,094	3,684	3,550	7,776	15	2	96·0	13·3	26·0	4,403	14·7	...	...
	Total of district ...	594,982	117	16	7,503	6,616	14,119	882	14,104	6,050	5,914	13,064	15	2	92·6	13·3	21·9	10,218	17·1	936	1·5
	Bellary district.																				
3	Bellary circle— Permanent vaccinators ...	429,492	115	16	6,131	5,715	11,846	740	11,846	6,505	4,354	11,188	...	...	94·4	...	...	...	...	...	...
	Total of circle ...	429,492	115	16	6,131	5,715	11,846	740	11,846	6,505	4,354	11,188	...	...	94·4	...	26·0	...	...	...	...
4	Harpanahalli circle— Permanent vaccinators ...	220,882	110	9	3,720	3,526	7,246	805	7,242	4,140	2,529	6,969	4	4	96·2	100·0	...	...	...	...	...
	Total of circle ...	220,882	110	9	3,720	3,526	7,246	805	7,242	4,140	2,529	6,969	4	4	96·2	100·0	31·5	...	...	...	...
	Total of district ...	650,374	113	25	9,851	9,241	19,092	764	19,088	10,645	6,883	18,157	4	4	95·1	100·0	27·9	11,062	17·0	536	0·8
	Chingleput district.																				
5	Chingleput circle— Permanent vaccinators ...	488,659	288	10	8,389	7,241	15,630	1,563	15,597	1,245	10,188	14,709	33	23	94·3	69·6	...	...	...	...	...
	Total of circle ...	488,659	288	10	8,389	7,241	15,630	1,563	15,597	1,245	10,188	14,709	33	23	94·3	69·6	30·1	...	...	...	...
6	Saidápet circle— Permanent vaccinators ...	455,447	381	10	8,314	7,013	15,327	1,533	15,210	1,574	8,573	14,094	117	82	92·6	70·0	...	...	...	...	...
	Total of circle ...	455,447	381	10	8,314	7,013	15,327	1,533	15,210	1,574	8,573	14,094	117	82	92·6	70·0	31·1	...	...	...	...
	Total of district ...	944,106	332	20	16,703	14,254	30,957	1,548	30,807	2,819	18,761	28,803	150	105	93·4	70·0	30·6	16,557	17·5	926	0·9
	Coimbatore district.																				
7	North Coimbatore circle— Permanent vaccinators ...	737,600	169	13	11,941	11,285	23,226	1,786	23,226	5,827	15,061	22,526	...	...	96·9	...	...	...	...	...	...
	Total of circle ...	737,600	169	13	11,941	11,285	23,226	1,786	23,226	5,827	15,061	22,526	...	...	96·9	...	30·5	19,893	26·9	...	...
8	South Coimbatore circle— Permanent vaccinators ...	862,054	248	18	11,889	11,766	23,655	1,314	23,608	8,616	12,182	23,181	47	39	98·1	82·9	...	...	...	...	...
	Total of circle ...	862,054	248	18	11,889	11,766	23,655	1,314	23,608	8,616	12,182	23,181	47	39	98·1	82·9	26·9	19,865	23·0	...	...
	Total of district ...	1,599,654	204	31	23,830	23,051	46,881	1,512	46,834	14,443	27,243	45,707	47	39	97·5	82·9	28·5	39,758	24·8	778	0·4
	Cuddapah district.																				
9	Cuddapah circle— Permanent vaccinators ...	406,699	160	10	2,029	1,479	3,508	351	3,497	536	1,765	3,120	11	11	89·2	100·0	...	...	...	...	...
	Total of circle ...	406,699	160	10	2,029	1,479	3,508	351	3,497	536	1,765	3,120	11	11	89·2	100·0	7·6	...	...	...	...
10	Madanapalle circle— Permanent vaccinators ...	419,470	109	14	2,962	2,600	5,562	397	5,546	578	3,796	5,326	16	4	96·0	25·0	...	...	...	...	...
	Total of circle ...	419,470	109	14	2,962	2,600	5,562	397	5,546	578	3,796	5,326	16	4	96·0	25·0	12·7	...	...	...	...
11	Sidhout circle— Permanent vaccinators ...	275,887	117	7	1,810	1,502	3,312	473	3,312	268	1,942	3,070	...	...	92·6	...	...	...	...	...	...
	Total of circle ...	275,887	117	7	1,810	1,502	3,312	473	3,312	268	1,942	3,070	...	...	92·6	...	11·1	...	...	...	...
	Total of district ...	1,102,056	126	31	6,801	5,581	12,382	400	12,355	1,382	7,503	11,516	27	15	93·2	55·5	10·4	9,786	8·8	1,028	0·9
	Ganjam district.																				
12	Chatrapur circle— Permanent vaccinators ...	906,219	456	20	6,561	5,312	11,873	594	11,859	603	7,673	11,655	14	12	98·2	85·7	...	...	...	...	...
	Total of circle ...	906,219	456	20	6,561	5,312	11,873	594	11,859	603	7,673	11,655	14	12	98·2	85·7	12·8	10,991	12·1	...	...

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing Particulars of Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and districts.	Population of district or circle according to the census of 1881.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.		Persons successfully vaccinated per 1,000 of population.	Average annual number of persons successfully vaccinated during previous 5 years.		Average annual number of deaths from small-pox during previous 5 years.	
									Total.	Successful.			Total.	Successful.	Primary vaccination.	Revaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Ganjam district—(Continued).				Males.	Females.	Total.														
13	Chicacole circle— Permanent vaccinators ...	557,128	469	12	4,933	4,871	9,804	817	9,804	1,028	6,448	9,216	...	...	94·0	...	...	...	...	...	...
	Total of circle ...	557,128	469	12	4,933	4,871	9,804	817	9,804	1,028	6,448	9,216	...	...	94·0	...	16·5	8,355	14·9	...	...
14	Ganjam hill tracts— Permanent vaccinators ...	246,303	47	6	3,846	3,774	7,620	1,270	7,620	355	1,841	7,389	...	...	96·9	...	...	...	...	...	...
	Total of circle ...	246,303	47	6	3,846	3,774	7,620	1,270	7,620	355	1,841	7,389	...	...	96·9	...	29·9	5,638	22·8	...	...
	Total of district ...	1,709,650	204	38	15,340	13,957	29,297	771	29,283	1,986	15,962	28,260	14	12	96·5	85·7	16·5	24,984	14·6	2,226	1·3
	Godávari district.																				
15	Ellore circle— Permanent vaccinators ...	580,485	230	21	6,988	5,975	12,963	617	12,910	868	6,693	12,343	53	48	95·6	90·5	...	...	...	...	...
	Total of circle ...	580,485	230	21	6,988	5,975	12,963	617	12,910	868	6,693	12,343	53	48	95·6	90·5	21·3	...	...	...	...
16	Pittapur circle— Permanent vaccinators ...	331,238	264	9	3,520	2,738	6,258	695	6,228	174	3,109	5,442	30	15	...	...	...	...	...	...	...
	Total of circle ...	331,238	264	9	3,520	2,738	6,258	695	6,228	174	3,109	5,442	30	15	...	...	16·4	...	...	...	...
17	Rajahmundry circle— Permanent vaccinators ...	790,387	290	11	6,467	4,629	11,096	1,009	11,072	549	4,693	10,200	24	18	92·1	75·0	...	...	...	...	...
	Government do. ...			2	713	623	1,336	668	1,336	242	698	1,280	...	...	95·8	...	...	...	...	...	...
	Total of circle ...	790,387	290	13	7,180	5,252	12,432	956	12,408	791	5,391	11,480	24	18	92·5	75·0	14·5	...	...	...	...
	Total of district ...	1,702,110	296	43	17,688	13,965	31,653	736	31,546	1,833	15,193	29,265	107	81	...	...	17·2	17,175	10·0	839	0·4
	Kistna district.																				
18	Guntúr circle— Permanent vaccinators ...	562,803	223	16	7,488	6,318	13,806	863	13,261	981	5,809	10,939	545	404	82·4	74·1	...	...	...	...	...
	Total of circle ...	562,803	223	16	7,488	6,318	13,806	863	13,261	981	5,809	10,939	545	404	82·4	74·1	20·1	...	...	...	...
19	Masulipatam circle— Permanent vaccinators ...	609,408	174	16	10,551	8,944	19,495	1,218	18,581	1,114	8,076	15,784	914	677	84·9	74·0	...	...	...	...	...
	Total of circle ...	609,408	174	16	10,551	8,944	19,495	1,218	18,581	1,114	8,076	15,784	914	677	84·9	74·0	27·0	...	...	...	...
20	Vinukonda circle— Permanent vaccinators ...	321,567	132	8	3,654	3,194	6,848	856	6,848	640	3,211	6,108	...	...	89·1	...	...	...	...	...	...
	Total of circle ...	321,567	132	8	3,654	3,194	6,848	856	6,848	640	3,211	6,108	...	...	89·1	...	18·9	...	...	...	...
	Total of district ...	1,493,778	176	40	21,693	18,456	40,149	1,004	38,690	2,735	17,096	32,831	1,459	1,081	84·8	74·0	22·7	12,379	8·2	1,286	0·8
	Kurnool district.																				
21	Cumbum circle— Permanent vaccinators ...	323,837	79	8	4,034	3,303	7,337	917	7,337	958	3,617	6,809	...	...	92·8	...	...	...	...	...	...
	Total of circle ...	323,837	79	8	4,034	3,303	7,337	917	7,337	958	3,617	6,809	...	...	92·8	...	21·0	...	...	...	...
22	Kurnool circle— Permanent vaccinators ...	334,385	97	12	2,993	2,300	5,293	441	5,293	1,686	2,455	4,732	...	...	89·4	...	...	...	...	...	...
	Total of circle ...	334,385	97	12	2,993	2,300	5,293	441	5,293	1,686	2,455	4,732	...	...	89·4	...	14·1	...	...	...	...
	Total of district ...	658,222	89	20	7,027	5,603	12,630	631	12,630	2,644	6,072	11,541	...	...	91·3	...	17·5	8,803	13·3	152	0·2
	Madura district.																				
23	Dindigul circle— Permanent vaccinators ...	694,239	221	20	9,892	9,524	19,416	971	19,244	7,400	9,560	18,892	172	149	98·1	86·6	...	...	...	...	...
	Total of circle ...	694,239	221	20	9,892	9,524	19,416	971	19,244	7,400	9,560	18,892	172	149	98·1	86·6	27·4	...	...	...	...
24	Madura circle— Permanent vaccinators ...	501,438	317	14	7,122	6,464	13,586	970	13,581	5,140	6,598	13,228	5	3	97·4	60·0	...	...	...	...	...
	Total of circle ...	501,438	317	14	7,122	6,464	13,586	970	13,581	5,140	6,598	13,228	5	3	97·4	60·0	26·3	...	...	...	...

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing Particulars of Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and districts.	Population of district or circle according to the census of 1881.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.		Persons successfully vaccinated per 1,000 of population.	Average annual number of persons successfully vaccinated during previous 5 years.		Average annual number of deaths from small-pox during previous 5 years.	
										Successful.											
									Total.	Under 1 year.	Over 1 and under 6 years.	Total of all ages.	Total.	Successful.	Primary vaccination.	Revaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Madura district—(Continued).				Males.	Females.	Total.														
25	Permagudy circle— Permanent vaccinators ...	885,014	241	27	14,814	13,262	28,076	1,040	27,744	6,619	14,315	27,145	332	289	97·8	87·0	...	...	...	...	...
	Total of circle ...	885,014	241	27	14,814	13,262	28,076	1,040	27,744	6,619	14,315	27,145	332	289	97·8	87·0	30·9	...	...	...	...
	Total of district ...	2,080,691	249	61	31,828	29,250	61,078	1,001	60,569	19,159	30,473	59,265	509	441	97·8	86·6	28·6	50,869	24·4	495	0·2
	Malabar district.																				
26	North Malabar circle— Permanent vaccinators ...	734,763	278	10	8,700	3,399	12,099	1,210	12,091	161	3,276	11,030	8	5	91·2	62·5	...	...	...	...	...
	Total of circle ...	734,763	278	10	8,700	3,399	12,099	1,210	12,091	161	3,276	11,030	8	5	91·2	62·5	15·0	11,151	15·1	...	...
27	South Malabar circle— Permanent vaccinators ...	1,468,354	474	22	16,664	4,438	21,102	960	21,080	89	3,670	18,813	22	18	89·2	81·8	...	...	...	...	...
	Total of circle ...	1,468,354	474	22	16,664	4,438	21,102	960	21,080	89	3,670	18,813	22	18	89·2	81·8	12·8	15,918	10·8	...	...
	Total of district ...	2,203,117	384	32	25,364	7,837	33,201	1,038	33,171	250	6,946	29,843	30	23	89·9	76·6	13·5	27,069	12·2	3,086	1·4
	Nellore district.																				
28	Kávali circle— Permanent vaccinators ...	373,748	132	10	5,401	4,900	10,301	1,030	10,292	402	5,307	9,586	9	5	93·1	55·5	...	...	...	...	...
	Total of circle ...	373,748	132	10	5,401	4,900	10,301	1,030	10,292	402	5,307	9,586	9	5	93·1	55·5	25·6	...	...	...	...
29	Nellore circle— Permanent vaccinators ...	397,873	137	17	5,493	5,263	10,756	633	10,688	715	6,332	10,209	68	55	95·5	80·8	...	...	...	...	...
	Total of circle ...	397,873	137	17	5,493	5,263	10,756	633	10,688	715	6,332	10,209	68	55	95·5	80·8	25·7	...	...	...	...
30	Ongole circle— Permanent vaccinators ...	411,910	138	11	6,234	5,683	11,917	1,083	11,917	862	7,641	10,926	...	...	91·6	...	...	...	...	...	...
	Total of circle ...	411,910	138	11	6,234	5,683	11,917	1,083	11,917	862	7,641	10,926	...	...	91·6	...	26·5	...	...	...	...
	Total of district ...	1,183,531	136	38	17,128	15,846	32,974	868	32,897	1,979	19,280	30,721	77	60	93·3	77·9	26·0	15,522	13·1	316	0·2
	Nilgiri district.																				
31	Permanent vaccinators ..	73,921	79	3	1,113	825	1,938	646	1,924	141	958	1,847	14	7	95·9	50·0	...	...	...	...	...
	Total of district ...	73,921	79	3	1,113	825	1,938	646	1,924	141	958	1,847	14	7	95·9	50·0	...	1,335	18·0	15	0·2
	North Arcot district.																				
32	Chittoor circle— Permanent vaccinators ...	674,485	232	15	6,175	5,643	11,818	788	11,814	2,993	6,480	11,576	4	2	97·9	50·0	...	...	...	...	...
	Total of circle ...	674,485	232	15	6,175	5,643	11,818	788	11,814	2,993	6,480	11,576	4	2	97·9	50·0	17·1	...	...	...	...
33	Karvetnagar circle— Permanent vaccinators ...	487,003	206	7	3,431	2,973	6,404	915	6,404	905	3,794	6,162	...	...	96·2	...	...	...	...	...	...
	Total of circle ...	487,003	206	7	3,431	2,973	6,404	915	6,404	905	3,794	6,162	...	...	96·2	...	12·6	...	...	...	...
34	Vellore circle— Permanent vaccinators ...	608,448	308	14	5,165	4,389	9,554	682	9,550	1,342	6,199	8,939	4	4	93·6	100·0	...	...	...	...	...
	Zemindary do. ...			1	406	370	776	776	776	57	477	664	...	...	85·5	...	...	...	...	...	...
	Total of circle ...	608,448	308	15	5,571	4,759	10,330	689	10,326	1,399	6,676	9,603	4	4	92·9	100·0	15·7	...	...	...	...
	Total of district ...	1,769,936	244	37	15,177	13,375	28,552	772	28,544	5,297	16,950	27,341	8	6	95·7	75·0	15·4	21,552	12·1	1,568	0·8
	Salem district.																				
35	Hosur circle— Permanent vaccinators ...	388,525	138	12	5,552	5,204	10,756	896	10,653	4,439	5,526	10,547	103	66	99·0	64·0	...	...	...	...	...
	Total of circle ...	388,525	138	12	5,552	5,204	10,756	896	10,653	4,439	5,526	10,547	103	66	99·0	64·0	27·3	...	...	...	...
36	Salem circle— Permanent vaccinators ...	689,642	270	13	7,446	7,013	14,459	1,112	14,391	1,154	9,934	13,265	68	48	92·1	70·5	...	...	...	...	...
	Total of circle ...	689,642	270	13	7,446	7,013	14,459	1,112	14,391	1,154	9,934	13,265	68	48	92·1	70·5	19·3	...	...	...	...

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing Particulars of Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and districts.	Population of district or circle according to the census of 1881.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.		Persons successfully vaccinated per 1,000 of population.	Average annual number of persons successfully vaccinated during previous 5 years.		Average annual number of deaths from small-pox during previous 5 years.	
										Successful.											
									Total.	Under 1 year.	Over 1 and under 6 years.	Total of all ages.	Total.	Successful.	Primary vaccination.	Revaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Salem district—(Continued).				MALES.	FEMALES.	TOTAL.														
37	Tirupatúr circle— Permanent vaccinators ...	470,761	206	11	4,309	4,145	8,454	769	8,451	643	5,991	7,874	3	3	93·1	100·0	...	...	...	...	...
	Total of circle ...	470,761	206	11	4,309	4,145	8,454	769	8,451	643	5,991	7,874	3	3	93·1	100·0	16·7	...	...	...	...
	Total of district ...	1,548,928	202	36	17,307	16,362	33,669	935	33,495	6,236	21,451	31,686	174	117	94·5	67·2	20·5	22,228	14·3	587	0·3
	South Arcot district.																				
38	Cuddalore circle— Permanent vaccinators ...	1,122,846	340	15	11,067	9,054	20,121	1,341	20,121	3,298	11,138	18,485	...	...	91·8	...		...	...	...	...
	Total of circle ...	1,122,846	340	15	11,067	9,054	20,121	1,341	20,121	3,298	11,138	18,485		...	91·8	...	16·4	13,239	11·7	...	...
39	Vriddhachalam circle— Permanent vaccinators ...	628,510	401	9	4,138	3,634	7,772	864	7,772	1,184	4,759	7,366	...	...	94·7	...	...	...	...	...	...
	Total of circle ...	628,510	401	9	4,138	3,634	7,772	864	7,772	1,184	4,759	7,366	...	...	94·7	...	11·7	6,256	9·9	...	...
	Total of district ...	1,751,356	360	24	15,205	12,688	27,893	1,162	27,893	4,482	15,897	25,851	...	...	92·6	...	14·7	19,495	11·1	1,682	0·9
	South Canara district.																				
40	No. I, South Canara circle— Permanent vaccinators ...	573,167	300	13	14,189	12,326	26,515	2,040	26,329	987	8,014	25,186	186	124	95·6	66·6	...	...	...	...	...
	Total of circle ...	573,167	300	13	14,189	12,326	26,515	2,040	26,329	987	8,014	25,186	186	124	95·6	66·6	44·1	14,281	24·9	...	...
41	No. II, South Canara circle— Permanent vaccinators ...	354,248	178	9	5,735	4,157	9,892	1,099	9,885	244	2,654	9,318	7	3	94·2	42·8	...	...	...	...	...
	Total of circle ...	354,248	178	9	5,735	4,157	9,892	1,099	9,885	244	2,654	9,318	7	3	94·2	42·8	26·3	10,595	29·9	...	...
	Total of district ...	927,415	238	22	19,924	16,483	36,407	1,655	36,214	1,231	10,668	34,504	193	127	95·2	65·8	37·3	24,876	26·8	300	0·3
	Tanjore district.																				
42	Negapatam circle— Permanent vaccinators ...	881,308	601	16	9,158	8,705	17,863	1,117	17,863	4,576	10,264	17,268	...	...	96·6	...	...	...	...	...	...
	Total of circle ...	881,308	601	16	9,158	8,705	17,863	1,117	17,863	4,576	10,264	17,268	...	...	96·6	...	19·5	29,385	33·3	...	...
43	Tanjore circle— Permanent vaccinators ...	1,047,924	484	24	13,744	12,304	26,048	1,085	25,862	5,241	12,474	24,313	186	144	94·0	77·4	...	...	...	...	...
	Total of circle ...	1,047,924	480	24	13,744	12,304	26,048	1,085	25,862	5,241	12,474	24,313	186	144	94·0	77·4	23·3	31,930	30·4	...	...
	Total of district ...	1,929,232	531	40	22,902	21,009	43,911	1,098	43,725	9,817	22,738	41,581	186	144	95·0	77·4	21·6	61,315	31·7	557	0·2
	Tinnevelly district.																				
44	Shermádevi circle— Permanent vaccinators ...	479,904	301	18	7,807	6,007	13,814	767	13,792	1,471	7,914	12,954	22	13	93·9	59·0	...	...	...	...	...
	Total of circle ...	479,904	301	18	7,807	6,007	13,814	767	13,792	1,471	7,914	12,954	22	13	93·9	59·0	27·0	10,727	22·3	...	...
45	Tinnevelly circle— Permanent vaccinators ...	1,162,377	307	29	12,950	9,894	22,844	788	22,762	2,357	12,864	20,368	82	28	89·4	34·1	...	...	...	...	...
	Total ...	1,162,377	307	29	12,950	9,894	22,844	788	22,762	2,357	12,864	20,368	82	28	89·4	34·1	17·5	23,382	20·1	...	...
	Total of district ...	1,642,281	305	47	20,757	15,901	36,658	780	36,554	3,828	20,778	33,322	104	41	91·1	39·4	20·3	34,109	20·7	1,335	0·8
	Trichinopoly district.																				
46	Permanent vaccinators ...	1,110,811	313	19	10,939	9,855	20,794	1,093	20,794	2,316	12,482	19,616	...	...	94·3	...	...	...	...	...	...
	Total of district ...	1,110,811	313	19	10,939	9,855	20,794	1,093	20,794	2,316	12,482	19,616	...	...	94·3	...	17·6	17,023	15·3	486	0·4
	Vizagapatam district.																				
47	Jeypore hill tracts— Permanent vaccinators ...	694,673	50	6	1,555	1,075	2,630	438	2,630	65	955	2,570	...	...	97·7	...	...	...	...	...	...
	Zemindary do. ...	...	...	8	2,085	1,645	3,730	466	3,730	202	1,642	3,627	...	...	97·2	...	...	...	...	...	...
	Total of Hill Tracts ...	694,673	50	14	3,640	2,720	6,360	454	6,360	267	2,597	6,197	...	...	97·4	...	8·9	4,641	6·6	...	...

A—VACCINE DEPARTMENT.

STATEMENT No. I *showing Particulars of Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and districts.	Population of district or circle according to the census of 1881.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.		Persons successfully vaccinated per 1,000 of population.	Average annual number of persons successfully vaccinated during previous 5 years.		Average annual number of deaths from small-pox during previous 5 years.	
									Total.	Successful.			Total.	Successful.	Primary vaccination.	Revaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	Vizagapatam district—(Contd.).				MALES.	FEMALES.	TOTAL.														
48	Vizagapatam circle—																				
	Permanent vaccinators ...	803,291	456	16	11,701	9,836	21,537	1,346	20,530	1,656	11,071	20,132	1,007	788	98·0	78·2	...	...	...	...	...
	Government do. ...			2	477	338	815	407	800	39	373	794	15	13	99·2	86·6	...	...	...	...	...
	Total ...	803,291	456	18	12,178	10,174	22,352	1,242	21,330	1,695	11,444	20,926	1,022	801	98·1	78·3	27·0	10,931	13·6	...	...
49	Vizianagrum circle—																				
	Permanent vaccinators ...	912,386	539	17	8,398	7,374	15,772	928	15,560	1,879	9,537	15,104	212	185	97·0	87·2	...	...	...	...	...
	Total ...	912,386	539	17	8,398	7,374	15,772	928	15,560	1,879	9,537	15,104	212	185	97·0	87·2	16·7	13,109	14·3	...	...
	Total of district ...	2,410,350	138	49	24,216	20,268	44,484	908	43,250	3,841	23,578	42,227	1,234	986	97·6	79·9	17·9	28,681	11·8	491	0·2
	Total of circle and districts ...	29,138,686	245	672	348,296	290,423	638,719	950	634,367	103,114	322,828	596,948	4,352	3,291	94·1	75·6	20·5	474,796	16·2	19,625	0·6
	*Medical subordinates.**																				
1	Hyderabad Subsidiary Force ...	...	...	...	669	657	2,448	...	1,326	390	163	1,079	1,122	763	81·3	68·0	...	...	...	...	...
2	Bangalore Division and Ceded Districts	...	...	...	1,921	990	4,398	...	2,911	946	426	2,045	1,487	1,064	70·2	71·5	...	...	...	...	...
3	Nagpur Force	...	...	...	748	362	1,247	...	1,110	399	232	980	137	103	88·2	75·1	...	...	...	...	...
4	British Burmah division ...	...	...	...	534	244	1,407	...	778	67	68	486	629	385	62·4	61·2	...	...	...	...	...
5	Eastern district	...	...	...	5,069	1,440	11,247	...	6,509	502	849	3,698	4,738	1,249	56·8	26·3	...	...	...	...	...
6	Western district	...	...	...	2,863	494	4,464	...	3,357	168	325	2,384	1,107	573	71·0	51·7	...	...	...	...	...
	Total ...	...	...	...	11,804	4,187	25,211	...	15,991	2,472	2,063	10,672	9,220	4,137	66·7	44·8	...	...	...	...	...

