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ANNUAL REPORT

OF THE

SANITARY COMMISSIONER WITH THE GOVERNMENT OF INDIA,

FOR

1908,

WITH

APPENDICES AND RETURNS OF SICKNESS AND MORTALITY AMONG EUROPEAN TROOPS, NATIVE TROOPS, AND PRISONERS IN INDIA, FOR THE YEAR.





CALCUTTA
SUPERINTENDENT GOVERNMENT PRINTING, INDIA
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ANNUAL REPORT

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SANITARY COMMISSIONER WITH THE GOVERNMENT OF INDIA

1908.

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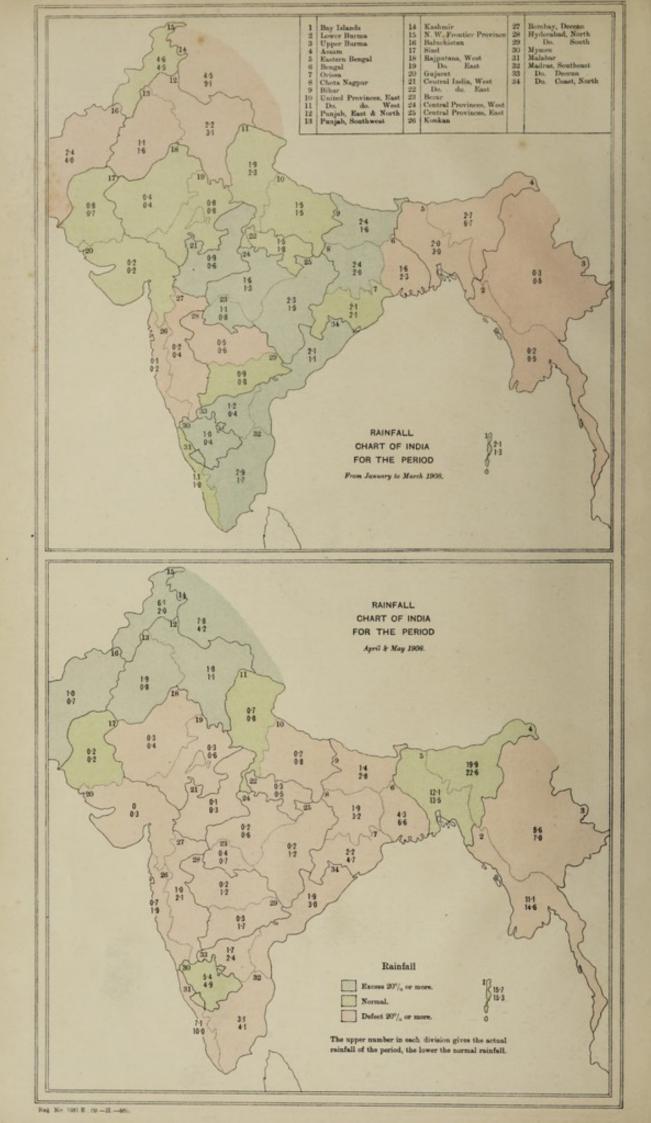
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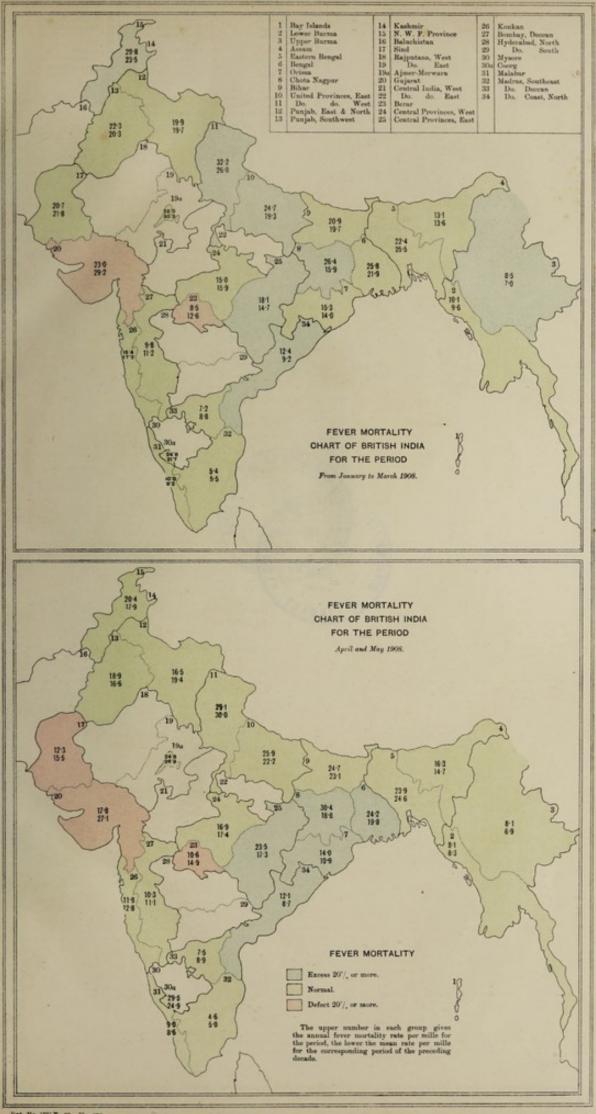
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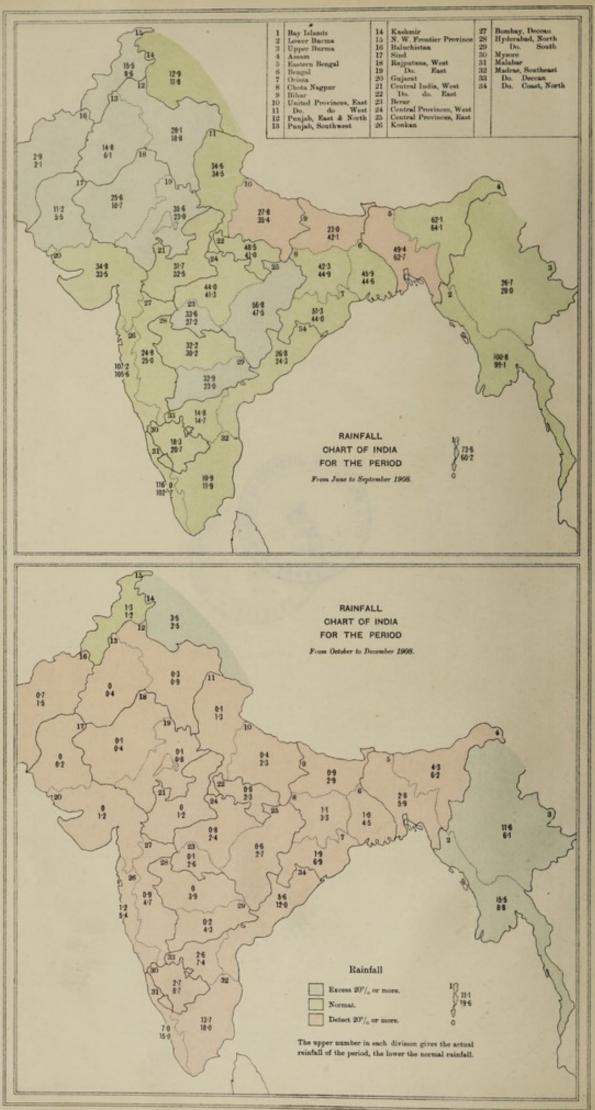