* Work performed in Regiments, Jails, Police Hospitals, Revenue and other departments.

	Municipalities.																				
1	Ádóni	22,441	7,480	1	399	418	817	817	817	427	309	765	...	...	93·6	...	34·0	709	31·0	10	0·4
2	Anantapur	4,907	545	1	103	110	213	213	210	146	33	198	3	2	94·2	66·6	40·7	236	48·0	6	1·2
3	Anakápalle	13,341	1,112	1	435	325	760	760	656	43	331	642	104	93	97·8	89·4	55·0	424	31·7	.9	0·6
4	Bellary	53,460	2,056	2	934	690	1,624	812	1,605	868	324	1,445	19	14	90·0	73·6	27·2	1,425	26·6	45	0·8
5	Berhampore	23,599	4,720	1	402	253	655	655	649	33	388	605	6	6	93·2	100·0	25·8	423	17·9	43	1·8
6	Bimlipatam	8,582	2,145	1	294	194	488	488	362	114	138	344	126	126	95·0	100·0	54·7	412	48·0	7	0·8
7	Calicut	57,085	4,391	3	2,308	592	2,900	966	2,877	64	573	2,456	23	17	85·3	73·9	43·3	2,349	41·1	147	2·5
8	Cannanore ...	26,386	6,596	2	814	575	1,389	694	1,389	332	657	1,248	...	...	89·8	...	47·2	1,348	51·0	25	0·9
9	Chicacole	18,302	5,445	1	373	265	638	638	638	79	294	574	...	...	89·9	...	31·3	380	23·2	18	1·1
10	Chidambaram ...	19,837	9,918	1	393	402	795	795	795	145	496	748	...	...	94·0	...	37·7	659	33·2	23	1·1
11	Cochin	15,698	15,698	1	647	307	954	954	952	101	226	784	2	2	82·3	100·0	50·0	635	40·4	131	8·3
12	Cocanada	30,441	5,771	1	962	751	1,713	1,713	1,365	321	788	1,304	348	121	95·5	34·7	46·8	660	22·8	3	0·1
13	Coimbatore	38,967	12,989	2	584	483	1,067	533	1,051	451	418	974	16	16	92·6	100·0	25·4	1,015	26·0	84	2·1
14	Conjeeveram	37,275	4,142	2	992	771	1,763	881	1,670	272	726	1,304	93	20	78·8	21·5	35·5	783	21·0	57	1·5
15	Coonoor	4,778	531	1	142	106	248	248	229	35	106	159	19	15	69·4	78·9	36·4	728	152·3	3	0·6
16	Cuddalore	43,545	3,629	2	678	487	1,165	582	1,140	176	496	868	25	1	76·1	4·0	19·9	1,167	26·7	30	0·6
17	Cuddapah	18,982	999	1	272	52	324	324	304	48	58	299	20	20	98·3	100·0	16·8	285	15·0	13	0·6
18	Dindigul	14,182	7,091	1	906	762	1,668	1,668	1,668	279	1,059	1,550	...	...	92·9	...	109·2	1,745	123·0	16	1·6
19	Ellore	25,092	2,788	3	485	352	837	837	774	69	393	723	63	43	93·4	68·2	30·5	375	14·9	3	0·1
20	Erode	9,864	897	1	200	178	378	378	378	91	218	344	...	...	91·0	...	34·8	611	61·9	8	0·8
21	Guntúr	19,646	1,591	1	313	231	544	544	515	58	256	410	29	19	79·6	65·5	21·8	500	25·4	16	0·8
22	Karúr	9,205	2,301	1	276	206	482	482	480	244	130	446	2	2	92·9	100·0	48·6	413	44·8	3	0·3
23	Kumbakónam	50,098	16,699	2	825	655	1,480	740	1,466	360	664	1,341	14	12	91·4	85·7	27·0	2,631	52·5	8	0·1
24	Kurnool	20,329	4,066	2	530	298	828	414	695	137	267	534	133	85	76·8	63·9	30·4	456	22·4	5	0·2
25	Madras	405,848	15,031	26	36,044	20,849	56,893	2,188	44,293	13,907	17,626	39,929	12,600	6,530	90·1	51·8	114·4	25,705	63·3	1,148	2·8
26	Madura	73,807	18,452	3	1,694	1,319	3,013	1,004	2,995	1,552	925	2,886	18	11	96·3	61·1	39·2	2,292	31·0	118	1·5
27	Mannárgudi	19,409	4,852	1	343	350	693	693	642	148	278	611	51	50	95·1	98·0	34·0	888	45·7	7	0·3
28	Mangalore	32,099	3,567	1	883	822	1,705	1,705	1,676	473	890	1,659	29	23	98·9	79·3	52·4	1,829	56·9	20	0·6
29	Masulipatam ...	35,056	8,764	1	961	669	1,630	1,630	1,518	148	727	1,467	112	86	96·6	76·7	44·3	733	20·9	13	0·3
30	Máyavaram	23,044	7,681	1	601	556	1,157	1,157	1,157	139	722	1,061	...	...	91·7	...	46·0	1,246	54·0	13	0·5
31	Negapatam ...	53,855	7,693	2	1,066	766	1,832	916	1,765	424	807	1,653	67	46	93·6	68·6	31·5	1,882	34·9	18	0·3
32	Nellore	27,505	1,100	1	439	368	807	807	760	88	480	744	47	27	97·8	57·4	28·0	568	20·6	2	0·07
33	Ongole	9,200	2,300	1	193	177	370	370	370	37	161	304	...	...	82·1	...	33·0	195	21·1	5	0·5
34	Ootacamund	12,335	1,121	1	352	313	665	665	516	98	263	483	149	117	93·6	78·5	48·6	630	51·0	8	0·6
35	Palamcottah	17,964	17,964	1	380	280	660	660	522	111	251	448	138	77	85·8	55·7	29·2	595	33·1	35	1·9
36	Pálghat	36,339	4,037	2	947	574	1,521	760	1,521	21	502	1,420	...	...	93·3	...	39·0	1,246	34·2	39	1·0
37	Rajahmundry	24,555	2,046	1	1,475	922	2,397	2,397	2,397	235	836	1,743	...	...	72·7	...	70·9	721	29·3	3	0·1
38	Salem	50,667	16,889	3	911	863	1,774	591	1,774	510	1,073	1,695	...	...	95·5	...	33·4	950	18·7	60	1·1
39	Srirangam	19,773	2,825	1	222	206	428	428	428	71	269	402	...	...	93·9	...	20·3	550	27·8	19	0·9
40	Tanjore	54,745	6,843	3	1,385	652	2,037	679	2,037	318	741	1,936	...	...	95·0	...	35·3	2,112	38·5	24	0·4
41	Tellicherry	26,410	6,602	4	1,299	832	2,131	533	2,109	53	749	1,799	22	22	85·3	100·0	68·9	1,681	63·6	33	1·2
42	Tinnevelly	23,221	23,221	2	533	418	951	475	937	200	470	849	14	8	90·6	57·1	36·9	1,039	44·7	59	2·5
43	Trichinopoly	84,449	8,445	6	2,204	1,340	3,544	591	3,463	1,272	1,535	3,307	81	30	95·4	37·0	39·5	2,682	31·7	132	1·5
44	Tuticorin	16,281	5,427	1	375	295	670	670	663	116	298	488	7	4	73·6	57·1	30·2	517	32·4	17	1·0
45	Vellore	37,491	9,373	3	738	769	1,507	502	1,437	531	538	1,302	70	35	90·4	50·0	35·6	1,023	27·2	53	1·4
46	Vizagapatam	30,291	10,097	2	948	839	1,787	893	1,221	225	515	1,170	566	409	95·8	72·2	52·1	815	26·9	55	1·8
47	Vizianagrum	22,577	4,515	1	405	334	739	739	708	128	269	700	31	26	98·8	83·8	32·1	898	39·7	33	1·4
48	Wálajápet	10,387	10,387	1	88	83	171	171	171	17	106	160	...	...	93·5	...	15·4	206	19·8	29	2·7
	Total of municipalities ...	1,733,350	4,872	104	68,753	44,059	112,812	1,084	97,765	25,715	40,379	88,281	15,047	8,115	90·2	53·9	55·6	71,372	41·1	2,556	1·4
	Grand Total ...	*30,868,504	225	776	428,853	338,669	776,742	† 968	748,123	131,301	365,268	695,901	28,619	15,543	93·0	54·3	23·0	546,168	14·4	22,181	0·7

* Figures taken from the census report of 1881.

† In finding the average, the total work of medical subordinates is excluded.

N.B.—The sex of 9,220 revaccinations done by the medical subordinates is not known.

A—VACCINATION DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency during the calendar year* 1884.

Number.	Circles and districts.	Establishment. Inspector of Vaccination and Deputy Sanitary Commissioner.	First-class deputy inspectors.	Second-class deputy inspectors.	Vaccinators. First class.	Second class.	Probationers.	Peons.	Pay of establishment.	Travelling allowance.	Contingencies.	Total cost.	Imperial funds.	Provincial funds.	Local funds.	Municipalities.	Native states, zemindars, or private funds.	Total.	Number of all successful vaccinations and revaccinations.	Average cost of each successful case.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
									RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
	Anantapur district.																			
1	Gooty circle— Permanent vaccinators	...	...	1	3	3	2	1	1,387 4 9	293 2 4	62 15 1	1,743 6 2	...	...	1,743 6 2	...	...	1,743 6 2	5,288	0 5 3
	Total of circle	...	...	1	3	3	2	1	1,387 4 9	293 2 4	62 15 1	1,743 6 2	...	...	1,743 6 2	...	...	1,743 6 2	5,288	0 5 3
2	Penukonda circle— Permanent vaccinators	...	1	...	2	5	1	1	1,767 15 3	283 2 0	170 9 0	2,221 10 3	...	...	2,221 10 3	...	...	2,221 10 3	7,778	0 4 7
	Total of circle	...	1	...	2	5	1	1	1,767 15 3	283 2 0	170 9 0	2,221 10 3	...	...	2,221 10 3	...	...	2,221 10 3	7,778	0 4 7
	Total of district	...	1	1	5	8	3	2	3,155 4 0	576 4 4	233 8 1	3,965 0 5	...	...	3,965 0 5	...	...	3,965 0 5	13,066	0 4 10
	Bellary district.																			
3	Bellary circle— Permanent vaccinators	...	1	...	5	6	5	1	2,851 10 5	1,387 8 6	50 10 10	4,289 13 9	...	...	4,289 13 9	...	...	4,289 13 9	11,188	0 6 2
	Total of circle	...	1	...	5	6	5	1	2,851 10 5	1,387 8 6	50 10 10	4,289 13 9	...	...	4,289 13 9	...	...	4,289 13 9	11,188	0 6 2
4	Harpanahalli circle— Permanent vaccinators	...	...	1	3	4	2	1	1,665 1 1	851 5 0	22 8 9	2,538 14 10	...	...	2,538 14 10	...	...	2,538 14 10	6,973	0 5 10
	Total of circle	...	...	1	3	4	2	1	1,665 1 1	851 5 0	22 8 9	2,538 14 10	...	...	2,538 14 10	...	...	2,538 14 10	6,973	0 5 10
	Total of district	...	1	1	8	10	7	2	4,516 11 6	2,238 13 6	73 3 7	6,828 12 7	...	...	6,828 12 7	...	...	6,828 12 7	18,161	0 6 0
	Chingleput district.																			
5	Chingleput circle— Permanent vaccinators	...	1	...	3	6	1	1	1,981 4 4	328 13 0	131 7 3	2,441 8 7	...	...	2,441 8 7	...	...	2,441 8 7	14,732	0 2 8
	Total of circle	...	1	...	3	6	1	1	1,981 4 4	328 13 0	131 7 3	2,441 8 7	...	...	2,441 8 7	...	...	2,441 8 7	14,732	0 2 8
6	Saidápet circle— Permanent vaccinators	...	1	...	3	6	1	1	2,186 13 8	463 15 6	221 0 7	2,871 13 9	...	...	2,871 13 9	...	...	2,871 13 9	14,176	0 3 3
	Total of circle	...	1	...	3	6	1	1	2,186 13 8	463 15 6	221 0 7	2,871 13 9	...	...	2,871 13 9	...	...	2,871 13 9	14,176	0 3 3
	Total of district	...	2	...	6	12	2	2	4,168 2 0	792 12 6	352 7 10	5,313 6 4	...	...	5,313 6 4	...	...	5,313 6 4	28,908	0 2 11
	Coimbatore district.																			
7	North Coimbatore circle— Permanent vaccinators	...	1	...	5	5	3	1	2,625 2 9	721 1 0	134 3 5	3,480 7 2	...	...	3,480 7 2	...	...	3,480 7 2	22,526	0 2 6
	Total of circle	...	1	...	5	5	3	1	2,625 2 9	721 1 0	134 3 5	3,480 7 2	...	...	3,480 7 2	...	...	3,480 7 2	22,526	0 2 6
8	South Coimbatore circle— Permanent vaccinators	...	1	...	5	11	2	1	2,551 11 8	292 0 0	622 13 6	3,466 8 2	...	...	3,466 8 2	...	...	3,466 8 2	23,220	0 2 5
	Total of circle	...	1	...	5	11	2	1	2,551 11 8	292 0 0	622 13 6	3,466 8 2	...	...	3,466 8 2	...	...	3,466 8 2	23,220	0 2 5
	Total of district	...	2	...	10	16	5	2	5,176 14 5	1,013 1 0	756 15 11	6,946 15 4	...	...	6,946 15 4	...	...	6,946 15 4	45,746	0 2 5
	Cuddapah district.																			
9	Cuddapah circle— Permanent vaccinators	...	1	...	4	3	3	1	1,975 1 9	642 10 0	69 8 0	2,687 3 9	...	...	2,687 3 9	...	...	2,687 3 9	3,131	0 13 9
	Total of circle	...	1	...	4	3	3	1	1,975 1 9	642 10 0	69 8 0	2,687 3 9	...	...	2,687 3 9	...	...	2,687 3 9	3,131	0 13 9
10	Madanapalli circle— Permanent vaccinators	...	1	...	4	8	2	1	2,348 3 2	200 6 0	49 7 0	2,598 0 2	...	...	2,598 0 2	...	...	2,598 0 2	5,330	0 7 10
	Total of circle	...	1	...	4	8	2	1	2,348 3 2	200 6 0	49 7 0	2,598 0 2	...	...	2,598 0 2	...	...	2,598 0 2	5,330	0 7 10

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and Districts.	Establishment. Inspector of Vaccination and Deputy Sanitary Commissioner.	First-class deputy inspectors.	Second-class deputy inspectors.	Vaccinators. First class.	Second class.	Probationers.	Peons.	Pay of establishment.	Travelling allowance.	Contingencies.	Total cost.	Imperial funds.	Provincial funds.	Local funds.	Municipalities.	Native states, zemindars, or private funds.	Total.	Number of all successful vaccinations and re-vaccinations.	Average cost of each successful case.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
									RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
	Cuddapah district—(contd).																			
11	Sidhout circle—Permanent vaccinators	...	...	1	3	4		1	1,488 2 11	441 15 0	101 7 0	2,031 8 11	...	...	2,031 8 11	...	...	2,031 8 11	3,070	0 10 7
	Total of circle	...	...	1	3	4		1	1,488 2 11	441 15 0	101 7 0	2,031 8 11	...	...	2,031 8 11	...	...	2,031 8 11	3,070	0 10 7
	Total of district	...	2	1	11	15	5	3	5,811 7 10	1,284 15 0	220 6 0	7,316 12 10	...	...	7,316 12 10	...	...	7,316 12 10	11,531	0 10 2
	Ganjam district.																			
12	Chatrapur circle—Permanent vaccinators	...	1		7	11	2	1	3,579 14 7	251 10 0	95 4 6	3,926 13 1	...	...	3,926 13 1	...	...	3,926 13 1	11,667	0 5 5
	Total of circle	...	1		7	11	2	1	3,579 14 7	251 10 0	95 4 6	3,926 13 1	...	...	3,926 13 1	...	...	3,926 13 1	11,667	0 5 5
13	Chicacole circle—Permanent vaccinators	...	1		2	8	2	...	2,251 0 0	247 8 0	51 5 4	2,549 13 4	...	...	2,549 13 4	...	...	2,549 13 4	9,216	0 4 5
	Total of circle	...	1		2	8	2	...	2,251 0 0	247 8 0	51 5 4	2,549 13 4	...	...	2,549 13 4	...	...	2,549 13 4	9,216	0 4 5
14	Hill tracts of Ganjam—Permanent vaccinators	...	1	...	...	6	...	1	1,620 1 5	425 9 0	20 7 6	2,066 1 11	...	2,066 1 11	...	...	...	2,066 1 11	7,389	0 4 6
	Total of hill tracts	...	1	...		6		1	1,620 1 5	425 9 0	20 7 6	2,066 1 11	...	2,066 1 11	...	...	...	2,066 1 11	7,389	0 4 6
	Total of district	...	3		9	25	4	2	7,451 0 0	924 11 0	167 1 4	8,542 12 4	...	2,066 1 11	6,476 10 5	...	...	8,542 12 4	2,8272	0 4 10
	Godávari district.																			
15	Ellore circle—Permanent vaccinators	...	1		5	14	2	1	2,672 14 7	864 5 0	26 9 0	3,563 12 7	...	...	3,563 12 7	...	...	3,563 12 7	12,391	0 4 7
	Total of circle	...	1	...	5	14	2	1	2,672 14 7	864 5 0	26 9 0	3,563 12 7	...	...	3,563 12 7	...	...	3,563 12 7	12,391	0 4 7
16	Pittapur circle—Permanent vaccinators	...	...	1	3	5	1	1	1,411 8 9	353 5 0	124 12 1	1,889 9 10	...	...	1,889 9 10	...	...	1,889 9 10	5,457	0 5 6
	Total of circle	...	...	1	3	5	1	1	1,411 8 9	353 5 0	124 12 1	1,889 9 10	...	...	1,889 9 10	...	...	1,889 9 10	5,457	0 5 6
17	Rajahmundry circle—Permanent vaccinators	...	1	...	4	5	2	1	2,296 1 11	714 13 0	136 15 6	3,147 14 5	...	...	3,147 14 5	...	...	3,147 14 5	10,218	0 4 11
	Government vaccinators (Bhadráchallam hill tracts)	...	...	...	2	...			540 15 1	356 4 0	10 2 0	907 5 1	...	907 5 1	...	...	...	907 5 1	1,280	0 11 4
	Total of circle	...	1	...	6	5	2	1	2,837 1 0	1,071 1 0	147 1 6	4,055 3 6	...	907 5 1	3,147 14 5	...	...	4,055 3 6	11,498	0 5 8
	Total of district	...	2	1	14	24	5	3	6,921 8 4	2,288 11 0	298 6 7	9,508 9 11	...	907 5 1	8,601 4 10	...	...	9,508 9 11	29,346	0 5 2
	Kistna district.																			
18	Guntúr circle—Permanent vaccinators	...	1	...	4	6	2	1	2,188 4 0	267 2 0	320 13 4	2,776 3 4	...	...	2,776 3 4	...	...	2,776 3 4	11,343	0 4 5
	Temporary do.	...	...	...	...	4	...	...	327 8 8	29 7 0	0 3 0	357 2 8	...	...	357 2 8	...	...	357 2 8		
	Total of circle	...	1	...	4	10	2	1	2,515 12 8	296 9 0	321 0 4	3,133 6 0	...	...	3,133 6 0	...	...	3,133 6 0	11,343	0 4 5
19	Masulipatam circle—Permanent vaccinators	...	1	...	6	6	4	1	3,332 11 4	569 12 0	155 13 3	4,058 4 7	...	...	4,058 4 7	...	...	4,058 4 7	16,461	0 3 11
	Total of circle	...	1	...	6	6	4	1	3,332 11 4	569 12 0	155 13 3	4,058 4 7	...	...	4,058 4 7	...	...	4,058 4 7	16,461	0 3 11
20	Vinukonda circle—Permanent vaccinators	...	...	1	3	4	1	1	1,563 14 1	240 6 0	66 9 9	1,870 13 10	...	...	1,870 13 10	...	...	1,870 13 10	6,108	0 4 11
	Total of circle	...	...	1	3	4	1	1	1,563 14 1	240 6 0	66 9 9	1,870 13 10	...	...	1,870 13 10	...	...	1,870 13 10	6,108	0 4 11
	Total of district	...	2	1	13	20	7	3	7,412 6 1	1,106 11 0	543 7 4	9,062 8 5	...	...	9,062 8 5	...	...	9,062 8 5	33,912	0 4 3

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and districts.	Establishment. Inspector of Vaccination and Deputy Sanitary Commissioner.	First-class deputy inspectors.	Second-class deputy inspectors.	Vaccinators. First class.	Vaccinators. Second class.	Probationers.	Peons.	Expenditure. Pay of establishment.	Travelling allowance.	Contingencies.	Total cost.	Paid from: Imperial funds.	Provincial funds.	Local funds.	Municipalities.	Native states, zemindars or private funds.	Total.	Number of all successful vaccinations and re-vaccinations.	Average cost of each successful case.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
									RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
	Kurnool district.																			
21	Cumbum circle— Permanent vaccinators ...	...	1	...	3	4	1	1	1,490 3 6	224 15 0	49 9 3	1,764 11 9	...	...	1,764 11 9	...	...	1,764 11 9	6,809	0 4 2
	Total of circle ...	...	1	...	3	4	1	1	1,490 3 6	224 15 0	49 9 3	1,764 11 9	...	...	1,764 11 9	...	...	1,764 11 9	6,809	0 4 2
22	Kurnool circle— Permanent vaccinators ...	...	1	...	5	4	3	1	2,267 11 8	203 7 0	56 3 3	2,527 5 11	...	...	2,527 5 11	...	...	2,527 5 11	4,732	0 8 7
	Total of circle ...	...	1	...	5	4	3	1	2,267 11 8	203 7 0	56 3 3	2,527 5 11	...	...	2,527 5 11	...	...	2,527 5 11	4,732	0 8 7
	Total of district ...	...	2	...	8	8	4	2	3,757 15 2	428 6 0	105 12 6	4,292 1 8	...	...	4,292 1 8	...	...	4,292 1 8	11,541	0 5 11
23	Madras Presidency	1	...	...	...	...	...	..	13,800 0 0	1,640 4 0	...	15,440 4 0	...	15,440 4 0	...	...	...	15,440 4 0	...	...
	Total ...	1	...	...	...	...	...	...	13,800 0 0	1,640 4 0	...	15,440 4 0	...	15,440 4 0	...	...	...	15,440 4 0	...	...
	Madura district.																			
24	Dindigul range— Permanent vaccinators ...	...	1	...	6	11	3	3	3,692 2 0	512 13 4	78 8 0	4,283 7 4	...	...	4,283 7 4	...	...	4,283 7 4	19,041	0 3 7
	Total of circle ...	...	1	...	6	11	3	3	3,692 2 0	512 13 4	78 8 0	4,283 7 4	...	...	4,283 7 4	...	...	4,283 7 4	19,041	0 3 7
25	Madura range— Permanent vaccinators ...	...	...	1	5	7	2	1	2,232 8 1	135 15 0	117 15 7	2,486 6 8	...	...	2,486 6 8	...	...	2,486 6 8	13,231	0 3 0
	Total of circle ...	...	...	1	5	7	2	1	2,232 8 1	135 15 0	117 15 7	2,486 6 8	...	...	2,486 6 8	...	...	2,486 6 8	13,231	0 3 0
26	Parmakudi range— Permanent vaccinators ...	...	1	...	10	15	2	1	4,868 13 3	236 10 0	188 9 5	5,294 0 8	...	...	5,294 0 8	...	...	5,294 0 8	27,434	0 3 1
	Total of circle ...	...	1	...	10	15	2	1	4,868 13 3	236 10 0	188 9 5	5,294 0 8	...	...	5,294 0 8	...	...	5,294 0 8	27,434	0 3 1
	Total of district ...	...	2	1	21	33	7	5	10,793 7 4	885 6 4	385 1 0	12,063 14 8	...	...	12,063 14 8	...	...	12,063 14 8	59,706	0 3 3
	Malabar district.																			
27	North Malabar circle— Permanent vaccinators ...	...	...	1	2	5	3	1	1,618 7 3	287 0 0	68 14 11	1,974 6 2	...	...	1,974 6 2	...	...	1,974 6 2	11,035	0 2 10
	Total of circle ...	...	...	1	2	5	3	1	1,618 7 3	287 0 0	68 14 11	1,974 6 2	...	...	1,974 6 2	...	...	1,974 6 2	11,035	0 2 10
28	South Malabar circle— Permanent vaccinators ...	...	1	...	7	8	1	1	3,186 15 6	135 10 0	71 2 6	3,393 12 0	...	...	3,393 12 0	...	...	3,393 12 0	18,831	0 3 0
	Temporary do. ...	...	...	...	...	6	...	...	148 5 2	...	...	148 5 2	...	...	148 5 2	...	...	148 5 2		
	Total of circle ...	..	1	...	7	14	1	1	3,335 4 8	135 10 0	71 2 6	3,542 1 2	...	...	3,542 1 2	...	...	3,542 1 2	18,831	0 3 0
	Total of district ...	..	1	1	9	19	4	2	4,953 11 11	422 10 0	140 1 5	5,516 7 4	...	...	5,516 7 4	...	...	5,516 7 4	29,866	0 2 11
	Nellore district.																			
29	Kávali circle— Permanent vaccinators ...	...	...	1	4	5	1	1	1,623 1 2	609 5 0	42 13 0	2,275 3 2	...	...	2,275 3 2	...	...	2,275 3 2	9,591	0 3 10
	Total of circle ...	...	...	1	4	5	1	1	1,623 1 2	609 5 0	42 13 0	2,275 3 2	...	...	2,275 3 2	...	...	2,275 3 2	9,591	0 3 10
30	Nellore circle— Permament vaccinators ...	...	1	...	7	6	4	1	3,296 4 0	1,112 3 0	67 7 6	4,475 14 6	...	...	4,475 14 6	...	...	4,475 14 6	10,264	0 7 0
	Total of circle ...	...	1	...	7	6	4	1	3,296 4 0	1,112 3 0	67 7 6	4,475 14 6	...	...	4,475 14 6	...	...	4,475 14 6	10,264	0 7 0

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and districts.	Establishment. Inspector of Vaccination and Deputy Sanitary Commissioner.	First-class deputy inspectors.	Second-class deputy inspectors.	Vaccinators. First class.	Vaccinators. Second class.	Probationers.	Peons.	Expenditure. Pay of establishment.	Travelling allowance.	Contingencies.	Total cost.	Paid from: Imperial funds.	Provincial funds.	Local funds.	Municipalities.	Native states, zemindars, or private funds.	Total.	Number of all successful vaccinations and re-vaccinations.	Average cost of each successful case.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
									RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
	Nellore district—(Continued).																			
31	Ongole circle— Permanent vaccinators ...	...	1	...	2	8	1	1	2,350 7 5	674 9 0	162 2 5	3,187 2 10	...	...	3,187 2 10	...	...	3,187 2 10	10,926	0 4 8
	Total of circle ...	...	1	...	2	8	1	1	2,350 7 5	674 9 0	162 2 5	3,187 2 10	...	...	3,187 2 10	...	...	3,187 2 10	10,926	0 4 8
	Total of district ...	...	2	1	13	19	6	3	7,269 12 7	2,396 1 0	272 6 11	9,938 4 6	...	...	9,938 4 6	...	...	9,938 4 6	30,781	0 5 2
	Nílgiri district.																			
32	Permanent vaccinators ...	...	...	...	3	...	...	...	843 4 1	115 12 0	104 6 0	1,063 6 1	...	...	1,063 6 1	...	...	1,063 6 1	1,854	0 9 2
	Total of district ...	...	...	...	3	...	...	...	843 4 1	115 12 0	104 6 0	1,063 6 1	...	...	1,063 6 1	...	...	1,063 6 1	1,854	0 9 2
	North Arcot district.																			
33	Chittoor circle— Permanent vaccinators ...	...	1	...	6	6	3	1	2,729 7 11	476 11 0	216 10 0	3,422 12 11	...	...	3,422 12 11	...	...	3,422 12 11	11,578	0 4 9
	Total of circle ...	...	1	...	6	6	3	1	2,729 7 11	476 11 0	216 10 0	3,422 12 11	...	...	3,422 12 11	...	...	3,422 12 11	11,578	0 4 9
34	Kárvetnagar circle— Permanent vaccinators ...	...	...	1	3	3	1	...	1,361 2 8	293 13 2	85 14 5	1,740 14 3	...	...	1,740 14 3	...	...	1,740 14 3	6,162	0 4 6
	Total of circle ...	...	...	1	3	3	1	...	1,361 2 8	293 13 2	85 14 5	1,740 14 3	...	...	1,740 14 3	...	...	1,740 14 3	6,162	0 4 6
35	Vellore circle— Permanent vaccinators ...	...	1	...	5	4	2	1	2,418 1 9	565 8 0	145 3 8	3,128 13 5	...	...	3,128 13 5	...	...	3,128 13 5	8,943	0 5 11
	Temporary do. ...	...	...	...	...	3	...	...	140 0 0	34 12 0	...	174 12 0	...	...	174 12 0	...	...	174 12 0		
	Zemindary do. ...	...	...	...	...	1	...	...	120 0 0	...	...	120 0 0	...	...	...	...	120 0 0	120 0 0	664	0 2 11
	Total of circle ...	...	1	...	5	8	2	1	2,678 1 9	600 4 0	145 3 8	3,423 9 5	...	...	3,303 9 5	...	120 0 0	3,423 9 5	9,607	0 5 8
	Total of district ...	...	2	1	14	17	6	2	6,768 12 4	1,370 12 2	447 12 1	8,587 4 7	...	...	8,467 4 7	...	120 0 0	8,587 4 7	27,347	0 5 0
	Salem district.																			
36	Hosúr circle— Permanent vaccinators ...	...	...	1	3	6	3	1	1,978 12 8	224 3 0	144 5 3	2,347 4 11	...	...	2,347 4 11	...	...	2,347 4 11	10,613	0 3 6
	Total of circle ...	...	...	1	3	6	3	1	1,978 12 8	224 3 0	144 5 3	2,347 4 11	...	...	2,347 4 11	...	...	2,347 4 11	10,613	0 3 6
37	Salem circle— Permanent vaccinators ...	...	1	...	3	8	2	1	2,396 11 11	383 15 8	152 0 5	2,932 12 0	...	...	2,932 12 0	...	...	2,932 12 0	13,313	0 3 6
	Total of circle ...	...	1	...	3	8	2	1	2,396 11 11	383 15 8	152 0 5	2,932 12 0	...	...	2,932 12 0	...	...	2,932 12 0	13,313	0 3 6
38	Tirupatúr circle— Permanent vaccinators ...	...	...	1	3	6	2	1	1,699 9 4	227 8 0	112 8 6	2,039 9 10	...	...	2,039 9 10	...	...	2,039 9 10	7,877	0 4 2
	Total of circle ...	...	...	1	3	6	2	1	1,699 9 4	227 8 0	112 8 6	2,039 9 10	...	...	2,039 9 10	...	...	2,039 9 10	7,877	0 4 2
	Total of distirct ...	...	1	2	9	20	7	3	6,075 1 11	835 10 8	408 14 2	7,319 10 9	...	...	7,319 10 9	...	...	7,319 10 9	31,803	0 3 8
	South Arcot District.																			
39	Cuddalore circle— Permanent vaccinators ...	...	1	...	5	10	...	1	3,088 1 7	209 4 0	142 8 6	3,439 14 1	...	...	3,439 14 1	...	...	3,439 14 1	18,485	0 3 0
	Total of circle ...	...	1	...	5	10	...	1	3,088 1 7	209 4 0	142 8 6	3,439 14 1	...	...	3,439 14 1	...	...	3,439 14 1	18,485	0 3 0
40	Vriddháchalam circle— Permanent vaccinators ...	...	...	1	3	6	...	1	1,862 5 3	211 1 0	12 9 0	2,085 15 3	...	...	2,085 15 3	...	...	2,085 15 3	7,366	0 4 6
	Total of circle ...	...	...	1	3	6	...	1	1,862 5 3	211 1 0	12 9 0	2,085 15 3	...	...	2,085 15 3	...	...	2,085 15 3	7,366	0 4 6
	Total of district ...	...	1	1	8	16	...	2	4,950 6 10	420 5 0	155 1 6	5,525 13 4	...	...	5,525 13 4	...	...	5,525 13 4	25,851	0 3 5

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and districts.	Establishment. Inspector of Vaccination and Deputy Sanitary Commissioner.	First-class deputy inspectors.	Second-class deputy inspectors.	Vaccinators. First class.	Vaccinators. Second class.	Probationers.	Peons.	Expenditure. Pay of establishment.	Travelling allowance.	Contingencies.	Total cost.	Paid from Imperial funds.	Provincial funds.	Local funds.	Municipalities.	Native states, zemindars, or private funds.	Total.	Number of all successful vaccinations and re-vaccinations.	Average cost of each successful case.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
									RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
	South Canara district.																			
41	No. I, South Canara circle—Permanent vaccinators	...	1		3	6	4	1	2,411 9 6	310 2 0	72 14 8	2,794 10 2	...	...	2,794 10 2	...	...	2,794 10 2	25,310	0 1 9
	Total of circle	...	1		3	6	4	1	2,411 9 6	310 2 0	72 14 8	2,794 10 2	...	...	2,794 10 2	...	...	2,794 10 2	25,310	0 1 9
42	No. II, South Canara circle—Permanent vaccinators	...	...	1	2	3	4	1	1,621 13 4	207 10 8	85 14 0	1,915 6 0	...	...	1,915 6 0	...	...	1,915 6 0	9,321	0 3 3
	Total of circle	...	...	1	2	3	4	1	1,621 13 4	207 10 8	85 14 0	1,915 6 0	...	...	1,915 6 0	...	...	1,915 6 0	9,321	0 3 3
	Total of district	...	1	1	5	9	8	2	4,033 6 10	517 12 8	158 12 8	4,710 0 2	...	...	4,710 0 2	...	...	4,710 0 2	34,631	0 2 2
	Tanjore district.																			
43	Negapatam circle—Permanent vaccinators	...	1		5	9	2	1	2,586 13 6	303 10 0	410 12 0	3,301 3 6	...	...	3,301 3 6	...	...	3,301 3 6	17,268	0 3 1
	Total of circle	...	1		5	9	2	1	2,586 13 6	303 10 0	410 12 0	3,301 3 6	...	...	3,301 3 6	...	...	3,301 3 6	17,268	0 3 1
44	Tanjore circle—Permanent vaccinators	...	1		4	18	2	1	3,507 0 7	257 4 0	337 12 8	4,102 1 3	...	...	4,102 1 3	...	...	4,102 1 3	24,457	0 2 8
	Total of circle	...	1		4	18	2	1	3,507 0 7	257 4 0	337 12 8	4,102 1 3	...	...	4,102 1 3	...	...	4,102 1 3	24,457	0 2 8
	Total of district	...	2		9	27	4	2	6,093 14 1	560 14 0	748 8 8	7,403 4 9	...	...	7,403 4 9	...	...	7,403 4 9	41,725	0 2 10
	Tinnevelly district.																			
45	Shermádevi circle—Permanent vaccinators	...		1	5	8	5	1	2,525 1 7	164 13 0	137 1 5	2,827 0 0	...	...	2,827 0 0	...	...	2,827 0 0	12,967	0 3 6
	Total of circle	...		1	5	8	5	1	2,525 1 7	164 13 0	137 1 5	2,827 0 0	...	...	2,827 0 0	...	...	2,827 0 0	12,967	0 3 6
46	Tinnevelly circle—Permanent vaccinators	...	1	...	7	10	12	1	4,119 8 8	266 8 0	111 12 1	4,497 12 9	...	...	4,497 12 9	...	...	4,497 12 9	20,396	0 3 6
	Total of circle	...	1	...	7	10	12	1	4,119 8 8	266 8 0	111 12 1	4,497 12 9	...	...	4,497 12 9	...	...	4,497 12 9	20,396	0 3 6
	Total of district	...	1	1	12	18	17	2	6,644 10 3	431 5 0	248 13 6	7,324 12 9	...	...	7,324 12 9	...	...	7,324 12 9	33,363	0 3 6
	Trichinopoly district.																			
47	Permanent vaccinators	...	1	...	5	11	3	1	3,185 14 8	268 2 0	78 15 0	3,532 15 8	...	...	3,532 15 8	...	...	3,532 15 8	19,616	0 2 11
	Total of district	...	1	...	5	11	3	1	3,185 14 8	268 2 0	78 15 0	3,532 15 8	...	...	3,532 15 8	...	...	3,532 15 8	19,616	0 2 11
	Vizagapatam district.																			
48	Jeypore Hill tracts—Permanent vaccinators (Government)	...	1	...	...	6	...	1	1,441 8 0	489 9 0	26 10 7	1,957 11 7	...	1,957 11 7	...	...	...	1,957 11 7	2,570	0 12 2
	Zemindary do.	...	...	...	...	8	...	...	957 2 8	...	...	957 2 8	...	...	...	...	957 2 8	957 2 8	3,627	0 4 3
	Total of Hill tracts	...	1	...	...	14	...	1	2,398 10 8	489 9 0	26 10 7	2,914 14 3	...	1,957 11 7	...	...	957 2 8	2,914 14 3	6,197	0 7 6
49	Vizagapatam range—Permanent vaccinators	...	1	...	7	6	3	1	2,953 10 1	208 11 0	89 11 6	3,252 0 7	...	...	3,252 0 7	...	...	3,252 0 7	20,920	0 2 6
	Government vaccinators (Gudem Hill tracts)	...		...	2	...	...	...	321 12 4	360 6 0	5 0 0	687 2 4	...	687 2 4	...	...	...	687 2 4	807	0 13 7
	Total of circle	...	1	...	9	6	3	1	3,275 6 5	569 1 0	94 11 6	3,939 2 11	...	687 2 4	3,252 0 7	...	...	3,939 2 11	21,727	0 2 11

A—VACCINE DEPARTMENT.

STATEMENT No. II *showing the Cost of the Department in the Madras Presidency during the calendar year* 1884—(Continued).

Number.	Circles and districts.	Establishment. Inspector of Vaccination and Deputy Sanitary Commissioner.	First-class deputy inspectors.	Second-class deputy inspectors.	Vaccinators. First class.	Vaccinators. Second class.	Vaccinators. Probationers.	Peons.	Expenditure. Pay of establishment.	Travelling allowance.	Contingencies.	Total cost.	Paid from: Imperial funds.	Provincial funds.	Local funds.	Municipalities.	Native states, zemindars, or private funds.	Total.	Number of all successful vaccinations and revaccinations.	Average cost of each successful case.
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
									RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.	RS. A. P.		RS. A. P.
	Vizagapatam district—(Contd.).																			
50	Vizianagrum circle—Permanent vaccinators ...	...		1	7	7	3	1	2,696 4 5	181 13 0	94 12 0	2,972 13 5	...	.	2,972 13 5	...	...	2,972 13 5	15,289	0 3 1
	Total of circle ...	...		1	7	7	3	1	2,696 4 5	181 13 0	94 12 0	2,972 13 5	...		2,972 13 5	...	...	2,972 13 5	15,289	0 3 1
	Total of district ...	..	2	1	16	27	6	3	8,370 5 6	1,240 7 0	216 2 1	9,826 14 7	.	2,644 13 11	6,224 14 0	..	957 2 8	9,826 14 7	43,213	0 3 8
	Total of circles and districts ...	1	33	15	208	354	110	48	1,32,154 1 8	21,759 11 2	6,116 4 2	1,60,030 1 0	...	21,058 8 11	1,37,894 5 5	...	1,077 2 8	1,60,030 1 0	600,239	0 4 3*
	Municipalities.																			
1	Ádóni ...				1				157 8 0		25 1 4	182 9 4	...	...	...	182 9 4	...	182 9 4	765	0 3 10
2	Anantapur ...				1				180 0 0		4 10 4	184 10 4	...	...	...	184 10 4	...	184 10 4	200	0 14 9
3	Anakápalle ...					1			120 0 0		80 3 11	200 3 11	...	...	...	200 3 11	...	200 3 11	735	0 4 4
4	Bellary ...					2			310 12 0		12 7 6	323 3 6	...	...	...	323 3 6	...	323 3 6	1,459	0 3 7
5	Berhampore ...				1				131 1 0		6 14 0	137 15 0	...	...	...	137 15 0	...	137 15 0	611	0 3 7
6	Bimlipatam ...		...			1			144 0 0		32 7 0	176 7 0	...	...	...	176 7 0	...	176 7 0	470	0 6 0
7	Calicut ...				1	2			452 0 9		53 3 6	505 4 3	...	...	...	505 4 3	...	505 4 3	2,473	0 3 3
8	Cannanore ...				1	1			299 12 0		32 1 6	331 13 6	...	...	...	331 13 6	...	331 13 6	1,248	0 4 3
9	Chicacole ...					1			144 0 0		7 5 3	151 5 3	...	...	...	151 5 3	...	151 5 3	574	0 4 3
10	Chidambaram ...				1				180 0 0		3 5 0	183 5 0	...	...	...	183 5 0	...	183 5 0	748	0 3 11
11	Cochin ...				1				177 8 0	8 7 10	6 1 6	192 1 4	...	...	...	192 1 4	...	192 1 4	786	0 3 11
12	Cocanada ...				1				246 0 0		28 15 0	274 15 0	...	...	...	274 15 0	...	274 15 0	1,425	0 3 1
13	Coimbatore ...				1	1			300 0 0		4 9 6	304 9 6	...	...	...	304 9 6	...	304 9 6	990	0 4 11
14	Conjeeveram ...				1	1			267 2 8		49 1 8	316 4 4	...	...	...	316 4 4	...	316 4 4	1,324	0 3 10
15	Coonoor ...				1				180 0 0		9 0 0	189 0 0	...	...	...	189 0 0	...	189 0 0	174	1 1 4
16	Cuddalore ...				1		1		228 1 6		70 0 6	298 2 0	...	...	...	298 2 0	...	298 2 0	869	0 5 6
17	Cuddapah ...				1				154 9 0		24 0 0	178 9 0	...	...	...	178 9 0	...	178 9 0	319	0 8 11
18	Dindigul ...				1				204 0 0		4 3 0	208 3 0	...	...	...	208 3 0	...	208 3 0	1,550	0 2 3
19	Ellore ...				1		2		265 2 0		6 8 0	271 10 0	...	...	...	271 10 0	...	271 10 0	766	0 5 8
20	Erode ...					1			110 10 10			110 10 10	...	...	...	110 10 10	...	110 10 10	344	0 5 2
21	Guntór ...				1				216 0 0		89 3 8	305 3 8	...	...	...	305 3 8	...	305 3 8	429	0 11 5
22	Karúr ...				1				216 0 0		17 12 0	233 12 0	...	...	...	233 12 0	...	233 12 0	448	0 8 4
23	Kumbakónam ...				1	1			280 0 0		301 13 6	581 13 6	...	...	...	581 13 6	...	581 13 6	1,353	0 6 11
24	Kurnool ...				1	1			120 0 0		33 15 8	153 15 8	...	...	...	153 15 8	...	153 15 8	619	0 4 0
25	Madras ...		1		8	10	8	1	5,260 2 2	183 3 7	4,764 13 3	10,208 3 0	...	...	...	10,208 3 0	...	10,208 3 0	46,459	0 3 6
26	Madura ...				1	2			419 4 0			419 4 0	...	...	...	419 4 0	...	419 4 0	2,897	0 2 4
27	Mannárgudi ...				1				196 0 0		54 8 0	250 8 0	...	...	...	250 8 0	...	250 8 0	661	0 6 1
28	Mangalore ...				1				180 0 0		38 10 8	218 10 8	...	...	...	218 10 8	...	218 10 8	1,682	0 2 1
29	Masulipatam ...				1				216 0 0		21 4 0	237 4 0	...	...	...	237 4 0	...	237 4 0	1,553	0 2 5
30	Máyavaram ...				1				220 0 0		3 14 0	223 14 0	...	...	...	223 14 0	...	223 14 0	1,061	0 3 4
31	Negapatam ...				1	1			312 0 0		209 2 11	521 2 11	...	...	...	521 2 11	...	521 2 11	1,699	0 4 11
32	Nellore ...				1				168 0 0		5 8 0	173 8 0	...	...	...	173 8 0	...	173 8 0	771	0 3 7
33	Ongole ...					1			117 14 11			117 14 11	...	...	...	117 14 11	...	117 14 11	304	0 6 2
34	Ootacamund ...				1				276 0 0		35 12 0	311 12 0	...	...	...	311 12 0	...	311 12 0	600	0 8 4
35	Palamcottah ...				1				180 0 0		31 1 6	211 1 6	...	...	...	211 1 6	...	211 1 6	525	0 6 5
36	Pálghat ...				1	1			300 0 0		22 13 7	322 13 7	...	...	...	322 13 7	...	322 13 7	1,420	0 3 8
37	Rajahmundry ...				1				237 6 8		92 7 9	429 14 5	...	...	...	429 14 5	...	429 14 5	1,743	0 3 11
38	Salem ...				1	2			350 0 8		5 8 0	355 8 8	...	...	...	355 8 8	...	355 8 8	1,695	0 3 4
39	Srírangam ...				1				180 0 0		30 15 0	210 15 0	...	...	...	210 15 0	...	210 15 0	402	0 8 5
40	Tanjore ...				1	2			355 0 0		0 10 0	355 10 0	...	...	...	355 10 0	...	355 10 0	1,936	0 2 11
41	Tellicherry ...				1	2	1		508 0 0		150 0 0	658 0 0	...	...	...	658 0 0	...	658 0 0	1,821	0 5 9
42	Tinnevelly ...				1	1			298 4 0		66 1 6	364 5 6	...	...	...	364 5 6	...	364 5 6	857	0 6 10
43	Trichinopoly ...				1	3	2		839 12 0		130 0 0	969 12 0	...	...	...	969 12 0	...	969 12 0	3,337	0 4 8
44	Tuticorin ...				1				175 0 0		22 0 3	197 0 3	...	...	...	197 0 3	...	197 0 3	492	0 6 5
45	Vellore ...					3			380 0 10		46 0 9	426 1 7	...	...	...	426 1 7	...	426 1 7	1,337	0 5 1
46	Vizagapatam ...				1	1			226 12 5		137 14 0	364 10 5	...	...	...	364 10 5	...	364 10 5	1,579	0 3 8
47	Vizianagrum ...				1				180 0 0		40 2 0	220 2 0	...	...	...	220 2 0	...	220 2 0	726	0 4 10
48	Wálajápet ...					1			108 0 0		1 14 0	109 14 0	...	...	...	109 14 0	...	109 14 0	160	0 11 0
	Total of Municipalities ...	...	1	...	47	43	14	1	16,867 13 5	191 11 5	6,814 0 6	23,873 9 4	...	...	...	23,873 9 4	...	23,873 9 4	96,396	0 4 0
	Grand Total ...	1	34	15	255	397	124	49	149,021 15 1	21,951 6 7	12,930 4 8	1,83,903 10 4	...	21,058 8 11	1,37,894 5 5	23,873 9 4	1,077 2 8	1,83,903 10 4	696,635	0 4 3*

* Inclusive of the pay and allowances of the Inspector of Vaccination and Deputy Sanitary Commissioner.

B—DISPENSARY VACCINATION.

STATEMENT No. III *showing Dispensary Vaccination in the Madras Presidency during the calendar year* 1884.

Districts.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.	
						Successful.						
					Total.	Under 1 year.	Above 1 and under 6 years.	Total of all ages.	Total.	Successful.	Primary.	Revaccination.
1	2	3	4	5	6	7	8	9	10	11	12	13
Anantapur district.												
Anantapur	...	...	44	...	38	11	15	33	6	6	86·8	100·0
Dharmavaram ...	...	...	...	...	...	...	...	...	...	...	...	...
Gooty	...	...	155	...	147	40	65	125	8	2	85·0	25·0
Hindupur	...	...	11	...	11	5	4	9	...	...	81·8	...
Kalyándrúg	...	...	176	...	176	44	86	159	...	...	90·3	...
Penukonda	...	...	99	...	99	36	33	77	...	...	77·7	...
Tadpatri	...	...	81	...	81	35	32	76	...	...	93·8	...
Uravakonda	...	...	231	...	231	45	137	198	...	...	85·7	...
Total ...	...	...	797	...	783	216	372	677	14	8	86·4	57·1
Bellary district.												
Ádóni	...	...	78	...	78	50	25	75	...	...	96·1	...
Álúr	...	...	32	...	28	...	8	17	4	2	60·7	50·0
Bellary	...	...	21	...	21	10	4	19	...	...	90·4	...
Do. branch ...	...	...	46	...	40	26	10	37	6	6	92·5	100·0
Hadagally	...	...	10	...	10	3	4	8	...	...	80·0	...
Harpanahalli ...	...	...	114	...	114	47	52	114	...	...	100·0	...
Hospet	...	...	62	...	57	20	22	52	5	1	91·2	20·0
Kampli	...	...	37	...	37	12	13	35	...	...	94·5	...
Kúdligi	...	...	38	...	38	10	19	33	...	...	86·8	...
Ráyadrug	...	...	41	...	40	11	18	34	1	1	85·0	100·0
Sandúr	...	...	78	...	64	9	20	33	14	7	51·5	50·0
Siruguppa	...	...	17	...	17	12	4	16	...	...	94·1	...
Total ...	...	...	574	...	544	210	199	473	30	17	86·9	56·6
Chingleput district.												
Chingleput	...	...	165	...	124	4	58	78	41	...	62·9	...
Conjeeveram	...	...	88	...	88	2	36	75	...	...	85·2	...
Madurántakam ...	...	...	251	...	122	18	44	83	129	32	68·0	24·8
Nágalápuram	...	...	65	...	65	12	24	47	...	...	72·3	...
Ponnéri	...	...	118	...	84	17	40	63	34	12	75·0	35·2
Poonamallee	...	...	85	...	85	...	36	53	...	...	62·3	...
Saidápet	...	...	400	...	392	18	193	228	8	4	58·1	50·0
Sathiavadu	...	...	72	...	72	15	26	46	...	...	63·8	...
St. Thomas' Mount ...	...	...	9	...	9	...	5	9	...	...	100·0	...
Sembium	...	...	134	...	129	18	70	116	5	5	89·9	50·0
Sríperumbudur ...	...	...	160	...	160	5	49	113	...	...	70·6	...
Tirupórúr	...	...	154	...	154	6	84	142	...	...	92·2	...
Tiruvallúr	...	...	115	...	86	6	50	66	29	9	76·7	31·0
Utramarur	...	...	167	...	141	24	56	82	26	15	58·1	57·6
Total ...	...	...	1,983	...	1,711	145	771	1,201	272	77	70·1	28·3
Coimbatore district.												
Aravakurchi	...	...	30	...	28	6	17	24	2	1	85·7	50·0
Bhavání	...	...	77	...	77	23	48	73	...	...	94·8	...
Coimbatore	...	...	27	...	27	1	17	25	...	...	92·5	...
Do. branch ...	...	...	50	...	50	23	17	50	...	...	100·0	...
Dhárápuram	...	...	55	...	54	18	26	52	1	1	96·2	100·0
Erode	...	...	115	...	114	107	...	109	1	1	95·6	100·0
Karúr	...	...	65	...	65	9	31	60	...	...	92·3	...
Kollegál	...	...	32	...	32	17	11	30	...	...	93·7	...
Mettupálaiyam ...	...	...	156	...	156	39	99	138	...	...	88·4	...
Palladam	...	...	45	...	45	2	27	37	...	...	82·2	...
Polláchi	...	...	91	...	91	12	31	70	...	...	76·9	...
Satyamangalam ...	...	...	91	...	91	48	34	91	...	...	100·0	...
Udamalpet	...	...	81	...	81	18	32	55	...	...	67·9	...
Total ...	...	...	915	...	911	323	390	814	4	3	89·3	75·0

B—DISPENSARY VACCINATION.

STATEMENT No. III *showing Dispensary Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Districts.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.	
						Successful.						
					Total.	Under 1 year.	Above 1 and under 6 years.	Total of all ages.	Total.	Successful.	Primary.	Revaccination.
1	2	3	4	5	6	7	8	9	10	11	12	13
Cuddapah district.												
Badvél	...	...	108	...	106	6	56	85	2	2	80·1	100·0
Cuddapah	...	...	85	...	85	1	3	67	...	...	78·8	...
Jammalamadugu ...	...	...	173	...	173	28	49	94	...	...	54·3	...
Kadiri	...	...	93	...	90	40	28	72	3	2	80·0	66·6
Madanapalle	...	...	118	...	97	31	35	81	21	5	83·5	23·8
Pílér	...	...	71	...	70	8	29	41	1	...	58·5	...
Proddutur	...	...	92	...	92	15	31	64	...	...	69·5	...
Pulivendla	...	...	71	...	71	1	15	44	...	...	61·9	...
Pullampet	...	...	61	...	61	11	22	56	...	...	91·8	...
Ráyachóti	...	...	62	...	62	9	28	42	...	...	67·7	...
Total ...	...	...	934	...	907	150	296	646	27	9	71·2	33·3
Ganjam district.												
Aska	...	...	177	...	177	6	111	158	...	...	89·2	...
Berhampore	...	...	144	...	143	5	70	130	1	...	90·9	...
Calingapatam ...	...	...	105	...	105	8	59	82	...	...	78·0	...
Chicacole	...	...	62	...	62	6	28	49	...	...	79·0	...
Ganjam	...	...	222	...	221	27	142	205	1	...	92·7	...
Gopálpur	...	...	47	...	44	7	4	22	3	...	50·0	...
Parlákimedi	...	...	195	...	193	28	122	158	2	2	81·8	100·0
Sómpet	...	...	170	...	170	45	119	169	...	...	99·4	...
Suradá	...	...	13	...	13	2	3	7	...	...	53·8	...
Tekkali, Raghunáthapuram	...	...	46	...	46	1	15	30	...	...	65·2	...
Total ...	...	...	1,181	...	1,174	135	673	1,010	7	2	86·0	28·5
Godávari district.												
Amalápuram	...	...	315	...	308	2	93	222	7	4	72·0	57·1
Badráchallam ...	...	...	107	...	88	21	43	81	19	10	92·0	52·6
Chintalapudi	...	...	167	...	140	2	63	99	27	4	70·7	14·7
Cocanada and Cocanada (Seamen's Hospital)	...	...	5	...	5	...	5	5	...	...	100·0	...
Ellore	...	...	...	...	...	...	...	...	...	...	...	...
Narsápur	...	...	224	...	219	7	54	145	5	5	66·2	100·0
Peddápuram	...	...	667	...	666	56	396	633	1	1	95·0	100·0
Pithápuram	...	...	309	...	308	5	135	279	1	1	90·5	100·0
Rajahmundry ...	...	...	125	...	125	4	45	84	...	...	67·2	...
Rámachandrapuram ...	...	...	360	...	360	15	203	297	...	...	82·5	...
Sivakodu	...	...	165	...	163	5	54	128	2	2	78·5	50·0
Tállapúdi	...	...	338	...	338	33	206	294	...	...	86·9	...
Tanuku	...	...	234	...	214	8	100	175	20	12	81·7	60·0
Tuni	...	...	190	...	174	5	70	144	16	5	82·7	31·2
Yeleswaram	...	...	108	...	108	16	66	88	...	...	81·4	...
Total ...	...	...	3,314	...	3,216	179	1,533	2,674	98	44	83·1	44·8
Kistna district.												
Bezwáda	...	...	93	...	92	7	21	43	1	...	46·7	...
Challapalle	...	...	59	...	59	1	36	55	...	...	93·2	...
Chiralla	...	...	38	...	38	...	12	21	...	...	55·2	...
Dáchepalle	...	...	59	...	58	3	33	55	1	1	94·8	100·0
Gudiváda	...	...	51	...	49	2	22	35	2	...	71·4	...
Guntúr	...	...	18	...	17	...	8	12	1	...	70·5	...
Jaggayapet	...	...	63	...	58	13	20	40	5	...	68·9	...
Karempoody	...	...	73	...	73	5	33	59	...	...	80·8	...

B—DISPENSARY VACCINATION.

STATEMENT No. III *showing Dispensary Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Districts.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.	
						Successful.						
					Total.	Under 1 year.	Above 1 and under 6 years.	Total of all ages.	Total.	Successful.	Primary.	Revaccination.
1	2	3	4	5	6	7	8	9	10	11	12	13
Kistna district—(Continued).												
Masulipatam	...	...	41	...	33	...	7	21	8	2	63·6	25·0
Narasaraopet ...	...	...	77	...	77	6	32	62	...	...	80·5	...
Nûzvid	...	...	63	...	60	19	30	55	3	3	91·6	100·0
Répalle	...	...	66	...	66	9	28	50	...	...	75·7	...
Sattenapalle	...	...	49	...	49	5	25	41	...	...	83·6	...
Tiruvúr	...	...	135	...	121	...	44	98	14	3	80·9	21·4
Tumercode	...	...	46	...	46	3	19	30	...	...	65·2	...
Vinukonda	...	...	118	...	116	4	61	87	2	2	75·0	100·0
Total ...	...	...	1,049	...	1,012	77	431	764	37	11	75·4	29·7
Kurnool district.												
Atmakúr	...	...	80	...	75	9	28	49	5	4	65·3	80·0
Cumbum	...	...	41	...	41	4	23	37	...	...	90·2	...
Kurnool	...	...	10	...	9	1	2	4	1	1	44·4	100·0
Márkápur	...	...	88	...	87	11	49	72	1	...	82·7	...
Nandyál	...	...	91	...	91	20	29	59	...	...	64·8	...
Owk	...	...	103	...	103	10	34	61	...	...	59·2	...
Pattikonda	...	...	56	...	56	14	19	37	...	...	66·0	...
Sirvel	...	...	40	...	40	4	13	34	...	...	85·0	...
Total ...	...	...	509	...	502	73	197	353	7	5	70·3	71·4
Madras town.												
Black Town, North Side	...	...	...	...	...	...	...	...	...	...	...	...
Native Infirmary ...	...	...	...	...	...	...	...	...	...	...	...	...
Triplicane	...	...	1	...	...	...	...	...	1	1	...	100·0
Hospital for Women and Children, Madras.	...	...	65	...	15	7	4	14	50	46	93·3	92·0
Total ...	...	...	66	...	15	7	4	14	51	47	93·3	92·1
Madura district.												
Ampucótta	...	...	2	...	2	...	1	1	...	...	50·0	...
Devakóta	...	...	26	...	26	5	14	25	...	...	96·1	...
Dindigul	...	...	...	...	...	...	...	...	...	...	...	...
Kilakarai	...	...	7	...	7	1	4	5	...	...	71·4	...
Kodaikánal	...	...	15	...	6	1	3	4	9	6	66·6	66·6
Madura and Madura branch	...	...	7	...	7	3	1	7	...	...	100·0	...
Palni	...	...	41	...	41	5	33	40	...	...	97·5	...
Paramakudi	...	...	...	...	...	...	...	...	...	...	...	...
Periyakulam	...	...	36	...	36	8	22	32	...	...	88·8	...
Pámban	...	...	35	...	35	3	6	10	...	...	28·5	...
Rajasingamangalam ...	...	...	20	...	20	1	14	20	...	...	100·0	...
Ramesvaram ...	...	...	1	...	1	1	...	1	...	...	100·0	...
Ramnad	...	...	113	...	87	27	22	73	26	18	83·9	69·2
Sivaganga	...	...	40	...	40	9	18	32	...	...	80·0	...
Tirumangalam ...	...	...	10	...	10	2	6	10	...	...	100·0	...
Tirupuvanam ...	...	...	5	...	3	1	...	3	2	1	100·0	50·0
Tirushuli	...	...	69	...	66	12	25	44	3	...	66·6	...
Usilamputty	...	...	21	...	21	11	10	21	...	...	100·0	...
Uttamapolliem ...	...	...	38	...	38	7	19	26	...	...	68·4	...
Total ...	...	...	486	...	446	97	198	354	40	25	79·3	62·5

B—DISPENSARY VACCINATION.

STATEMENT No. III *showing Dispensary Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Districts.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.	
						Successful.						
					Total.	Under 1 year.	Above 1 and under 6 years.	Total of all ages.	Total.	Successful.	Primary.	Revaccination.
1	2	3	4	5	6	7	8	9	10	11	12	13
Malabar district.												
Badagara	...	...	102	...	102	...	23	51	...	...	50·0	...
Cannanore	...	...	2	...	2	...	2	2	...	...	100·0	...
Calicut	...	...	4	...	4	...	...	2	...	...	50·0	...
Cochin	...	...	199	...	162	16	49	93	37	9	57·4	...
Manantoddy	...	...	64	...	28	...	4	22	36	10	24·3	27·7
Manjeri	...	...	123	...	123	...	7	88	...	...	71·5	...
Pálghat	...	...	40	...	38	...	...	3	2	...	7·8	...
Palliport Lazareth ...	...	...	89	...	89	...	47	53	...	...	59·5	...
Ponáni	...	...	105	...	105	1	45	63	...	...	60·0	...
Tellicherry	...	...	18	...	18	...	...	10	...	...	55·5	...
Vayitri	...	...	9	...	9	...	4	5	...	...	55·5	...
Total ...	...	...	755	...	680	17	181	392	75	19	57·6	25·3
Nellore district.												
Addanki	...	...	...	...	...	...	...	...	...	...	...	...
Atmakúr	...	...	73	...	78	3	26	46	...	...	63·0	...
Gúdúr	...	...	68	...	68	4	61	65	...	...	95·5	...
Kandukúr	...	...	119	...	119	5	79	108	...	...	90·7	...
Kávali	...	...	201	...	201	12	105	176	...	...	87·5	...
Nellore	...	...	124	...	124	2	6	57	...	...	45·9	...
Do. branch ...	...	...	7	...	7	...	1	5	...	...	71·4	...
Ongole	...	...	29	...	29	3	11	27	...	...	93·1	...
Rápúr	...	...	33	...	29	2	11	14	4	3	48·2	75·0
Udayagiri	...	...	95	...	95	12	55	95	...	...	100·0	...
Venkatagiri	...	...	8	...	8	...	5	6	...	...	75·0	...
Total ...	...	...	757	...	753	43	360	599	4	3	79·5	75·0
Nílgiri district.												
Coonoor	...	...	42	...	14	7	2	9	28	25	64·2	89·2
Devala	...	...	86	...	67	25	30	65	19	16	97·0	84·2
Gúdalór	...	...	21	...	21	4	2	11	...	...	52·3	...
Kótagiri	...	...	23	...	18	1	...	1	5	2	5·5	40·0
Ootacamund	...	...	13	...	13	2	3	13	...	...	100·0	...
Total ...	...	...	185	...	133	39	37	99	52	43	74·4	82·6
North Arcot district.												
Arcot	...	...	18	...	18	5	12	17	...	...	94·4	...
Arni	...	...	108	...	106	22	34	72	2	...	67·9	...
Chittoor	...	...	146	...	136	11	91	134	10	9	98·5	90·0
Gudiyatam	...	...	53	...	49	4	28	36	4	3	73·4	75·0
Kálahasti	...	...	55	...	55	15	19	54	...	...	98·1	...
Kuppam	...	...	13	...	13	3	8	13	...	...	100·0	...
Plamaner	...	...	52	...	52	1	38	46	...	...	88·4	...
Pólúr	...	...	215	...	215	34	128	202	...	...	93·9	...
Raneepet	...	...	56	...	56	5	19	45	...	...	80·3	...
Tirupati	...	...	67	...	67	...	62	62	...	...	92·5	...
Vellore	...	...	19	...	16	6	5	15	3	3	93·7	100·0
Venkatagiricottah ...	...	...	32	...	30	3	14	23	2	1	76·6	50·0
Wálajápet	...	...	50	...	50	9	22	39	...	...	78·0	...
Wandiwash	...	...	71	...	66	13	24	53	5	3	80·3	60·0
Total ...	...	...	955	...	929	131	504	811	26	19	87·2	73·0
Salem district.												
Atúr	...	...	128	...	128	36	39	98	...	...	76·5	...
Dharmapuri	...	...	48	...	48	15	17	42	...	...	87·5	...
Harúr	...	...	73	...	73	24	44	72	...	...	98·6	...

B—DISPENSARY VACCINATION.

STATEMENT No. III *showing Dispensary Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Districts.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.	
					Total.	Successful.			Total.	Successful.	Primary.	Revaccination.
						Under 1 year.	Above 1 and under 6 years.	Total of all ages.				
1	2	3	4	5	6	7	8	9	10	11	12	13
Salem district—(Continued).												
Hosúr	...	...	102	...	102	...	...	18	...	...	17·6	...
Krishnagiri	...	...	58	...	58	29	27	57	...	...	98·2	...
Námakal	...	...	91	...	89	10	68	85	2	...	95·5	...
Salem	...	...	15	...	15	...	13	15	...	...	100·0	...
Sankaridrug	...	...	54	...	54	5	24	48	...	...	88·8	...
Tirupatúr	...	...	79	...	79	39	12	51	...	...	64·5	...
Úttankarai	...	...	45	...	45	...	40	40	...	...	88·8	...
Vániyambádi ...	...	...	85	...	85	3	36	50	...	...	58·8	...
Yercaud	...	...	45	...	28	3	11	21	17	9	75·0	52·9
Total ...	...	...	823	...	804	164	331	597	19	9	74·2	47·3
South Arcot district.												
Chengam	...	...	6	...	6	...	4	6	...	...	100·0	...
Chidambaram ...	...	...	46	...	46	...	34	43	...	...	93·4	...
New Town, Cuddalore.	...	...	43	...	43	8	12	28	...	...	65·1	...
Old Town, do. ...	...	...	47	...	44	8	11	27	3	3	61·3	100·0
Kallakurchi	...	...	56	...	56	25	21	51	...	...	91·0	...
Panruti	...	...	43	...	42	2	20	38	1	1	90·4	100·0
Tindivanam	...	...	37	...	25	...	7	16	12	5	64·0	41·6
Tirukoilúr	...	...	101	...	98	10	59	79	3	1	80·6	33·3
Tiruvannámalai ...	...	...	31	...	31	1	24	28	...	...	90·3	...
Villupuram	...	...	92	...	92	27	38	80	...	...	86·9	...
Vriddáchalam ...	...	...	17	...	17	4	4	9	...	...	52·9	...
Total ...	...	...	519	...	500	85	234	405	19	10	81·0	52·6
South Canara district.												
Amindevi Island ...	...	...	41	...	41	...	...	...	...	...	...	...
Bantwal	...	...	55	...	47	1	21	35	8	2	74·4	25·0
Karkal	...	...	45	...	45	...	6	34	...	...	75·5	...
Kásaragód	...	...	18	...	18	...	2	16	...	...	88·8	...
Kundapur	...	...	51	...	36	2	4	28	15	6	77·7	40·0
Mangalore	...	...	51	...	48	3	5	33	3	2	68·7	66·6
Puttur	...	...	70	...	62	...	18	56	8	7	90·3	87·5
Udipi	...	...	90	...	89	6	22	68	1	1	76·4	100·0
Total ...	...	...	421	...	386	12	78	270	35	18	69·9	51·4
Tanjore district.												
Ammápet	...	...	111	...	109	8	68	88	2	1	80·7	50·0
Arantángi	...	...	142	...	142	12	106	137	...	...	96·4	...
Avadiarkoil	...	...	161	...	161	28	79	140	...	...	86·9	...
Ayyampett	...	...	123	...	123	...	58	95	...	...	77·2	...
Karanthattangudi ...	...	...	48	...	48	4	37	45	...	...	93·7	...
Kodavassel	...	...	112	...	112	27	50	108	...	...	96·4	...
Kumbakónam ...	...	...	47	...	47	6	20	38	...	...	80·8	...
Do. branch.	...	...	37	...	37	1	13	31	...	...	83·7	...
Kuttanallur	...	...	66	...	50	6	22	32	16	6	64·0	37·5
Madukur	...	...	192	...	186	7	102	138	6	3	74·1	50·0
Manamalkudi ...	...	...	152	...	152	3	91	138	...	...	90·7	...
Manamboochavidy ...	...	...	65	...	65	...	34	63	...	...	96·9	...
Mannárgudi	...	...	80	...	80	9	28	68	...	...	85·0	...
Máyavaram	...	...	57	...	57	1	20	27	...	...	47·3	...
Minpassal	...	...	67	...	65	1	20	38	2	2	58·4	100·0
Mutupet	...	...	141	...	140	4	67	121	1	1	86·4	100·0
Nannilam	...	...	80	...	69	1	39	51	11	5	73·9	45·4
Nagore branch ...	...	...	63	...	63	10	37	59	...	...	93·6	...

B—DISPENSARY VACCINATION.

STATEMENT No. III *showing Dispensary Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Districts.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination.				Revaccination.		Percentage of successful cases.	
					Total.	Successful.			Total.	Successful.	Primary.	Revaccination.
						Under 1 year.	Above 1 and under 6 years.	Total of all ages.				
1	2	3	4	5	6	7	8	9	10	11	12	13
Tanjore district—(Continued).												
Negapatam	...	...	65	...	60	6	25	47	5	2	78·3	40·0
Nídámangalam ...	...	...	102	...	102	1	68	94	...	...	92·1	...
Orthanaud Chuttrum.	...	...	175	...	131	20	63	94	44	25	71·7	56·8
Pápanásam	...	...	146	...	146	25	77	124	...	...	84·9	...
Patukóta	...	...	229	...	229	14	155	205	...	...	89·5	...
Rajamadam	...	...	107	...	102	8	33	76	5	3	74·5	60·0
Rajah Mirazdar Hospital, Tanjore ...	...	...	27	...	27	3	17	26	...	...	96·2	...
Shiyáli	...	...	95	...	85	17	42	72	10	5	84·7	50·0
Tirukattupalli ...	...	...	85	...	81	3	31	54	4	4	66·6	100·0
Tiruturaipúndi ...	...	...	77	...	73	2	36	62	4	4	84·9	100·0
Tiruvadamarudúr ...	...	...	74	...	74	5	41	56	...	...	75·6	...
Tiruvádi	...	...	162	...	161	6	102	134	1	...	83·2	...
Tiruválúr	...	...	66	...	66	5	49	66	...	...	100·0	...
Tranquebar	...	...	39	...	36	3	19	32	3	...	88·8	...
Do. branch ...	...	...	35	...	33	3	10	23	2	1	69·6	50·0
Valangyman	...	...	160	...	160	1	88	119	...	...	74·3	...
Vallam	...	...	181	...	181	...	137	139	...	...	76·7	...
Vadarnium	...	...	93	...	93	6	69	84	...	...	90·3	...
Velangulam Chuttrum Dispensary	...	...	74	...	63	4	18	40	11	4	63·4	36·3
Total ...	...	...	3,736	...	3,609	260	1,971	2,964	127	66	82·1	51·9
Tinnevelly district.												
Ambásamudram ...	...	...	90	...	86	...	32	65	4	2	75·5	50·0
Edyengoody ...	...	...	119	...	119	5	67	117	...	...	98·3	...
Megnánapuram ...	...	...	70	...	68	...	19	26	2	...	38·2	...
Nágalápuram ...	...	...	121	...	119	10	41	91	2	2	76·4	100·0
Nángunéri	...	...	101	...	101	2	44	79	...	...	78·2	...
Nazareth	...	...	22	...	16	2	4	6	6	3	37·5	50·3
Otapidáram	...	...	52	...	49	14	18	37	3	1	75·5	33·3
Palamcottah	...	...	57	...	57	...	5	40	...	...	70·1	...
Rádhápuram	...	...	22	...	22	...	8	16	...	...	72·7	...
Sankaranainárkoil ...	...	...	107	...	107	9	49	91	...	...	85·0	...
Sátúr	...	...	49	...	49	2	18	41	...	...	83·6	...
Sawyerpuram ...	...	...	69	...	60	1	35	57	9	7	95·0	77·7
Sivakási	...	...	33	...	32	4	10	16	1	...	50·0	...
Srívaikuntham ...	...	...	57	...	57	3	24	49	...	...	85·9	...
Srívilliputur	...	...	122	...	122	7	39	69	...	...	56·5	..
Tenkási	...	...	145	...	144	3	53	109	1	...	75·6	...
Tinnevelly	...	...	21	...	19	4	5	13	2	2	68·4	100·0
Tirukarangudy ...	...	...	74	...	72	4	29	51	2	1	70·8	50·0
Tuticorin	...	...	35	...	35	5	15	23	...	...	65·7	...
Vírakeralampudur ...	...	...	39	...	39	4	14	28	...	...	71·7	...
Virudupati	...	...	40	...	38	5	7	29	2	1	76·3	50·0
Total ...	...	...	1,445	...	1,411	84	536	1,053	34	19	74·6	55·8
Trichinopoly district.												
Ariyalúr	...	...	52	...	52	9	25	38	...	...	73·0	...
Erungalore	...	...	62	...	57	7	39	51	5	1	89·4	20·0
Lálgudy	...	...	47	...	47	3	18	29	...	...	61·7	...
Musiri	...	...	82	...	82	...	61	82	...	...	100·0	...
Srírangam	...	...	15	...	15	...	2	13	...	...	86·6	...
Trichinopoly	...	...	22	...	21	...	7	21	1	...	100·0	...
Trichinopoly Leper's Hospital	...	...	...	...	...	...	...	...	...	...	...	...
Total ...	...	...	280	...	274	19	152	234	6	1	85·4	16·6

B—DISPENSARY VACCINATION.

STATEMENT No. III *showing Dispensary Vaccination in the Madras Presidency during the calendar year* 1884—(Continued).

Districts.	Number of dispensaries in each district to which a vaccinator is attached.	Average number of vaccinators attached to dispensaries during the year.	Total number of persons vaccinated.	Average number of persons vaccinated by each vaccinator.	Primary vaccination. Total.	Primary vaccination. Successful. Under 1 year.	Primary vaccination. Successful. Above 1 and under 6 years.	Primary vaccination. Successful. Total of all ages.	Revaccination. Total.	Revaccination. Successful.	Percentage of successful cases. Primary.	Percentage of successful cases. Revaccination.
1	2	3	4	5	6	7	8	9	10	11	12	13
Vizagapatam district.												
Anakápalle ...	...	...	55	...	54	1	23	54	1	1	100·0	100·0
Bimlipatam ...	...	...	...	...	...	...	...	...	...	...	...	...
Bobbili ...	...	...	86	...	78	10	41	78	8	8	100·0	100·0
Chipurupalle ...	...	...	15	...	13	2	6	13	2	2	100·0	100·0
Chódavaram ...	...	...	88	...	83	5	44	83	...	...	100·0	...
Gajapatinagar ...	...	...	36	...	36	3	27	35	...	...	97·2	...
Narsapatnam ...	...	...	45	...	38	...	9	38	6	4	97·4	66·6
Pálkonda ...	...	...	156	...	156	...	69	131	...	...	83·9	...
Párvatipúr ...	...	...	86	...	86	...	70	76	...	...	88·3	...
Sálúr ...	...	...	219	...	232	64	130	222	7	4	95·6	57·1
Srunkuravarapukotta. ...	...	...	25	...	25	1	20	25	...	...	100·0	...
Vizagapatam ...	...	...	3	...	3	...	2	3	...	...	100·0	...
Yellamanchili ...	...	...	56	...	56	3	14	39	...	...	69·6	...
Total ...	...	...	885	...	861	89	454	797	24	19	92·5	79·1
Grand Total ...	...	...	22,569	...	21,561	2,555	9,802	17,201	1,008	474	79·7	47·0
Secunderabad Civil Dispensary ...	...	...	87	...	87	29	37	70	...	...	80·4	...

COMPARATIVE STATEMENT No. IV *showing the number of persons primarily vaccinated and the number of those persons who were successfully vaccinated in the Madras Presidency in each of the undermentioned years.*

Establishment.	Persons primarily vaccinated.													
	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.	Total number.	Number successfully vaccinated.
	Calendar years ended 31st December													
	1878.		1879.		1880.		1881.		1882.		1883.		1884.	
Government vaccinators * ...	5,300	4,853	5,958	5,530	8,228	7,746	10,194	9,663	9,136	8,741	16,887	16,319	12,386	12,033
Local fund do. ...	402,301	363,141	367,639	333,794	543,037	486,219	470,605	435,696	526,329	493,415	591,352	553,890	617,475	580,624
Cantonment do. ...	5,493	4,990	5,007	4,601	5,286	4,786	5,213	4,941	3,446	3,207	3,734	3,461	3,434	3,159
Native States do. ...	5,689	4,943	3,605	3,104	4,518	3,983	3,635	3,286	3,838	3,652	4,751	4,436	4,506	4,291
Municipalities ...	80,607	56,543	61,556	51,788	73,214	63,116	80,286	70,980	83,533	75,950	91,665	84,452	97,765	88,281
Private vaccinators ...	160	154	171	145	1,056	993	137	117	45	43	...	...	...	...
Railway Apothecaries ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Dispensaries ...	397	251	4,897	3,980	9,577	8,215	9,890	8,193	10,154	8,371	12,579	10,185	21,561	17,201
Medical Subordinates ...	16,482	9,776	13,273	7,806	8,779	5,735	9,646	5,742	10,049	7,915	9,633	6,271	8,936	5,280
Army — European ...	287	169	849	639	1,710	1,294	1,916	1,382	1,987	1,357	1,940	1,158	2,640	1,737
Army — Native ...	4,617	2,859	4,818	3,748	3,264	2,389	4,372	3,093	4,414	3,374	4,121	3,212	4,415	3,655
Total ...	521,333	447,679	467,773	415,135	658,669	584,476	595,894	543,093	652,931	605,125	736,662	683,384	773,118	716,261

* Work done by vaccinators employed in the Hill Tracts of Ganjam, Jeypore, Gudem and Bhadráchalam.

STATEMENT No. I *showing the particulars of vaccination in the military cantonments of the Madras Presidency during the calendar year* 1884.

Number.	Military cantonments.	Population.	Average population per square mile.	Average number of vaccinators employed throughout the season.	Total number of persons vaccinated.			Average number of persons vaccinated by each vaccinator.	Primary vaccination.					Revaccination.		Percentage of success.		Persons successfully vaccinated per 1,000 of population.	Average annual number of persons successfully vaccinated during previous 5 years.		Average annual number of deaths from small-pox during previous 5 years.	
									Successful.													
					Males.	Females.	Total.		Under 1 year.	Over 1 and under 6 years.	Total of all ages.	Total.		Total.	Successful.	Primary vaccination.	Revaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
1	2	3	4	5	6			7	8	9	10	11		12	13	14	15	16	17	18	19	20
1	Bangalore	79,487	...	2	1,012	753	Total. 1,765	882	1,545	1,013	225	1,435		220	151	92·8	68·6	19·9	1,415	17·8	109	2·1
2	Secunderabad	52,000	...	2	1,057	1,336	2,393	1,196	1,889	1,047	292	1,724		504	345	91·2	68·4	39·7	2,077	39·9	25	0·4
	Total ...	131,487	...	4	2,069	2,089	4,158	1,039	3,434	2,060	517	3,159		724	496	91·9	68·5	27·7	3,492	26·5	194	1·4

STATEMENT No. II *showing the cost of the Vaccine Department in the military cantonments of the Madras Presidency during the calendar year* 1884.

| Number. | Military cantonments. | Establishment. | | | | | | | | | Expenditure. | | | | | | | | | | | | |

I.

Births registered in the districts of the Madras Presidency during the year 1884.

1	2			3	4			5			6			7	8	9
Number.	Populations (exclusive of Europeans and Eurasians) according to the census of 1881.			Districts.	Population (exclusive of Europeans and Eurasians) for which returns were received.			Number of births registered (exclusive of Europeans and Eurasians).			Ratio of births per 1,000 of population.			Number of males born to every 100 females born.	Excesses of births over deaths per 1,000 of population.	Excesses of deaths over births per 1,000 of population.
	Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.			
1	869,257	879,996	* 1,749,253	Ganjam	501,917	518,094	1,020,011	13,376	12,271	25,647	13·1	12·0	25·1	109·0	10·6	...
2	1,254,536	1,230,041	* 2,484,577	Vizagapatam	731,879	724,204	1,456,083	19,626	18,684	38,310	13·4	12·8	26·3	105·0	10·7	...
3	888,567	902,283	* 1,790,850	Godávari	888,567	902,283	1,790,850	18,933	18,106	37,039	10·5	10·1	20·6	104·5	...	3·6
4	780,510	767,845	1,548,355	Kistna	780,510	767,845	1,548,355	24,884	24,344	49,228	16·0	15·7	31·7	102·2	5·2	...
5	615,154	604,729	1,219,883	Nellore	595,982	587,150	1,183,132	14,006	13,286	27,292	11·8	11·2	23·0	105·4	8·5	...
6	192,066	197,918	389,984	Madras	192,066	197,918	389,984	8,072	7,625	15,697	20·6	19·5	40·2	105·8	9·2	...
7	491,085	487,439	978,524	Chingleput	491,085	487,439	978,524	20,786	19,729	40,515	21·2	20·1	41·4	105·3	12·6	...
8	905,516	908,763	1,814,279	South Arcot	905,516	908,763	1,814,279	23,120	22,709	45,829	12·7	12·5	25·2	101·8	1·6	...
9	586,127	628,358	1,214,485	Trichinopoly	586,127	628,358	1,214,485	18,432	17,795	36,227	15·1	14·6	29·8	103·5	6·1	...
10	1,026,070	1,103,468	2,129,538	Tanjore	1,026,070	1,103,468	2,129,538	31,195	29,311	60,506	14·6	13·7	28·4	106·4	...	7·7
11	1,032,353	1,135,774	2,168,127	Madura	625,845	667,984	1,293,829	21,334	19,900	41,234	16·4	15·3	31·8	107·2	8·9	...
12	825,508	873,548	1,699,056	Tinnevelly	825,508	873,548	1,699,056	24,561	23,195	47,756	14·4	13·6	28·1	105·8	...	3·5
13	359,299	349,919	709,218	Kurnool	359,299	349,919	709,218	14,001	13,227	27,228	19·7	18·6	38·3	105·8	16·5	...
14	569,792	550,922	1,120,714	Cuddapah	569,792	550,922	1,120,714	19,108	18,638	37,746	17·0	16·6	33·6	102·5	16·9	...
15	678,904	657,113	1,336,017	Bellary	678,904	657,113	1,336,017	16,063	15,585	31,648	21·0	20·3	41·3	103·0	19·9	...
16				Anantapur				12,036	11,572	23,608				104·0		...
17	907,059	910,194	1,817,253	North Arcot	906,764	909,928	1,816,692	27,815	27,018	54,833	15·3	14·8	30·1	102·9	10·9	...
18	778,145	820,825	1,598,970	Salem	778,145	820,825	1,598,970	28,164	27,118	55,282	17·6	16·9	34·5	103·8	16·6	.
19	806,530	850,614	1,657,144	Coimbatore	806,530	850,614	1,657,144	22,315	21,304	43,619	13·4	12·8	26·3	104·7	7·2	.
20	49,322	39,002	88,324	Nílgiris	49,322	39,002	88,324	801	713	1,514	9·0	8·0	17·1	112·3	0·9	...
21	472,088	487,179	959,267	South Canara	470,383	485,212	955,595	13,818	13,385	27,203	14·4	14·0	28·4	103·2	3·3	..
22	1,172,047	1,189,906	2,361,953	Malabar	1,166,917	1,184,235	2,351,152	30,662	28,758	59,420	13·0	12·2	25·2	106·6	4·4	..
	15,259,935	15,575,836	30,835,771	Total, Madras Presidency ...	13,937,128	14,214,824	28,151,952	423,108	404,273	827,381	15·0	14·3	29·3	104·6	6·2	..

* Including the Hill Tracts.

II.

Deaths registered in the districts of the Madras Presidency during the year 1884.

1	2	3	4	5			6	7			8		
Number.	Districts.	Area in square miles.	Average population per square mile.	Number of deaths registered (exclusive of Europeans, Eurasians and born dead).			Number of males, died to every 100 deaths of females.	Ratio of deaths per 1,000 of population.			Mean ratio of deaths per 1,000 during previous 5 years.		
				Males.	Females.	Total.		Males.	Females.	Total.	Males.	Females.	Total.
1	Ganjam	8,311	210·5	7,893	6,891	14,784	114·5	15·7	13·3	14·5	17·7	15·8	16·8
2	Vizagapatam	17,380	142·9	11,805	11,010	22,815	107·2	16·1	15·2	15·6	14·9	13·6	14·3
3	Gedávari	7,345	243·9	22,759	20,669	43,428	110·1	25·6	22·9	24·2	18·5	16·8	17·7
4	Kistna	8,471	182·7	21,384	19,789	41,173	108·0	27·3	25·7	26·5	18·2	17·3	17·8
5	Nellore	8,739	139·6	8,896	8,327	17,223	106·8	14·9	14·1	14·5	10·9	10·8	10·9
6	Madras	27	15,031·4	9,706	9,573	19,279	101·3	50·5	48·3	49·4	37·2	35·7	36·4
7	Chingleput	2,842	345·3	14,183	14,054	28,237	100·9	28·8	28·8	28·8	20·5	20·7	20·5
8	South Arcot	4,873	372·4	22,389	20,556	42,945	108·9	24·7	22·6	23·6	17·0	15·8	16·4
9	Trichinopoly	3,561	341·2	14,532	14,299	28,831	101·6	24·7	22·7	23·7	19·5	18·3	18·9
10	Tanjore	3,654	583·0	38,163	37,894	76,057	100·7	37·1	34·3	35·7	23·6	22·2	22·9
11	Madura	8,401	258·1	15,431	14,191	29,622	108·7	24·6	21·2	22·9	16·6	14·8	15·7
12	Tinnevelly	5,381	315·8	27,512	26,169	53,681	105·1	33·3	29·9	31·6	20·3	18·7	19·5
13	Kurnool	7,788	91·0	7,979	7,537	15,516	105·8	22·2	21·5	21·8	19·9	19·6	19·7
14	Cuddapah	8,745	128·1	9,447	9,362	18,809	100·9	16·5	16·9	16·7	17·5	17·9	17·7
15	Bellary	11,007	121·4	8,571	8,318	16,889	103·0	21·3	21·4	21·4	17·4	17·6	17·5
16	Anantapúr			5,907	5,797	11,704	101·8						
17	North Arcot	7,256	250·5	17,566	17,303	34,869	101·5	19·3	19·0	19·2	14·4	14·9	14·7
18	Salem	7,653	209·0	14,651	13,906	28,557	105·3	18·8	16·9	17·9	13·6	13·1	13·7
19	Coimbatore	7,842	211·3	16,152	15,482	31,634	104·3	20·0	18·2	19·1	14·1	12·5	13·3
20	Nílgiris	957	95·1	739	688	1,427	107·4	14·9	17·6	16·2	15·7	14·5	15·1
21	South Canara	3,902	245·9	12,130	11,821	23,951	102·6	25·7	24·3	25·1	20·8	18·6	19·6
22	Malabar	5,765	410·2	26,249	22,655	48,904	115·8	22·4	19·1	20·8	19·1	15·9	17·5
	Total, Madras Presidency ...	139,900	220·6	334,044	316,291	650,335	105·6	23·9	22·2	23·1	17·7	16·5	17·2

III.

Deaths registered in the districts of the Madras Presidency during each month of the year 1884.

1	2	3												4
Number.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total deaths registered during the year.
1	Ganjam	1,698	1,088	1,082	1,051	1,183	1,138	1,343	1,523	1,712	1,069	947	950	14,784
2	Vizagapatam	2,253	1,475	1,674	1,372	1,542	1,660	1,708	1,896	2,110	2,320	2,281	2,524	22,815
3	Godávari	2,999	2,096	2,129	2,469	2,827	3,168	3,942	4,178	4,195	4,212	4,954	6,259	43,428
4	Kistna	4,041	3,283	3,300	2,941	2,609	2,996	3,045	4,095	3,863	2,987	3,569	4,444	41,173
5	Nellore	2,028	1,301	1,324	1,197	1,372	1,340	1,322	1,171	1,445	1,459	1,508	1,756	17,223
6	Madras	2,290	2,546	2,345	1,534	1,203	995	1,051	1,433	1,702	1,086	1,425	1,669	19,279
7	Chingleput	2,953	2,449	2,274	1,925	1,905	1,881	2,322	2,314	2,344	2,255	2,647	2,968	28,237
8	South Arcot	5,486	3,511	2,591	2,455	2,549	2,590	3,646	3,258	3,081	3,332	4,112	6,334	42,945
9	Trichinopoly	4,200	2,396	1,775	1,642	1,804	1,746	2,133	2,015	2,049	2,219	2,811	4,041	28,831
10	Tanjore	13,042	6,060	3,733	3,700	5,035	7,026	8,970	5,504	4,484	4,587	5,258	8,658	76,057
11	Madura	3,318	2,466	1,776	1,645	1,627	1,727	1,897	1,892	1,908	2,141	3,001	6,224	29,622
12	Tinnevelly	9,033	3,947	3,132	2,561	2,391	2,181	2,371	2,602	2,726	2,926	5,120	14,691	53,681
13	Kurnool	1,336	1,022	1,258	1,280	1,335	1,263	1,280	1,323	1,214	1,266	1,402	1,527	15,516
14	Cuddapah	1,741	1,276	1,346	1,303	1,449	1,284	1,457	1,417	1,441	1,610	2,174	2,311	18,809
15	Bellary	1,325	1,082	1,119	1,227	1,479	1,718	1,743	1,563	1,440	1,420	1,459	1,314	16,889
16	Anantapur	883	845	806	854	869	954	1,056	1,017	954	932	1,194	1,340	11,704
17	North Arcot	3,974	2,550	2,614	2,200	2,411	2,397	2,471	2,461	2,687	3,099	3,672	4,333	34,869
18	Salem	3,733	2,497	2,201	1,877	1,922	1,899	2,148	2,005	2,078	2,206	2,817	3,174	28,557
19	Coimbatore	3,593	2,768	2,090	2,053	2,073	2,021	2,204	1,959	2,076	2,338	3,188	5,271	31,634
20	Nilgiris	91	94	85	114	137	151	136	152	131	124	104	108	1,427
21	South Canara	2,053	1,856	1,636	1,431	1,686	2,071	2,995	2,773	2,085	1,835	1,697	1,833	23,951
22	Malabar	4,575	5,157	4,850	4,114	3,903	4,108	4,522	4,236	3,615	3,202	3,138	3,484	48,904
	Total, Madras Presidency ...	76,645	51,765	45,140	40,955	43,311	46,314	53,762	50,787	49,340	48,625	58,478	85,213	650,335
	Ratio of deaths per 1,000 in each month ...	2·7	1·8	1·6	1·4	1·5	1·6	1·9	1·8	1·7	1·7	2·0	3·0	23·1

IV.

Deaths registered according to age in the districts of the Madras Presidency during the year* 1884.

1	2	3		4		5		6		7		8		9		10		11		12	
Number.	Districts.	Under 1 year.		1 year and under 5.		5 years and under 10.		10 years and under 15.		15 years and under 20.		20 years and under 30.		30 years and under 40.		40 years and under 50.		50 years and under 60.		60 years and upwards.	
		Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1	Ganjam	1,662	1,321	946	772	411	375	274	216	310	362	712	753	727	563	710	495	823	712	1,318	1,322
2	Vizagapatam	2,045	1,887	1,566	1,583	753	608	538	454	587	656	1,084	1,146	1,257	957	1,212	943	1,181	1,149	1,582	1,627
3	Godávari	3,065	2,864	4,699	4,425	2,222	1,835	1,154	934	1,118	1,184	1,961	1,656	1,625	1,367	1,705	1,324	2,024	1,552	3,186	3,528
4	Kistna	4,426	3,995	4,550	4,550	2,039	1,751	941	747	745	1,097	1,515	1,697	1,399	1,041	1,136	802	1,513	1,179	3,120	2,930
5	Nellore	1,727	1,581	1,352	1,210	686	652	441	416	411	455	610	600	586	582	603	491	997	915	1,483	1,425
6	Madras	3,663	3,275	1,797	1,783	454	411	201	201	307	461	697	862	551	514	458	438	676	568	902	1,060
7	Chingleput	4,986	4,501	2,473	2,422	830	754	444	441	445	627	843	1,266	846	899	851	671	845	746	1,620	1,727
8	South Arcot	5,129	4,877	4,879	4,517	1,625	1,400	878	701	760	961	1,685	1,949	1,758	1,456	1,675	1,214	1,515	1,159	2,485	2,322
9	Trichinopoly	3,753	3,334	2,436	2,331	797	774	503	428	484	636	1,011	1,268	1,139	1,194	1,165	972	1,175	1,030	2,069	2,332
10	Tanjore	7,253	6,206	5,122	4,744	2,992	2,629	2,085	1,836	2,019	2,555	3,510	4,432	3,780	3,698	3,409	3059	3,177	2,983	4,816	5,752
11	Madura	3,501	3,076	2,582	2,416	949	832	659	537	664	625	1,484	1,485	1,556	1,318	1,480	1,124	1,199	1,129	1,357	1,649
12	Tinnevelly	4,896	4,381	4,938	4,870	2,019	1,848	1,387	1,166	1,340	1,394	2,488	2,830	2,765	2,344	2,375	1,728	2,101	1,830	3,203	3,778
13	Kurnool	2,316	1,946	1,320	1,222	490	465	294	280	278	472	623	917	785	687	655	482	601	463	617	603
14	Cuddapah	2,852	2,390	742	694	354	371	378	368	354	758	911	1,474	1,077	971	949	711	927	785	903	840
15	Bellary	2,592	2,225	1,521	1,504	483	422	301	287	274	487	671	1,080	807	749	756	548	566	450	600	566
16	Anantapur	1,945	1,584	674	690	301	281	201	223	235	407	458	817	528	553	541	350	449	384	575	508
17	North Arcot	4,831	4,470	2,973	2,904	892	921	623	588	712	1,081	1,347	1,897	1,510	1,437	1,403	991	1,226	1,017	2,049	1,997
18	Salem	4,885	4,170	1,876	1,699	658	618	601	520	609	728	1,175	1,478	1,402	1,302	1,201	1,053	979	929	1,265	1,409
19	Coimbatore	3,886	3,578	2,375	2,315	983	891	747	618	697	749	1,404	1,623	1,617	1,381	1,389	1,129	1,299	1,224	1,755	1,974
20	Nilgiris	140	135	136	133	53	45	33	26	39	35	82	96	86	71	75	50	39	38	56	59
21	South Canara	2,369	2,099	1,345	1,421	534	537	322	320	447	525	1,172	1,440	1,482	1,216	1,423	990	1,268	1,135	1,768	2,138
22	Malabar	3,193	2,862	3,892	3,398	1,520	1,289	969	871	1,228	1,204	3,360	3,057	3,565	2,672	2,809	1,755	2,210	1,588	3,503	3,959
	Total, Madras Presidency.	75,115	66,757	54,194	51,603	22,045	19,709	13,974	12.178	14,063	17,459	28,803	33,823	30,848	26,972	27,980	21,320	26,790	22,965	40,232	43,505
	Ratio per mille of population †	169·1	146·5	38·8	34·6	10·8	9·6	7·1	7·1	10·8	14·4	11·8	12·1	14·0	12·5	19·3	14·8	30·9	24·2	55·5	48·4

* Exclusive of Europeans, Eurasians, and born dead.

† Worked on the total population as per census of 1881, including Europeans and Eurasians.

V.

Deaths registered according to classes in the districts of the Madras Presidency during the year 1884.

1	2	3					4					5				
		Population for which returns were received.					Number of deaths registered.					Ratio of deaths per 1,000 of population.				
Number.	Districts.	Christians. Native.	Muhammadans.	Hindus.	Other classes.	Total.	Christians. Native.	Muhammadans.	Hindus.	Other classes.	Total.	Christians. Native.	Muhammadans.	Hindus.	Other classes.	Total.
1	Ganjam	1,060	4,994	1,013,369	588	1,020,011	27	88	14,659	10	14,784	25·4	17·6	14·4	17·0	14·5
2	Vizagapatam	2,808	16,857	1,435,598	820	1,456,083	38	120	22,653	4	22,815	13·5	7·1	15·7	4·8	15·6
3	Godávari	3,231	38,798	1,748.734	87	1,790,850	21	396	43.011		43,428	6·4	10·2	24·5	...	24·2
4	Kistna	36,069	87,161	1.425,013	112	1.548,355	453	2,000	38,719	1	41,173	12·5	22·9	27·1	8·9	26·5
5	Nellore	18 398	56,501	1,108,171	62	1,183,132	94	497	16,632	...	17,223	5·1	8·7	15·0	..	14·5
6	Madras	23,767	50,298	315,527	392	389,984	720	2,241	16,318	...	19,279	30·2	44·5	51·7	...	49·4
7	Chingleput	13,917	25,034	939,314	259	978,524	219	640	27,378	.	28,237	15·7	25·5	29·1	..	28·8
8	South Arcot	39,112	48,289	1,721,614	5,264	1,814,279	308	847	41,763	27	42.945	7·8	17·5	24·2	5·1	23·6
9	Trichinopoly	60,892	34,104	1,119,434	55	1,214.485	1,154	647	27,030		28,831	18·9	18·9	24·1	..	23·7
10	Tanjore	77,413	112,058	1,939.421	646	2,129,538	2,009	4,133	69.914	1	76,057	25·9	36·8	36·0	1·5	35·7
11	Madura	34,174	62,328	1,197,323	4	1,293,829	552	1,808	27,262	...	29,622	16·1	29·0	22·7	..	22·9
12	Tinnevelly	140,255	89,767	1,468,977	57	1,699,056	3,192	3,330	47.159		53,681	22·7	37·0	32·1	...	31·6
13	Kurnool	11,377	81,827	615,992	22	709,218	147	1,777	13.592	.	15,516	12·9	21·7	22·0	.	21·8
14	Cuddapah	5.743	97.749	1,017,211	11	1,120.714	54	1,627	17,128		18,809	9·4	16·6	16·8	...	16·7
15	Bellary	4,318	100,006	1,220,657	1,036	1,336,017	55	1,732	15.102		16,889	14·8	21·4	21·4	0·9	21·4
16	Anantapur						9	624	11,070	1	11,704					
17	North Arcot	8,896	82,448	1,717,585	7,753	1,816,692	60	1,154	33,655		34,869	6·7	13·9	19·5	.	19·2
18	Salem	15,942	51 092	1.531,855	81	1,598.970	230	685	27,632	10	28,557	14·4	13·4	18·0	123·4	17·9
19	Coimbatore	12.780	37,855	1,606,343	166	1,657,144	198	924	30,512		31,634	15·4	24·4	18·9	.	19·1
20	Nílgiris	5,778	3,531	78.970	45	88.324	149	49	1,229		1,427	25·7	13·8	15·5	.	16·2
21	South Canara	57,968	89,983	797,427	10.217	955,595	1,152	1.729	20,708	362	23,951	19·8	19·2	25·9	35·4	25·1
22	Malabar	40,114	641,399	1,669,269	370	2,351,152	1,599	13,806	33,497	2	48,904	39·8	21·5	20·0	5·4	20·8
	Total, Madras Presidency ...	614,012	1,822,079	25,687,804	28,057	28,151,952	12,440	40,854	596,623	418	650,335	20·2	22·4	23·2	14·9	23·1

VI.

*Deaths * registered from different causes in the districts and towns of the Madras Presidency during the year* 1884.

1	2	3	4	5	6	7	8					9	10	11							
							Injuries.							Ratio of deaths per 1,000 of population.							
							Suicides.													From all causes.	
Number.	Districts and towns.	Population for which returns were received.†	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Males.	Females.	Wounds and accidents.	Snake-bite and killed by wild beasts.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other causes.	For the year.	Mean of previous 5 years.
	A—*Districts.*‡																				
1	Ganjam	967,649	110	356	10,337	297	19	24	174	62	279	2,277	13,656	0·1	0·3	10·6	0·3	0·2	2·3	14·1	16·5
2	Vizagapatam	1,355,050	10	1,325	17,731	169	27	34	339	69	469	690	20,394	0·007	0·9	13·0	0·1	0·3	0·5	15·0	13·4
3	Godávari	1,688,553	822	10,384	16,408	596	42	77	252	72	443	11,891	40,544	0·4	6·8	9·7	0·3	0·2	7·0	24·0	17·3
4	Kistna	1,483,706	1,467	10,182	13,884	511	60	76	450	93	679	13,230	39,953	0·9	6·1	9·3	0·3	0·4	8·9	26·8	17·9
5	Nellore	1,146,780	461	1,639	7,943	301	22	34	355	70	481	5,729	16,554	0·4	1·8	6·9	0·2	0·4	4·9	14·4	10·7
6	Madras	405,848	1,142	3,997	3,726	2,515	3	3	71	1	78	7,821	19,279	2·8	9·8	9·1	6·1	0·1	19·2	47·5	36·0
7	Chingleput	918,803	2,008	2,908	5,802	3,482	11	31	418	106	566	11,511	26,277	2·1	3·1	6·3	3·7	0·6	12·5	28·5	20·3
8	South Arcot	1,731,184	7,296	5,740	10,227	741	36	33	455	220	744	16,084	40,832	4·2	3·3	5·9	0·4	0·4	9·2	23·5	16·3
9	Trichinopoly	1,110,811	3,825	637	5,636	425	16	18	222	152	408	15,307	26,238	3·4	0·5	5·0	0·3	0·3	13·7	23·6	18·3
10	Tanjore	1,929,237	21,587	3,382	3,151	960	30	22	316	161	529	38,876	68,485	11·1	1·7	1·6	0·4	0·2	20·1	35·4	22·7
11	Madura	1,176,973	3,802	1,227	8,961	716	35	57	280	130	502	11,242	26,450	3·2	1·0	7·6	0·6	0·4	9·5	22·4	14·6
12	Tinnevelly	1,525,520	13,259	1,115	6,008	2,155	34	67	384	98	583	23.299	46,419	8·6	0·7	3·9	1·4	0·3	15·2	30·2	18·9
13	Kurnool	688,976	18	1,572	10,471	224	18	34	234	68	354	2,237	14,876	0·02	2·2	15·1	0·3	0·5	3·2	21·5	19·4
14	Cuddapah	1,102,056	300	530	12,168	621	20	84	492	140	736	3,777	18,132	0·2	0·4	11·0	0·5	0·6	3·4	16·4	17·5
15	Bellary	1,245,669	994	810	3,881	747	16	15	106	40	177	8,171	14,780	0·9	1·1	4·3	0·8	0·3	13·5	21·1	16·9
16	Anantapur		239	602	1,539	289	11	27	190	46	274	8,652	11,595								
17	North Arcot	1,724,394	2,877	3,142	11,169	1,284	41	43	661	142	887	13,434	32,793	1·6	1·8	6·4	0·7	0·5	7·7	19·0	14·4
18	Salem	1,506,649	2,053	1,337	10,486	658	36	41	556	176	809	11,966	27,309	1·3	0·8	6·9	0·4	0·5	7·9	18·1	13·2
19	Coimbatore	1,599,654	3,305	712	12,610	1,575	35	53	465	156	709	11,242	30,153	2·0	0·4	7·8	0·9	0·4	7·0	18·8	13·0
20	Nílgiris	73,921	3	9	921	43	...	...	2	2	4	52	1,032	0·04	0·1	12·4	0·5	0·05	0·7	13·9	12·0
21	South Canara	923,743	...	677	10,225	2,088	38	24	363	74	499	9,858	23,347	...	0·7	11·0	2·2	0·5	10·6	25·2	19·5
22	Malabar	2,179,895	717	4,901	23,843	4,177	48	19	479	141	687	9,720	44,045	0·3	2·2	10·9	1·9	0·3	4·4	20·2	16·9
	Total of districts ...	26,485,071	66,295	57,184	207,127	24,574	598	816	7,264	2,219	10,897	237,066	603,143	2·5	2·1	7·8	0·9	0·4	8·9	22·7	16·8

* Exclusive of Europeans, Eurasians, and born dead.

† Inclusive of Europeans and Eurasians, as the census of 1881 does not show these classes separately for towns under the column of Christians to be omitted. For the same reason the ratios are orked on this population.

‡ Exclusive of B—Towns.

VI—(*Continued*).

Deaths registered from different causes in the districts and towns of the Madras Presidency during the year 1884.

1	2		3	4	5	6	7	8				9	10	11									
Number.	Districts and towns.		Population for which returns were received.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.				All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of population.									
								Suicides.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Total.		Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other causes.	For the year.	Mean of previous 5 years.	From all causes.	
								Males.	Females.														
	B—*Towns.*																						
1	Tinnevelly.	M. T. Berhampore	23,599	2	3	258	107	...	...	8	3	11	671	0·08	0·1	10·9	4·5	0·4	12·2	28·4	28·1		
2		M. T. Chicacole	18,302	...	5	102	13	...	1	6	...	7	343		0·2	5·5	0·7	0·3	11·8	18·7	15·0		
3		T. Parlakimedi ...	10,812	...	...	92	1	...	...	3	...	3	114	...	...	8·5	0·09	0·2	1·6	10·5	20·4		
4	Vizagapatam.	M. T. Vizagapatam	30,201	...	217	204	89	4	2	7	2	15	934	...	7·1	6·7	2·9	0·4	13·5	30·8	34·1		
5		M. T. Vizianagram	22,577	...	6	343	36	...	...	14	2	16	550	...	0·2	15·1	1·5	0·7	6·6	24·3	27·4		
6		M. T. Bimlipatam	8,582	...	5	59	...	...	...	3	...	3	230	0·5	0·5	6·8	...	0·3	18·9	26·8	19·9		
7		M. T. Anakapalle	13,311	4	49	118	11	2	1	2	9	14	332	3·6	3·6	8·8	0·8	1·0	10·1	24·8	19·8		
8		T. Bobbili	14,943	...	1	219	4	1	...	1	1	8	232	0·06	0·2	14·6	0·2	0·5	...	15·5	18·5		
9		T. Salúr ...	11,856	...	...	138	2	...	1	1	...	2	143	...	...	11·6	0·1	0·1	0·08	12·0	10·8		
10	Ganjam.	M. T. Ellore	25,092	6	333	143	68	2	...	6	1	9	917	0·2	13·2	5·6	2·7	0·3	14·2	36·5	21·5		
11		M. T. Rajahmundry	24,555	16	287	115	29	2	1	9	3	15	765	0·6	11·6	4·6	1·1	0·6	12·3	31·1	29·0		
12		M. T. Cocanada	30,441	9	251	84	117	...	...	4	6	11	808	0·2	8·2	2·7	3·8	0·3	11·0	26·5	25·8		
13		T. Peddapuram	11,278	1	65	34	...	1	3	5	5	13	282	0·08	5·7	3·0	...	0·7	15·3	25·0	...		
14		T. Pittapuram ...	11,593	1	25	73	2	1	3	2	1	7	112	0·08	2·1	6·2	0·1	0·6	0·3	9·6	...		
15	Kistna.	M. T. Masulipatam	35,056	17	106	74	1	...	...	1	...	1	507	0·4	3·0	2·1	0·02	0·02	8·5	14·4	10·2		
16		M. T. Guntúr	19,646	...	46	84	42	...	...	8	...	9	360	2·3	2·3	4·2	2·1	0·4	9·1	18·3	16·3		
17		T. Jaggayapet ...	10,072	77	52	14	1	1	3	6	1	10	353	7·6	5·1	1·3	0·09	0·9	19·7	35·0	...		
18	Nellore.	M. T. Nellore ...	27,505	24	19	110	8	2	...	5	1	8	443	0·8	0·6	3·9	0·2	0·2	9·9	16·1	15·0		
19		M. T. Ongole ...	9,200	...	20	41	10	1	...	10	...	11	226		2·1	4·4	1·0	1·1	15·6	24·5	22·7		
20	Chingleput.	M. T. Conjeveram ...	37,275	259	122	176	151	...	...	12	3	15	1,351	6·9	3·2	4·8	4·0	0·4	17·6	37·0	26·0		
21		T. St. Thomas' Mount	15,013	13	23	45	...	...	...	...	...	...	218	0·9	1·5	2·9	...	...	9·1	14·5	...		
22		T. Saidápet ...	10,290	68	68	59	20	1	...	2	1	4	361	6·6	6·6	5·7	1·9	0·3	13·8	35·0	...		
23	South Arcot.	M. T. Cuddalore	43,545	211	20	92	107	...	...	5	5	10	771	4·8	0·4	2·1	2·4	0·2	7·6	17·7	19·1		
24		M. T. Chidambaram	19,837	290	67	132	24	1	...	2	...	3	123	14·6	3·3	6·6	1·2	0·1	6·2	32·2	22·1		
25		T. Panruti ...	20,172	272	31	73	...	3	2	...	3	8	319	13·4	1·5	3·6	...	0·3	15·8	34·8	...		

1	2		3	4	5	6	7	8				9	10	11									
Number.	Districts and towns.		Population for which returns were received.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.				All other causes.	Total deaths from all causes.	Ratio of deaths per 1,000 of population.									
								Suicides.		Wounds and accidents.	Snake-bite and killed by wild beasts.	Total.		Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other causes.	For the year.	Mean of previous 5 years.	From all causes.	
								Males.	Females.														
26	Trichinopoly.	M. T. Trichinopoly	84,449	566	36	280	277	...	1	1	...	2	751	6·7	0·4	3·3	3·2	0·2	8·8	22·8	23·3		
27		M. T. Srirangam	19,773	126	32	57	2	...	...	21	1	23	660	6·3	1·6	2·8	0·1	0·1	22·2	33·3	41·7		
28	Tanjore.	M. T. Tanjore ...	54,745	401	167	230	368	1	...	10	1	12	1,688	7·3	3·0	4·2	6·7	0·2	9·3	30·8	20·8		
29		M. T. Kumbakónam	50,098	400	119	316	241	...	...	9	1	10	2,141	7·9	2·3	6·3	4·8	0·1	21·0	42·7	31·1		
30		M. T. Negapatam	53,855	784	233	220	313	2	...	13	...	15	2,126	14·5	4·3	4·0	5·8	0·2	10·4	39·4	20·0		
31		M. T. Máyavaram	23,044	197	74	103	115	...	...	3	6	9	821	8·5	3·2	4·4	4·9	0·3	14·0	35·6	28·6		
32		M. T. Mannárgudi	19,404	302	64	54	114	...	...	5	1	6	796	15·5	3·2	2·7	5·8	0·3	13·1	41·0	23·4		
33	Madura.	M. T. Madura	73,807	708	103	287	171	1	...	26	1	28	2,154	9·5	1·3	3·8	2·3	0·3	11·6	29·1	32·6		
34		M. T. Dindigul ...	14,182	45	18	89	35	...	...	9	2	11	310	3·1	1·2	6·2	2·4	0·7	7·8	21·8	17·9		
35		T. Periyakulam	16,446	17	...	154	52	...	...	2	1	3	429	1·0	...	9·3	3·1	0·1	12·3	26·0	22·0		
36		T. Palni ...	12,974	41	2	5	16	...	1	9	...	10	279	3·1	0·1	0·3	1·2	0·7	15·8	21·5	23·5		
37	Tinnevelly.	M. T. Tinnevelly	23,221	303	107	43	73	...	...	8	1	9	914	13·0	4·6	1·8	3·1	0·3	16·3	39·3	34·3		
38		M. T. Palamcottah	17,964	159	37	32	35	...	...	8	...	8	523	8·8	2·0	1·7	1·9	0·4	14·0	29·1	25·9		
39		M. T. Tuticorin ...	16,281	251	23	67	212	1	...	4	1	6	793	15·4	1·4	4·1	13·0	0·3	14·3	48·7	37·8		
40		T. Kayalpatnam	11,806	86	1	67	1	...	...	...	...	...	261	7·2	0·08	5·6	0·08	...	8·9	22·1	18·7		
41		T. Kulasekarapatnam	14,972	111	20	48	15	...	...	6	...	6	413	7·4	1·3	3·2	1·0	0·4	14·2	27·5	...		
42		T. Rajahpollem ...	12,021	634	4	16	1	1	4	1	1	6	173	52·7	0·3	1·3	0·08	0·4	14·3	69·2	...		
43		T. Nachiarcoil	18,256	235	11	15	...	...	...	5	1	6	446	12·8	0·6	0·8	...	0·3	24·4	39·0	20·9		
44		T. Sivagiri	13,632	865	...	47	35	...	...	5	...	5	160	63·4	...	3·4	2·5	0·3	11·7	81·5	19·3		
45		T. Virayanallur	12,318	153	...	4	...	...	1	3	...	3	248	12·4	0·3	...	...	0·2	20·1	33·1	21·7		
46		T. Kalladakurchi	10,936	118	65	9	...	1	2	3	...	3	220	10·7	0·8	...	...	0·2	20·1	37·9	25·3		
47		T. Sivakasi ...	10,833	92	1	16	...	...	...	11	...	11	141	8·4	0·09	1·4	...	1·0	13·0	24·0	14·6		
48		T. Tenkasi ...	11,987	179	17	76	4	...	...	2	1	3	615	14·9	1·4	6·3	0·3	0·2	28·0	51·3	41·7		
49	Kurnool.	M. T. Kurnool ...	20,329	...	91	300	21	...	2	...	...	...	640	...	4·4	14·7	1·0	0·3	10·8	31·4	30·3		
50	Cuddapah.	M. T. Cuddapah ...	18,982	275	2	114	23	1	2	...	...	...	677	14·4	0·1	6·0	1·2	0·2	13·5	35·6	39·5		
51	Bellary.	M. T. Bellary ...	53,460	59	43	519	83	...	1	19	1	20	1,324	1·1	0·8	9·7	1·5	0·3	11·2	24·7	24·9		
52		M. T. Adóni ...	22,441	2	195	123	8	...	...	5	...	5	556	0·08	8·6	5·4	0·3	0·2	9·9	24·7	32·2		
53		T. Hospet ...	10,219	13	10	99	5	2	1	2	1	3	229	1·2	0·9	9·6	0·4	0·4	9·4	22·4	31·8		
54	Anantapur.	M. T. Anantapur ...	4,907	...	...	9	...	...	...	3	...	3	109	...	...	1·8	...	0·6	19·7	22·2	25·5		
55	North Arcot.	M. T. Vellore ...	37,491	76	85	195	88	1	...	13	1	15	807	2·0	2·2	5·2	2·3	0·4	9·2	21·5	19·0		
56		M. T. Wálajápet	10,387	17	2	21	...	...	1	1	...	2	212	1·6	0·1	2·0	...	0·1	16·3	20·4	25·7		
57		T. Arcot ...	10,718	6	42	5	5	...	...	1	1	2	255	0·5	3·9	0·4	0·4	0·09	18·2	23·7	26·0		
58		T. Gudiyátam ...	10,641	57	...	103	4	1	...	1	...	2	207	5·3	...	9·6	0·3	0·1	3·8	19·4	18·7		
59		T. Tirupati ...	13,232	28	...	163	130	...	...	2	...	2	358	2·1	...	12·3	9·8	0·1	2·6	27·0	18·8		
60		T. Ambúr ...	10,390	118	5	99	1	...	...	14	...	14	237	11·3	0·4	9·5	0·09	1·3	...	22·8	...		

VIII.

Deaths registered from small-pox in the districts of the Madras Presidency during each month of the year 1884.

1	2	3		4		5												6			7		8			9
		Circles of registration.		Villages.														Total.			Number of deaths among children.		Ratio of deaths per 1,000 of population.			
Number.	Districts.	Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Under 1 year.	1 to 5 years.	Males.	Females.	Total.	Mean ratio per 1,000 for previous 5 years.
1	Ganjam	[illegible]	[illegible]	[illegible]	Information not available.	59	49	49	38	32	19	33	22	28	16	3	16	178	186	364	53	143	0·3	0·3	0·3	2·1
2	Vizagapatam ...	[illegible]	[illegible]	[illegible]		87	121	154	174	103	118	130	152	131	103	129	201	829	774	1,603	306	653	1·1	1·0	1·1	0·4
3	Godávari	[illegible]	[illegible]	[illegible]		274	473	700	934	1,042	1,267	1,373	1,264	1,124	775	712	1,107	5,903	5,442	11,345	1,230	3,628	6·6	6·0	6·3	0·5
4	Kistna	[illegible]	[illegible]	[illegible]		590	1,170	1,200	1,174	762	890	720	622	481	317	259	561	5,250	5,136	10,386	2,023	5,843	6·7	6·6	6·7	0·8
5	Nellore	[illegible]	[illegible]	[illegible]		170	145	228	169	132	151	138	47	78	148	120	146	840	838	1,678	346	652	1·4	1·4	1·4	0·2
6	Madras	[illegible]	[illegible]	[illegible]		778	1,088	1,221	518	211	78	41	25	15	7	8	7	2,014	1,893	3,907	1,467	2,421	10·4	10·0	10·2	2·9
7	Chingleput	7	7	[illegible]		276	378	564	473	328	214	224	194	131	139	82	118	1,533	1,588	3,121	865	1,642	3·1	3·2	3·2	1·0
8	South Arcot	[illegible]	[illegible]	[illegible]		416	522	581	526	510	384	483	442	498	486	487	512	2,949	2,909	5,858	1,465	2,831	3·2	3·2	3·2	1·0
9	Trichinopoly	[illegible]	[illegible]	[illegible]		42	40	74	69	44	44	74	77	42	64	56	79	354	351	705	117	293	0·6	0·5	0·5	0·3
10	Tanjore	[illegible]	[illegible]	[illegible]		237	205	364	309	372	308	391	402	385	363	262	323	2,027	2,012	4,039	546	1,593	1·9	1·8	1·8	0·2
11	Madura	[illegible]	[illegible]	[illegible]		78	111	117	124	115	73	79	107	110	152	146	138	674	676	1,350	388	904	1·0	1·0	1·0	0·4
12	Tinnevelly	[illegible]	[illegible]	[illegible]		40	42	123	85	83	104	81	145	185	160	178	178	680	711	1,391	245	858	0·8	0·8	0·8	0·8
13	Kurnool	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	202	211	202	156	158	152	101	57	64	173	841	822	1,663	408	764	2·3	2·3	2·3	0·3
14	Cuddapah	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	35	38	39	25	31	30	41	40	283	249	532	155	247	0·4	0·4	0·4	0·8
15	Bellary	11	11	1,184		102	38	47	[illegible]	155	173	122	88	35	30	28	42	548	510	1,058	264	795	1·2	1·2	1·2	0·4
16	Anantapur	8	8	900		68	68	112	137	58	57	36	44	27	16	27	31	265	307	572	196	350				
17	North Arcot	12	12	3,967		104	84	53	[illegible]	275	249	289	258	252	338	264	276	1,592	1,684	3,276	1,060	1,900	1·7	1·8	1·8	0·8
18	Salem	10	10	3,972		186	231	300	259	91	88	135	91	99	90	116	140	716	649	1,365	308	590	0·9	0·7	0·8	0·3
19	Coimbatore	13	13	1,447		137	104	159	115	107	57	35	24	24	22	42	32	396	384	780	163	514	0·4	0·4	0·4	0·4
20	Nilgiris	5	3	10		96	141	131	69	1		10						6	5	11	...	2	0·1	0·1	0·1	0·3
21	South Canara ...	6	5	1,282		8	43	156	58	67	59	85	60	20	32	36	53	377	300	677	39	122	0·8	0·6	0·7	0·3
22	Malabar	17	17	437		551	1,062	1,317	843	482	274	174	140	126	99	157	211	3,001	2,435	5,436	137	835	2·5	2·0	2·3	1·4
	Total, Madras Presidency	229	226	52,051		5,237	6,771	8,257	6,474	5,207	4,799	4,850	4,381	3,923	3,444	3,220	4,684	31,296	29,951	61,247	11,781	27,511	2·2	2·1	2·1	0·7

IX.

Deaths registered from fevers in the districts of the Madras Presidency during each month of the year 1884.

1	2	3		4		5												6			7		8
		Circles of registration.		Villages.														Total.			Ratio of deaths per 1,000 of population.		
Number.	Districts.	Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean ratio per 1,000 for previous 5 years.
1	Ganjam	6	6	6,895	Information not available.	1,329	819	786	766	838	815	943	1,066	1,210	792	699	726	5,715	5,074	10,789	11·3	9·7	10·5	10·8
2	Vizagapatam ...	18	18	8,762		1,989	1,230	1,265	1,074	1,264	1,379	1,376	1,558	1,757	2,022	1,935	1,963	9,674	9,138	18,812	13·2	12·6	12·9	12·0
3	Godávari	14	14	2,249		1,617	894	670	722	835	908	1,199	1,389	1,433	1,471	2,418	3,301	8,786	8,071	16,857	9·8	8·9	9·4	8·5
4	Kistna	14	14	1,823		1,418	811	755	718	794	931	1,052	1,336	1,419	1,098	1,616	2,108	7,235	6,821	14,056	9·2	8·8	9·0	8·5
5	Nellore	12	12	1,688		1,014	556	613	550	695	602	597	568	712	680	730	777	4,208	3,886	8,094	7·0	6·6	6·8	6·0
6	Madras	1	1	1		365	353	321	280	295	243	277	322	272	299	342	357	1,861	1,865	3,726	9·6	9·4	9·5	9·2
7	Chingleput	7	7	2,003		556	587	493	393	480	520	515	483	497	473	559	526	2,969	3,113	6,082	6·0	6·3	6·2	6·9
8	South Arcot	10	10	2,850		893	719	566	684	695	750	898	856	919	1,000	1,207	1,337	5,510	5,014	10,524	6·0	5·5	5·8	6·6
9	Trichinopoly	8	8	1,485		606	465	433	413	477	490	471	486	452	457	583	640	3,022	2,951	5,973	5·1	4·6	4·9	5·4
10	Tanjore	14	14	3,551		359	326	307	286	333	345	405	309	314	281	335	474	1,964	2,110	4,074	1·9	1·9	1·9	2·1
11	Madura	10	10	3,971		897	651	650	581	590	705	777	675	693	723	1,023	1,531	4,993	4,503	9,496	7·9	6·7	7·3	7·4
12	Tinnevelly	12	12	1,497		813	534	403	399	399	396	480	415	457	446	644	1,062	3,349	3,099	6,448	4·0	3·5	3·7	4·3
13	Kurnool	9	9	836		959	752	854	830	904	876	833	909	841	927	1,005	1,081	5,549	5,222	10,771	15·4	14·9	15·1	16·5
14	Cuddapah	12	12	1,241		1,092	841	909	865	973	851	956	970	1,007	1,094	1,324	1,400	6,205	6,077	12,282	10·8	11·0	10·9	13·3
15	Bellary	11	11	1,184		352	321	346	351	349	396	394	402	431	419	431	430	2,299	2,323	4,622	4·4	4·7	4·6	5·6
16	Anantapur	8	8	900		105	145	123	117	102	119	147	108	136	118	147	181	741	807	1,548				
17	North Arcot	12	12	3,967		943	783	891	851	908	894	870	897	935	1,063	1,265	1,455	5,998	5,757	11,755	6·6	6·3	6·4	6·8
18	Salem	10	10	3,972		1,020	826	890	762	809	777	947	853	865	925	1,106	1,128	5,492	5,416	10,908	7·0	6·5	6·8	6·7
19	Coimbatore	13	13	1,447		1,380	1,138	1,000	978	953	968	1,011	921	909	1,068	1,266	1,305	6,576	6,321	12,897	8·1	7·4	7·7	6·8
20	Nilgiris	5	5	10		57	69	68	70	114	125	94	125	101	98	67	75	535	528	1,063	10·8	13·5	12·0	9·7
21	South Canara ...	6	6	1,282		708	604	464	523	716	1,007	1,768	1,571	965	766	652	640	5,160	5,224	10,384	10·9	10·7	10·8	7·4
22	Malabar	17	17	437		2,444	2,440	2,151	1,953	1,875	2,151	2,404	2,311	1,893	1,710	1,734	1,750	13,405	11,411	24,816	11·4	9·6	10·5	8·3
	Total, Madras Presidency	229	229	52,051		20,916	15,864	14,958	14,166	15,398	16,248	18,414	18,530	18,218	17,930	21,088	24,247	111,246	104,731	215,977	7·9	7·3	7·6	7·6

VIII.

Deaths registered from small-pox in the districts of the Madras Presidency during each month of the year 1884.

1	2	3		4		5												6			7		8			9
No.	Districts.	Circles of registration.		Villages.														Total.			Number of deaths among children.		Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 for previous 5 years.
		No. in each district.	No. from which deaths from small-pox were reported.	No. in each district.	No. from which deaths from small-pox were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Under 1 year.	Under 12 years.	Males.	Females.	Total.	
1	Ganjam	6	6	6,895	Information not available.	59	49	49	38	32	19	33	22	28	16	3	16	178	186	364	53	143	0·3	0·3	0·3	2·1
2	Vizagapatam	18	18	8,762		87	121	154	174	103	118	130	152	131	103	129	201	829	774	1,603	306	663	1·1	1·0	1·1	0·4
3	Godávari	14	14	2,249		274	473	700	934	1,042	1,267	1,373	1,264	1,124	775	712	1,407	5,903	5,442	11,345	1,230	3,628	6·6	6·0	6·3	0·5
4	Kistna	14	14	1,823		1,430	1,670	1,500	1,174	762	890	720	622	481	317	259	561	5,250	5,136	10,386	2,023	5,843	6·7	6·6	6·7	0·8
5	Nellore	12	12	1,688		176	145	228	169	132	151	138	47	78	148	120	146	840	838	1,678	346	652	1·4	1·4	1·4	0·2
6	Madras	1	1	1		778	1,088	1,221	518	211	78	41	25	15	7	8	7	2,014	1,983	3,997	1,467	2,421	10·4	10·0	10·2	2·9
7	Chingleput	7	7	2,003		276	378	564	473	328	214	224	194	131	139	82	118	1,533	1,588	3,121	865	1,642	3·1	3·2	3·2	1·0
8	South Arcot	10	10	2,850		419	522	589	526	510	384	483	442	498	486	487	512	2,949	2,909	5,858	1,465	2,831	3·2	3·2	3·2	1·0
9	Trichinopoly	8	8	1,485		42	40	74	69	44	44	74	77	42	64	56	79	354	351	705	117	293	0·6	0·5	0·5	0·3
10	Tanjore	14	14	3,551		237	265	364	369	372	306	391	402	385	363	262	323	2,027	2,012	4,039	546	1,603	1·9	1·8	1·8	0·2
11	Madura	10	10	3,971		78	111	117	124	115	73	79	107	110	152	146	138	674	676	1,350	388	904	1·0	1·0	1·0	0·4
12	Tinnevelly	12	12	1,497		39	42	121	85	83	104	81	145	185	160	178	178	690	711	1,401	245	858	0·8	0·8	0·8	0·8
13	Kurnool	9	9	836		91	96	202	211	202	156	158	152	101	57	64	173	841	822	1,663	408	764	2·3	2·3	2·3	0·3
14	Cuddapah	12	12	1,241		102	38	47	63	35	38	39	25	31	30	44	40	283	249	532	155	247	0·4	0·4	0·4	0·8
15	Bellary	11	11	1,184		68	68	112	137	155	173	122	88	35	30	28	42	548	510	1,058	264	766	1·2	1·2	1·2	0·4
16	Anantapur	8	8	900		103	84	53	66	58	57	36	44	27	16	27	31	295	307	602	196	350				
17	North Arcot	12	12	3,967		186	231	399	259	275	249	289	258	252	338	264	276	1,592	1,684	3,276	1,060	1,900	1·7	1·8	1·8	0·8
18	Salem	10	10	3,972		137	104	159	115	91	88	135	91	99	90	116	140	716	649	1,365	308	530	0·9	0·7	0·8	0·3
19	Coimbatore	13	13	1,447		96	141	131	69	107	57	35	24	24	22	42	32	396	384	780	163	514	0·4	0·4	0·4	0·4
20	Nílgiris	5	3	10		...	...	...	...	1	...	10	...	...	...	...	...	6	5	11	...	2	0·1	0·1	0·1	0·3
21	South Canara ...	6	5	1,282		8	43	156	58	67	59	85	60	20	32	36	53	377	300	677	39	122	0·8	0·6	0·7	0·3
22	Malabar	17	17	437		551	1,062	1,317	843	482	274	174	140	126	99	157	211	3,001	2,435	5,436	137	835	2·5	2·0	2·3	1·4
	Total, Madras Presidency	229	226	52,051		5,237	6,771	8,257	6,474	5,207	4,799	4,850	4,381	3,923	3,444	3,220	4,684	31,296	29,951	61,247	11,781	27,511	2·2	2·1	2·1	0·7

IX.

Deaths registered from fevers in the districts of the Madras Presidency during each month of the year 1884.

1	2	3		4		5												6			7		8
Number.	Districts.	Circles of registration.		Villages.														Total.			Ratio of deaths per 1,000 of population.			Mean ratio per 1,000 for previous 5 years.
		Number in each district.	Number from which deaths from fevers were reported.	Number in each district.	Number from which deaths from fevers were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	
1	Ganjam	6	6	6,895	Information not available.	1,329	819	786	766	838	815	943	1,066	1,210	792	699	726	5,715	5,074	10,789	11·3	9·7	10·5	10·8
2	Vizagapatam ...	18	18	8,762		1,989	1,230	1,265	1,074	1,264	1,379	1,376	1,558	1,757	2,022	1,935	1,963	9,674	9,138	18,812	13·2	12·6	12·9	12·0
3	Godávari	14	14	2,249		1,617	894	670	722	835	908	1,199	1,389	1,433	1,471	2,418	3,301	8,786	8,071	16,857	9·8	8·9	9·4	8·5
4	Kistna	14	14	1,823		1,418	811	755	718	794	931	1,052	1,336	1,419	1,098	1,616	2,108	7,235	6,821	14,056	9·2	8·8	9·0	8·5
5	Nellore	12	12	1,688		1,014	556	613	550	695	602	597	568	712	680	730	777	4,208	3,886	8,094	7·0	6·6	6·8	6·0
6	Madras	1	1	1		365	353	321	280	295	243	277	322	272	299	342	357	1,861	1,865	3,726	9·6	9·4	9·5	9·2
7	Chingleput	7	7	2,003		556	587	493	393	480	520	515	483	497	473	559	526	2,969	3,113	6,082	6·0	6·3	6·2	6·9
8	South Arcot	10	10	2,850		893	719	566	684	695	750	898	856	919	1,000	1,207	1,337	5,510	5,014	10,524	6·0	5·5	5·8	6·6
9	Trichinopoly	8	8	1,485		606	465	433	413	477	490	471	486	452	457	583	640	3,022	2,951	5,973	5·1	4·6	4·9	5·4
10	Tanjore	14	14	3,551		359	326	307	286	333	345	405	309	314	281	335	474	1,964	2,110	4,074	1·9	1·9	1·9	2·1
11	Madura	10	10	3,971		897	651	650	581	590	705	777	675	693	723	1,023	1,531	4,993	4,503	9,496	7·9	6·7	7·3	7·4
12	Tinnevelly	12	12	1,497		813	534	403	399	399	396	480	415	457	446	644	1,062	3,349	3,099	6,448	4·0	3·5	3·7	4·3
13	Kurnool	9	9	836		959	752	854	830	904	876	833	909	841	927	1,005	1,081	5,549	5,222	10,771	15·4	14·9	15·1	16·5
14	Cuddapah	12	12	1,241		1,092	841	909	865	973	851	956	970	1,007	1,094	1,324	1,400	6,205	6,077	12,282	10·8	11·0	10·9	13·3
15	Bellary	11	11	1,184		352	321	346	351	349	396	394	402	431	419	431	430	2,299	2,323	4,622	4·4	4·7	4·6	5·6
16	Anantapur	8	8	900		105	145	123	117	102	119	147	108	136	118	147	181	741	807	1,548				
17	North Arcot	12	12	3,967		943	783	891	851	908	894	870	897	935	1,063	1,265	1,455	5,998	5,757	11,755	6·6	6·3	6·4	6·8
18	Salem	10	10	3,972		1,020	826	890	762	809	777	947	853	865	925	1,106	1,128	5,492	5,416	10,908	7·0	6·5	6·8	6·7
19	Coimbatore	13	13	1,447		1,380	1,138	1,000	978	953	968	1,011	921	909	1,068	1,266	1,305	6,576	6,321	12,897	8·1	7·4	7·7	6·8
20	Nilgiris	5	5	10		57	69	68	70	114	125	94	125	101	98	67	75	535	528	1,063	10·8	13·5	12·0	9·7
21	South Canara ...	6	6	1,282		708	604	464	523	716	1,007	1,768	1,571	965	766	652	640	5,160	5,224	10,384	10·9	10·7	10·8	7·4
22	Malabar	17	17	437		2,444	2,440	2,151	1,953	1,875	2,151	2,404	2,311	1,893	1,710	1,734	1,750	13,405	11,411	24,816	11·4	9·6	10·5	8·3
	Total, Madras Presidency	229	229	52,051		20,916	15,864	14,958	14,166	15,398	16,248	18,414	18,530	18,218	17,930	21,088	24,247	111,246	104,731	215,977	7·9	7·3	7·6	7·6

XI—(Continued).

Births and Deaths registered among Europeans and Eurasians from different causes in each district of the Madras Presidency and the number born dead among all classes during the year 1884—(Continued).

Number.	Districts.		Population for which returns were received.			9			10			11			12									13		
						All other causes.			Total deaths from all causes.			Total births.			Ratio per 1,000 of population.									Born dead among all classes.		
															Total deaths.			Total births.								
			M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	Cholera.	Small-pox.	Fevers.	Injuries.	Bowel-complaints.	Hindus.
1	Ganjam	Europeans	116	13	129	1	...	1	4	...	4	...	1	1	34·4	...	31·0	...	7·7	7·7	15·5	...	7·7	169	159	328
		Eurasians	92	130	222	2	2	4	3	4	7	2	...	2	32·6	30·7	31·5	9·0	...	9·0	13·5	...	...	276	257	533
2	Vizagapatam	Europeans	112	51	163	4	2	6	5	2	7	1	5	6	44·6	39·2	42·9	6·1	30·6	36·7	6·1	...	2·5	105	163	268
		Eurasians	197	197	394	7	6	13	9	7	16	14	10	24	45·6	35·5	40·6	35·5	25·3	60·9	6·1	...	5·0	319	317	636
3	Godávari	Europeans	194	56	250	1	...	1	3	...	3	2	6	8	15·4	...	12·0	24·0	8·0	32·0	4·0	...	2·5	130	128	258
		Eurasians	208	204	412	4	4	8	5	5	10	3	6	9	24·0	24·5	24·2	7·2	14·5	21·8	2·4	...	4·0	173	145	318
4	Kistna	Europeans	35	17	52	...	...	...	...	...	...	2	1	3	...	...	...	38·4	19·2	57·6	...	...	2·4	776	653	1,429
		Eurasians	43	30	73	2	...	2	...	3	3	1	1	2	46·5	100·0	68·4	13·6	...	13·6	...	...	...	319	317	636
5	Nellore	Europeans	23	10	33	2	...	2	2	...	2	5	5	10	86·9	...	60·6	90·9	60·6	151·5	...	...	...	130	128	258
		Eurasians	155	165	320	6	...	6	7	...	7	11	3	14	45·1	...	21·8	34·3	9·3	43·7	3·1	...	...	173	145	318
6	Madras	Europeans	2,004	1,201	3,205	46	13	59	75	24	99	46	41	87	37·4	19·9	30·8	14·3	12·7	27·1	3·1	0·9	...	776	653	1,429
		Eurasians	6,100	6,559	12,659	123	109	232	226	201	427	178	171	349	37·0	30·6	33·7	14·0	13·5	27·5	3·8	0·1	3·4	394	386	780
7	Chingleput	Europeans	1,061	622	1,683	15	2	17	18	3	21	8	19	27	16·9	4·8	12·4	4·7	11·2	16·0	2·3	...	2·3	428	383	811
		Eurasians	480	694	1,174	6	3	9	8	8	16	11	11	22	16·6	11·5	13·6	9·3	18·7	23·8	2·5	...	2·5	776	653	1,429
8	South Arcot	Europeans	69	15	84	3	...	3	3	...	3	1	1	2	43·4	66·6	47·6	11·9	11·9	23·8	...	...	11·9	394	386	780
		Eurasians	186	189	375	3	2	5	6	4	10	10	4	14	32·2	21·1	26·6	10·6	10·6	37·3	2·5	...	8·0	428	383	811
9	Trichinopoly	Europeans	110	67	177	2	2	4	2	2	4	7	5	9	18·1	29·8	22·5	22·5	28·2	50·8	...	...	5·6	1,171	994	2,165
		Eurasians	197	174	371	4	9	13	10	13	23	7	19	26	50·7	74·7	61·9	18·8	51·2	70·0	...	...	16·1	1,171	994	2,165
10	Tanjore	Europeans	110	58	168	2	2	4	4	2	6	4	5	9	36·3	34·4	35·7	23·8	29·7	53·5	...	...	10·7	438	431	869
		Eurasians	348	329	677	7	10	17	14	14	28	11	14	25	40·2	42·5	41·3	16·2	20·6	36·9	...	...	2·9			
11	Madura	Europeans	101	75	176	...	...	...	3	...	3	1	2	3	29·7	...	17·0	5·6	11·3	17·0	...	...	17·0	438	431	869
		Eurasians	253	124	377	2	3	5	4	2	6	5	5	10	15·5	48·3	26·5	13·2	13·2	26·5	2·6	...	7·9			
12	Tinnevelly	Europeans	71	54	125	1	1	2	5	3	8	1	5	6	56·1	37·0	48	8	8	16	16	...	3·5	660	580	1,240
		Eurasians	308	258	566	2	...	2	...	...	...	...	1	1	16·2	11·6	14·1	8·8	10·6	19·4	3·5	...	1·7			
13	Kurnool	Europeans	33	19	52	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	316	349	665
		Eurasians	22	13	35	...	...	...	...	...	...	...	...	...	90·9	...	47·6	55·2	23·8	119·0	...	...	...			
14	Cuddapah	Europeans	22	20	42	2	...	2	2	...	2	4	...	4	12·8	...	7·0	...	3·5	3·5	3·5	...	3·5	437	408	845
		Eurasians	156	126	282	1	...	1	2	...	2	1	1	2	9·5	14·8	10·8	28·9	18·1	47·1	1·8	...	1·8			
15	Bellary	Europeans	417	135	552	2	1	3	4	2	6	16	16	32	50·6	145·8	86·6	102·3	55·1	157·4	...	...	...	430	388	818
		Eurasians	79	48	127	3	4	7	4	7	11	13	7	20	13·8	...	8·6	...	8·6	8·6	7·8	...	23·6			
16	Anantapur	Europeans	72	43	115	1	...	1	1	1	2	...	1	1	13·4	17·9	15·6	13·4	8·9	22·4	...	...	...	603	522	1,125
		Eurasians	223	223	446	2	3	5	3	4	7	6	4	10	13·4	38·4	27·7	16·6	33·3	50·0	2·2	...	2·2			
17	North Arcot	Europeans	102	78	180	1	1	2	2	3	5	3	6	9	19·3	9·5	6·7	6·7	11·2	17·9	5·5	...	11·1	583	502	1,085
		Eurasians	236	209	445	...	...	...	2	1	3	3	3	6	4·2	9·5	6·7	7·3	...	7·3	6·7	...	...			
18	Salem	Europeans	144	130	274	2	2	4	2	8	10	9	5	14	10·8	15·7	36·7	33·0	18·3	51·4	11·0	...	11·0	339	267	606
		Eurasians	145	127	272	3	2	5	8	2	10	9	5	14	55·1	15·7	22·7	18·8	24·1	40·6	...	...	...			
19	Coimbatore	Europeans	571	1,127	1,698	10	11	21	19	13	32	28	41	69	16·8	22·7	18·8	16·4	24·1	40·6	1·7	...	3·5	24	22	46
		Eurasians	485	527	1,012	5	10	15	7	13	20	17	13	30	13·1	26·3	19·7	16·7	12·8	29·6	0·9	...	3·9			
20	Nilgiris	Europeans	79	41	120	...	...	...	...	...	...	3	4	7	14·4	...	7·8	15·7	25	33·3	...	...	...	534	470	1,004
		Eurasians	58	127	185	...	...	...	1	...	1	2	1	3	18·1	15·5	17·0	12·1	8·3	20·5	1·9	...	7·8			
21	South Canara	Europeans	69	275	344	11	5	16	19	5	24	19	13	32	14·8	18·1	15·4	12·1	8·3	20·5	1·9	...	9·8	828	622	1,450
		Eurasians	1,253	1,558	2,811	29	27	56	51	49	100	59	40	99	23·4	31·5	27·5	16·9	14·7	31·6	2·1	1·9	4·1			
22	Malabar	Europeans	944	580	1,524	106	40	146	172	59	231	150	162	312	21·3	16·8	19·1	13·8	14·9	28·7	2·1	0·7	2·1	9,138	8,146	17,279
		Eurasians	7,325	3,511	10,836	209	198	407	376	345	721	369	323	692	33·0	31·5	32·6	16·9	14·7	31·6	3·4	0·1	3·5			
	Total	Europeans	10,968	10,922	21,890																					

Return showing the Births and Deaths registered in the Municipalities of the Madras Presidency during the year 1884.

Districts.	Municipal towns.	Population per Census of 1881.	Births.								Deaths.											
			Class.						Total births.		Class.				Total deaths.			Causes of death.				
			Christians.	Muhammadans.	Hindus.	Other classes.	Total.	M.	F.	Total.	Christians.	Muhammadans.	Hindus.	Other classes.	Total.	M.	F.	Cholera.	Small-pox.		Fevers.	
																		M.	F.	M.	F.	M.	F.
Ganjam	Chicacole	18,302	2	22	487	...	511	267	244	511	2	17	331	...	350	173	177	...	...	2	3	45	57
	Berhampore	23,599	22	63	941	3	1,029	542	487	1,029	15	42	650	...	707	390	317	2	...	2	1	124	136
Vizagapatam	Vizagapatam	30,291	38	50	950	...	1,038	516	522	1,038	38	52	874	...	964	505	459	...	...	113	106	114	91
	Bimlipatam	8,582	5	3	298	...	306	165	141	306	2	13	230	...	245	122	123	...	...	4	1	28	31
	Vizianagram	22,577	2	13	652	...	667	356	311	667	...	7	543	...	550	322	228	...	...	4	2	200	143
	Anakápalle	13,341	...	3	535	...	538	268	270	538	...	5	329	...	334	184	150	1	3	22	27	69	49
Godávari	Cocanada	30,441	12	27	724	...	763	373	390	763	13	43	781	...	837	431	406	4	5	131	120	39	47
	Rajahmundry	24,555	8	35	588	...	631	296	335	631	3	46	743	...	792	400	392	7	9	138	149	60	55
	Ellore	25,092	10	88	443	...	541	285	256	541	13	173	750	...	936	516	420	4	3	185	148	73	70
Kistna	Masulipatam	35,056	7	181	611	...	799	439	360	799	4	117	386	1	508	312	196	10	7	56	50	47	27
	Guntúr	19,646	9	142	323	...	474	273	201	474	7	69	304	...	380	201	179	...	...	23	23	31	53
Nellore	Nellore	27,505	33	75	456	...	564	322	242	564	26	63	362	...	451	250	200	15	9	11	8	64	47
	Ongole	9,200	23	31	360	...	414	223	191	414	13	21	216	...	250	138	112	...	...	8	12	26	15
Madras	Madras	405,848	1,052	1,714	13,367	...	16,133	8,296	7,837	16,133	1,246	2,241	16,636	...	20,123	10,180	9,943	571	622	2,054	2,010	1,885	1,894
Chingleput	Conjeeveram	37,275	...	31	1,370	...	1,401	723	678	1,401	1	29	1,423	...	1,453	730	723	129	130	64	58	96	80
South Arcot	Cuddalore	43,545	32	46	1,293	...	1,371	694	677	1,371	31	27	769	...	827	433	394	107	107	6	14	55	38
	Chillambaram	19,837	1	16	316	10	343	197	146	343	...	36	596	8	640	337	303	140	150	39	28	73	59
Trichinopoly	Trichinopoly	84,449	174	148	1,108	...	1,430	728	702	1,430	228	269	1,510	...	1,035	972	2,007	308	265	14	22	149	135
	Srirangam	19,773	5	1	583	...	589	277	312	589	3	4	673	...	329	351	680	61	65	13	19	30	27
Tanjore	Tanjore	54,745	87	53	1,257	...	1,397	700	697	1,397	107	107	1,502	...	844	872	1,716	187	214	84	83	120	110
	Kumbakónam	50,098	33	32	1,262	...	1,327	705	622	1,327	47	70	2,158	...	1,152	1,123	2,275	200	200	63	56	130	186
	Máyavaram	23,044	8	8	534	...	550	274	276	550	15	24	810	...	422	427	849	98	99	38	36	33	70
	Negapatam	53,855	60	308	633	...	1,001	535	466	1,001	168	584	1,440	1	1,074	1,119	2,193	393	398	102	132	98	124
	Mannárgudi	19,409	8	17	530	...	555	283	272	555	10	13	797	...	419	401	820	148	154	36	28	33	21
Madura	Madura	73,807	89	139	1,789	...	2,017	1,027	990	2,017	69	237	1,980	...	1,177	1,109	2,286	370	339	58	45	159	184
	Dindigul	14,182	93	77	332	...	502	269	233	502	48	46	226	...	143	143	320	28	17	9	9	50	89

Return showing the Births and Deaths registered in the Municipalities of the Madras Presidency during the year 1884—(Continued).

Districts.	Municipal towns.	Deaths—(*Continued*). Causes of death—(*Continued*). Bowel-complaints. M.	Bowel-complaints. F.	Injuries. Suicides. M.	Suicides. F.	Wounds. M.	Wounds. F.	Accidents. M.	Accidents. F.	Snake-bite. M.	Snake-bite. F.	Killed by wild beasts. M.	Killed by wild beasts. F.	All other causes. M.	All other causes. F.	Ratio per 1,000 of population. Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Total deaths.	Total births.	Average ratio of 5 previous years. Deaths.	Births.
Ganjam	Chicacole	4	9	...	1	...	...	3	3	...	...	...	...	119	104	...	0·2	5·5	0·7	0·3	19·1	27·9	15·9	16·2
	Berhampore	67	40	...	...	...	1	5	2	1	2	...	...	189	135	0·08	0·1	11·0	4·5	0·4	29·9	43·6	30·3	25·0
Vizagapatam	Vizagapatam	53	37	4	2	...	...	5	2	1	1	...	...	215	220	...	7·2	6·7	2·9	0·4	31·8	34·2	34·1	29·1
	Bimlipatam	...	...	...	...	...	...	3	...	...	...	...	...	87	91	...	0·5	6·8	...	0·3	28·5	35·6	20·9	17·9
	Vizianagram	22	14	...	...	...	...	6	8	2	...	...	...	88	61	...	0·2	15·1	1·5	0·7	24·3	29·5	28·9	29·9
	Anakápalle	9	2	2	1	...	...	1	1	1	2	4	2	75	63	0·2	3·6	8·7	0·8	1·0	25·0	40·3	19·8	22·4
Godávari	Cocanada	62	56	1	...	...	...	3	1	5	1	...	...	186	176	0·2	8·2	2·8	3·8	0·3	27·4	25·0	26·1	28·8
	Rajahmundry	21	8	2	1	2	...	3	4	...	...	2	1	165	165	0·6	11·6	4·6	1·1	0·6	32·2	25·6	29·5	34·0
	Ellore	39	29	2	...	...	...	5	1	1	...	...	...	207	169	0·2	13·2	5·6	2·7	0·3	37·3	21·5	25·6	27·2
Kistna	Masulipatam	1	...	...	...	...	...	1	...	...	...	...	...	197	112	0·4	3·0	2·1	0·02	0·02	14·2	22·4	10·5	18·7
	Guntúr	26	16	...	1	5	...	1	2	...	...	...	...	115	84	...	2·3	4·3	2·1	0·4	19·8	24·7	16·9	19·9
Nellore	Nellore	2	6	2	...	1	...	2	2	1	...	...	...	153	128	0·8	0·6	4·0	0·2	0·2	16·3	20·5	15·8	15·9
	Ongole	5	5	1	...	2	1	2	5	...	...	...	...	94	74	...	2·1	4·4	1·0	1·1	27·1	45·0	23·9	30·2
Madras	Madras	1,276	1,298	5	3	2	1	43	28	1	...	...	...	4,343	4,087	2·9	10·0	9·3	6·3	0·2	49·5	39·7	33·6	41·1
Chingleput	Conjeeveram	74	77	...	...	...	...	4	8	...	1	2	...	361	369	6·9	3·2	4·7	4·0	0·4	38·9	37·5	27·3	35·4
South Arcot	Cuddalore	53	57	...	...	...	...	4	1	3	2	...	...	205	175	4·9	0·4	2·1	2·5	0·2	18·7	31·4	19·9	30·4
	Chillambaram	16	8	1	...	...	...	...	2	...	...	...	...	68	56	14·6	3·3	6·6	1·2	0·1	32·2	17·2	22·5	23·3
Trichinopoly	Trichinopoly	139	139	...	1	1	...	11	9	...	...	1	...	412	401	6·7	0·4	3·3	3·2	0·2	23·7	16·9	24·1	20·2
	Srírangam	2	...	...	...	...	...	...	3	...	...	...	...	223	237	6·3	1·6	2·9	0·1	0·1	34·3	29·7	29·5	26·8
Tanjore	Tanjore	177	191	1	...	1	1	6	2	...	1	...	...	268	270	7·3	3·0	4·2	6·7	0·2	31·3	25·5	21·1	20·7
	Kumbakónam	120	121	...	...	...	...	7	2	...	1	...	...	632	557	7·9	2·3	6·3	4·8	0·1	45·4	26·4	33·7	32·6
	Máyavaram	61	54	...	...	...	...	2	1	2	4	...	...	188	163	8·5	3·2	4·4	4·9	0·3	36·8	23·8	30·2	34·5
	Negapatam	150	163	2	...	...	...	7	6	...	...	...	...	322	296	14·6	4·3	4·1	5·8	0·2	40·6	18·5	20·8	19·0
	Mannárgudi	49	65	...	...	...	...	1	4	...	1	...	...	152	128	15·5	3·2	2·7	5·8	0·3	42·2	28·5	24·3	31·5
Madura	Madura	88	83	1	...	3	1	17	5	...	1	...	...	481	501	9·6	1·3	3·9	2·3	0·3	30·9	27·3	33·5	45·4
	Dindigul	18	18	...	...	1	1	2	5	...	1	1	...	68	53	3·1	1·2	6·2	2·5	0·7	22·5	35·3	18·5	35·3

Return showing the Births and Deaths registered in the Municipalities of the Madras Presidency during the year 1884—(Continued).

Districts.	Municipal Towns.	Population per census of 1881.	Births. Class. Christians.	Muhammadans.	Hindus.	Other classes.	Total births. Males.	Females.	Total.	Deaths. Class. Christians.	Muhammadans.	Hindus.	Other classes.	Total deaths. Males.	Females.	Total.	Causes of death. Cholera. M.	Cholera. F.	Small-pox. M.	Small-pox. F.	Fevers. M.	Fevers. F.
Tinnevelly	Tinnevelly	23,221	12	44	612	...	326	342	668	6	59	866	...	464	467	931	136	168	53	54	26	17
	Palamcottah	17,964	43	17	392	...	231	221	452	61	23	450	...	278	256	534	77	84	21	16	15	17
	Tuticorin	16,281	263	48	321	...	312	320	632	330	55	413	...	400	398	798	124	127	8	15	36	32
Kurnool	Kurnool	20,329	10	334	361	...	380	325	705	5	304	335	...	301	343	644	...	...	41	50	137	163
Cuddapah	Cuddapah	18,982	6	217	256	...	246	233	479	15	300	402	...	354	363	717	134	141	...	2	60	54
Bellary	Bellary	53,460	96	355	664	...	573	542	1,115	52	494	792	...	703	635	1,338	28	33	30	13	284	239
	Adóni	22,441	5	292	593	...	462	428	890	1	206	354	...	283	278	561	...	2	91	104	74	49
Anantapur	Anantapur	4,907	2	83	158	...	117	126	243	...	35	88	...	66	57	123	...	...	...	...	5	4
North Arcot	Vellore	37,491	37	145	951	...	587	546	1,133	39	166	668	...	457	416	873	27	50	47	38	101	95
	Wálajápet	10,387	...	35	339	...	213	161	374	...	26	207	...	136	97	233	9	8	2	...	16	5
Salem	Salem	50,667	27	142	1,127	...	696	600	1,296	21	97	757	...	455	420	875	78	89	9	7	101	79
Coimbatore	Coimbatore	33,967	71	69	1,334	1	772	703	1,475	47	78	890	...	537	478	1,015	46	31	13	21	114	82
	Erode	9,864	16	31	220	...	157	110	267	5	44	169	...	104	114	218	8	14	12	21	17	17
	Karúr	9,205	3	40	361	...	195	209	404	1	30	278	...	153	156	309	28	26	...	1	33	25
Nílgiris	Ootacamund	12,335	177	27	82	46	179	153	332	140	31	109	77	183	174	357	...	2	1	1	56	62
	Coonoor	4,778	43	7	49	1	49	51	100	33	4	70	6	59	54	113	...	...	...	...	13	15
South Canara	Mangalore	32,099	268	145	517	...	498	432	930	134	141	368	...	355	288	643	...	...	...	...	77	83
Malabar	Tellicherry	26,410	67	310	618	...	521	474	995	42	178	323	...	305	238	543	...	...	10	17	44	33
	Calicut	57,085	111	1,173	1,409	...	1,414	1,279	2,693	80	766	940	...	944	842	1,786	6	2	47	52	114	77
	Pálghat	36,339	44	251	1,073	...	692	676	1,368	31	197	1,100	...	671	657	1,328	26	26	18	26	247	206
	Cochin	15,698	417	78	107	1	324	279	603	534	138	202	2	463	413	876	40	23	206	172	26	36
	Cannanore	26,386	279	469	358	1	566	541	1,107	163	260	258	...	374	307	681	...	...	1	...	61	52
	Total	1,733,350	3,810	7,635	43,644	63	28,543	26,609	*55,152	3,849	7,987	47,058	95	30,299	28,690	†58,989	3,550	3,622	3,889	3,800	5,488	5,180

* Inclusive of 225 Europeans and 599 Eurasians.

† Inclusive of 180 Europeans, 674 Eurasians, and 1,762 born dead.

Return showing the Births and Deaths registered in the Municipalities of the Madras Presidency during the year 1884—(Continued).

Districts.	Municipal towns.	Deaths—(Continued). Causes of death—(Continued). Bowel-complaints. M.	Bowel-complaints. F.	Suicides. M.	Suicides. F.	Injuries. Wounds. M.	Wounds. F.	Accidents. M.	Accidents. F.	Snake-bite. M.	Snake-bite. F.	Killed by wild beasts. M.	Killed by wild beasts. F.	All other causes. M.	All other causes. F.	Ratio per 1,000 of population. Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Total deaths.	Total births.	Average ratio of 5 previous years. Deaths.	Births.
Tinnevelly	Tinnevelly	35	38	...	...	1	...	5	2	1	...	...	...	207	188	13·0	4·6	1·8	3·1	0·3	40·0	28·7	35·0	33·0
	Palamcottah	17	21	...	...	2	2	3	1	...	...	...	...	143	115	8·9	2·0	1·7	2·1	0·4	29·7	25·1	32·0	34·9
	Tuticorin	106	108	1	...	1	...	3	...	1	...	...	...	121	116	15·4	1·4	4·2	13·0	0·3	49·0	38·8	40·2	49·8
Kurnool	Kurnool	13	8	...	2	...	2	1	3	...	...	...	...	109	115	...	4·4	14·7	1·0	0·3	31·6	34·6	30·4	25·6
Cuddapah	Cuddapah	14	10	1	2	...	...	2	...	...	...	...	...	143	154	14·5	0·1	6·0	1·2	0·2	37·7	25·2	40·3	30·5
Bellary	Bellary	53	31	...	1	2	...	10	7	...	...	...	...	296	311	1·1	0·8	9·7	1·5	0·3	25·0	20·8	25·0	17·3
	Adóni	4	4	...	...	1	1	3	...	...	...	...	...	110	118	0·08	8·6	5·4	0·3	0·2	24·9	39·6	33·5	31·6
Anantapur	Anantapur	...	...	...	...	...	1	1	1	...	...	...	...	60	51	...	...	1·8	...	0·6	25·0	49·5	27·7	36·6
North Arcot	Vellore	54	34	1	...	...	...	8	5	1	...	...	...	218	194	2·0	2·2	5·2	2·2	0·4	23·2	30·2	20·1	30·1
	Wálajápet	...	...	...	1	...	...	...	1	...	...	...	...	109	82	1·6	0·1	2·0	...	0·1	22·4	36·0	27·4	34·2
Salem	Salem	49	36	...	1	...	...	4	3	1	1	...	...	213	204	3·2	0·3	3·5	1·6	0·1	17·2	25·5	19·8	26·2
Coimbatore	Coimbatore	84	93	...	1	3	1	3	3	...	...	...	...	274	246	1·9	0·8	5·0	4·5	0·2	26·0	37·8	21·3	30·6
	Erode	13	16	...	1	1	...	1	1	...	...	...	...	52	44	2·2	3·3	3·4	2·9	0·4	22·1	27·0	18·5	24·9
	Karúr	45	58	...	1	4	1	1	...	...	...	...	...	42	44	5·8	0·1	6·3	11·1	0·7	33·5	43·8	28·5	36·0
Nilgiris	Ootacamund	25	15	1	...	...	...	2	1	...	...	...	...	98	93	0·1	0·1	9·5	3·2	0·3	28·9	26·9	28·9	32·3
	Coonoor	17	13	...	1	...	...	1	1	...	...	...	...	28	24	...	...	5·8	6·2	0·6	23·6	20·9	34·6	26·6
South Canara	Mangalore	41	32	1	2	2	2	5	2	...	1	...	...	228	169	...	...	4·9	2·2	0·4	20·0	28·9	24·2	26·1
Malabar	Tellicherry	26	26	2	1	2	...	7	3	...	1	...	...	213	156	...	1·0	2·9	1·9	0·6	20·5	37·6	23·9	29·9
	Calicut	72	82	3	1	2	1	8	3	...	...	...	...	692	624	0·1	1·7	3·3	2·6	0·3	31·2	47·0	28·0	32·0
	Pálghat	31	30	1	1	1	2	1	...	1	2	...	...	345	364	1·4	1·2	12·4	1·6	0·2	36·5	37·6	34·4	41·4
	Cochin	30	29	...	1	1	...	1	2	...	1	...	...	160	150	4·0	24·7	3·9	3·7	0·2	55·8	38·4	39·9	40·5
	Cannanore	12	10	...	...	1	...	4	2	...	...	1	...	293	242	...	0·03	4·2	0·8	0·3	25·8	41·9	19·3	28·2
Total ..		3,274	3,190	36	27	41	17	218	148	24	23	12	4	13,767	12,679	4·1	4·4	6·1	3·7	0·3	34·0	31·8	28·5	31·3

GOVERNMENT OF MADRAS.

PUBLIC DEPARTMENT.

ORDER—dated 19th August 1885, No. 1956, Public.

The Sanitary Commissioner's report for the year 1884 reached the Government office on the 27th July, very nearly two months after the date prescribed * by the Government of India. A perusal of Dr. Bidie's letter, dated 29th July 1885, No. 0-20, leads the Government to believe that the cause of this unsatisfactory state of things is want of punctuality in the submission of district reports, and the careless way in which the returns due from the districts are prepared. Dr. Bidie, however, has omitted to specify the districts specially in fault in the above respects. Nor has he stated whether the district officers concerned have furnished any explanation of their dilatoriness. Information on these points must now be supplied without delay, and the Government will then be in a position to say whether a good case has been made out for requesting the Government of India to fix a later date for the submission of the annual report, as suggested by the Sanitary Commissioner.

* 1st June.

2. The results of the registration of vital statistics show that these most important registers are now prepared with greater care and accuracy than in former years, but the Government expect still further improvement, and they entirely endorse the opinion expressed by the Sanitary Commissioner as to the importance of the district officers showing their personal interest in the work when on tour, by occasionally inspecting the registers. The Government desire that these remarks may be carefully borne in mind and acted upon as opportunity offers. The birth-rate reached 29·3 *per mille*, compared with 27·7 in 1883, and is the highest on record in the presidency. The rate in England and Wales for the same period was 33·4 *per mille* of population.

3. The recorded death-rate rose from 19·0 in the previous year to 23·1 *per mille*. This increase is ascribed partly to improved registration of deaths, but the main cause appears to have been the prevalence of epidemic disease.

4. Cholera prevailed in all districts of the presidency except South Canara which completely escaped. The incidence of the disease in Ganjam, Vizagapatam, Kurnool, and Nílgiris is reported to have been very slight. The disease continued longest and was most fatal in the district of Tanjore where it destroyed 11·1 per thousand of the population. The special attention of the district authorities is drawn to the remarks of the Sanitary Commissioner in paragraph 20 of his report. It would be difficult to overstate the importance to the health of the people of an abundant supply of wholesome drinking water. The total number of deaths from cholera and small-pox exceeded that of any year since 1877. Small-pox was very destructive in the town of Madras during the first quarter of the year, the deaths being in the ratio of 7·7 *per mille*. A special Health officer was appointed early in the year, and the vaccination of children above three and under twelve years of age was made compulsory. Fever was also very prevalent and fatal during the year, the mortality from this cause being 7·6 *per mille*. The disease was most destructive in Kurnool, Vizagapatam and the Nílgiris. In all the Western Districts there was a considerable increase of mortality from this cause, compared with the average results of the previous five years, the results being as follows:—

	1884.	Averge of five years.
Coimbatore	7·7	6·8
Nilgiris	12·0	9·7
South Canara	10·8	7·4
Malabar	10·5	8·3

6. *Vaccination.*—The total number of persons vaccinated was 803,469 compared with 753,589 in 1883. The ratio to births was 96·9 *per cent.* compared with 86 *per cent.*, the ratio in the previous year. The Vaccine departments under the Local Fund Boards did better work than in 1883, the total operations performed being increased by 26,598. The improvement occurred in the 13 districts noted in the margin. The results for the year were very unsatisfactory in Kurnool, Malabar, and South Canara. In Tanjore the prevalence of cholera interfered considerably with the work of the vaccinators who were in many cases detached for special cholera duty. Though the total cost of vaccination by Local Fund agency showed an increase of Rs. 6,136, the average cost of each successful case fell from Annas 3 Pies 10 in 1883 to Annas 3 Pies 9 in the year under report. The work done by municipal agency showed an improvement, the number of persons vaccinated being 112,812 compared with 96,274 in 1883. The following towns showed a marked improvement:—Ellore, Masulipatam, Rajahmundry and Salem, while in Coonoor, Mangalore, Calicut, Dindigul and Erode there was a considerable falling off. The Government again draw the attention of all district authorities to the importance of this work, the results of which depend mainly on the amount of interest bestowed upon the question by the various district officials. The suggestion made by the Sanitary Commissioner that some reliable data should be collected as to the actual value of past vaccination operations will be referred for the opinion of the Surgeon-General. The Government are disposed to think that the numerous civil hospitals, which now exist, afford a means of collecting important evidence which should not be neglected.

Chingleput.	North Arcot.
Coimbatore.	Salem.
Godávari.	South Arcot.
Kistna.	Tinnevelly.
Madura.	Trichinopoly.
Nellore.	Vizagapatam.
Nílgiris.	

7. The health of European troops was on the whole good. The death-rate was reduced to the low ratio of 8·5 *per mille*, compared with 12·4 *per mille* in the previous year. There was, however, much intermittent fever at Kamptee, and enteric fever at Bangalore. The prevalence of the latter is due no doubt to some extent to the unsatisfactory nature of the water-supply at Bangalore. Native troops were not so healthy as in the previous year, though the death-rate was only 11·6 *per mille.*

8. *Jails.*—The death-rate in 1884 was only 20·2 *per mille*, compared with 29·4 in the previous year. Cholera appeared in only four jails, Cuddalore, Tanjore, Trichinopoly, and Vellore, which, considering the great prevalence of cholera among the outside population, was satisfactory. The jail at Cuddapah is reported to have enjoyed a remarkable immunity, although cholera prevailed in the town for a couple of months. The death-rate in Trichinopoly, which had been abnormally high during the past four years, was only 17·4 *per mille* during the year under review.

9. *Municipalities.*—The sanitary allotments made by Municipal Councils amounted in 1884 to six lakhs and a half compared with five lakhs and seventy thousand rupees allotted in the previous year. Of the total allotment only Rs. 3,84,751 or 58·7 per cent. had been expended before the close of the year. This result is more disappointing even than that of last year, and the special attention of Chairmen of all Municipal Councils will now be drawn to the necessity of great attention being paid to the judicious expenditure of all the Municipal Sanitary allotments within the year. It is satisfactory to observe that the scavengering of private latrines by municipal agency made a great advance during the year. In 1883-84, 94·8 per cent. of the allotments made were spent.

10. *Local Fund Boards.*—In 1883, 77 per cent. only of the allotments for sanitary purposes were spent within the year, while in the first nine months of 1884, only Rs. 1,97,457 had been spent out of a total allotment of Rs. 3,72,946. The total allotments were only 26·5 per cent. of the total income, compared with 28·8 per cent. allotted in the previous year. It is very unsatisfactory to observe that the retrograde movement noted in the last year's report has continued. This is due in most cases not to insufficient allotments, but to the allotments made not being sufficiently utilized. Presidents of all Local Boards will now be called upon specially to report how far in the current year they expect to be able to utilize their sanitary allotments, and to give full reasons in cases where they report that they do not expect to be able to spend all the funds

allotted for sanitation. The formation of Taluk Boards and Unions under the present Local Fund Act will, it is hoped, produce improvement. The attention of the Surgeon-General is drawn to the remarks made in paragraph 141 of the report.

11. In the early portion of the year, the late Sanitary Commissioner (Surgeon-General Furnell) made tours in the Northern and Ceded districts, and also a special tour of inspection in Tanjore for the purpose of investigating the causes of the epidemic of cholera prevalent there; and at the close of the year, Malabar, Trichinopoly, Coimbatore, and North Arcot were also inspected. The Government desire the Sanitary Commissioner to enter, in future, in appendices all matter which does not form part of the text of his report.

(True Extract.)

E. F. WEBSTER,
Chief Secretary.

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