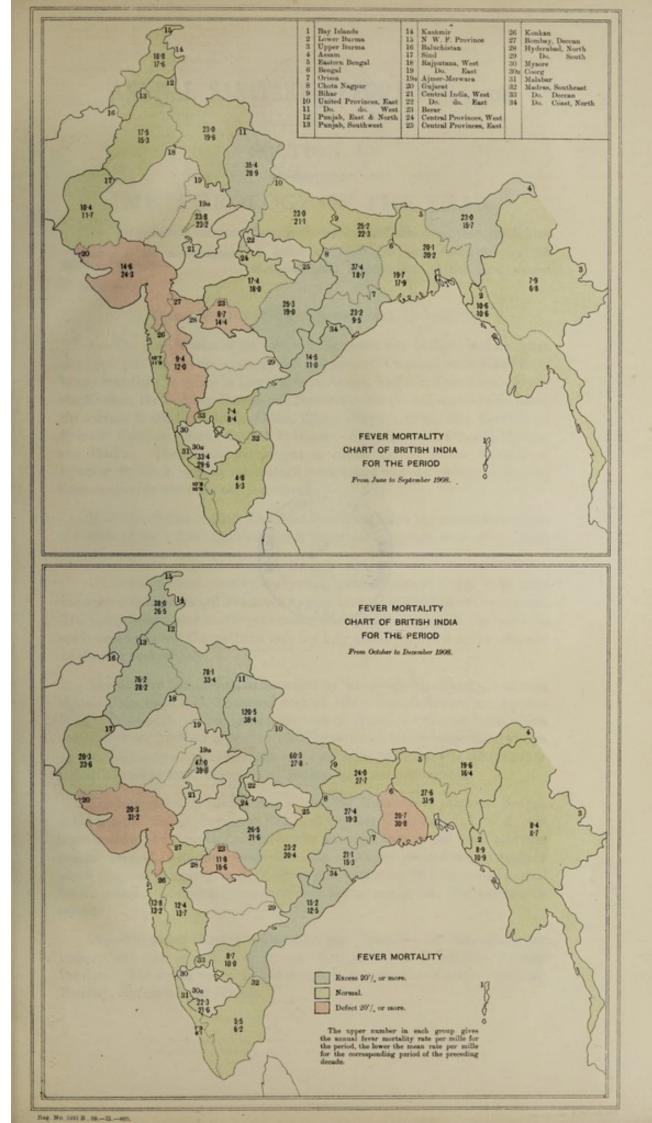
















METEOROLOGY OF THE YEAR.

I. The following memorandum on the rainfall and other weather conditions

Summary of the meteorological of India in 1908 has been furnished by the Meteorological Department of the Government of India:—

CHIEF FEATURES OF THE RAINFALL OF 1908.

I.—The precipitation of the cold weather period was in slight excess when averaged over the whole country, but was somewhat unusual in its distribution. It was materially in defect in Lower Burma, Assam, Kashmir, Baluchistan, Berar, the Konkan, the Bombay Deccan and Hyderabad North; and considerably above the average in the Bay Islands, Orissa, Chota Nagpur, Bihar, the North-West Frontier Province, Sind, Central Provinces East, Hyderabad South, Mysore, and Madras. The excess was largest in actual amount in the North-West Frontier Province, and by percentage comparison with the average in Mysore, where ordinarily but little rain is received.

II.—The rainfall of the hot weather season was below the normal over nearly the whole of the Indian region: the only important exceptions were upper India, Baluchistan, Berar and Mysore.

III.—The commencement of the monsoon rains occurred a few days after the normal date in Bengal and about a week later than usual on the west coast. The currents were very slow in penetrating inland, and as a result the rains in north-west India and Central India were not fully established until nearly the end of the first week of July.

The Arabian Sea current, as measured by its rain-giving capacity, was more vigorous than usual from the second week of July to the 4th September, but was directed to a much greater extent than usual towards north-west India, where accordingly the rainfall was heavy. The Bay monsoon, on the other hand, always showed less than its normal strength and steadiness, particularly in Bihar and the United Provinces East, where the rainfall was light and intermittent.

The total monsoon rainfall was in decided defect over Eastern Bengal, Bihar and the United Provinces East, and very nearly normal or above it over the remainder of the country. The excess was more than 50 per cent. over the greater part of north-west India and was absolutely greatest over Rajputana which obtained an aggregate of 33 inches instead of about 20 inches—the normal for the period. The rainfall over north-west India was in fact the heaviest on record.

IV.—The period October to December was unusually dry throughout the country with the exception of Burma, Kashmir and the North-West Frontier Province. The defect was large and serious in Bengal, the Central Provinces, Bombay, Hyderabad and Mysore.

V.—The excess of precipitation recorded during the cold weather and southwest monsoon seasons almost counterbalanced the defect in the other two periods and accordingly the year's rainfall over the whole country was I per cent below the normal.

TOTAL RAINFALL OF THE YEAR 1908.

			RAINFALL W	HOLE YEAR.	
Sub-division.		Actual.	Normal.	Departure from normal.	Percentage departure from normal.
		"		,	THE REAL PROPERTY.
1. Bay Islands	***	102'46	96:37	+6.09	+6
2. Lower Burma		127.55	122.86	+4.69	+4
3. Upper Burma		44.08	41.21	+ 2.57	+6
4. Assam		89.01	99.55	-10.24	-11
5. Eastern Bengal		66.31	85.21	-18.90	-22
6. Bengal		52.74	58.08	-5'34	-9
7. Orissa		57.44	57.73	-0.29	-1
8. Chota Nagpur		47'79	53'40	-5.61	-11
9. Bihar		27.77	49.38	-21.61	-44
10 United Provinces, East		29.86	40.10	-10.24	-26
11. Do. do. West		37.38	38.85	-1'47	-4
12. Punjab, East and North		32.41	23'97	+8.44	+35
13. Punjab, South-west		17.88	8.89	+8.99	+ 101
14. Kashmir		28.81	27.62	+1'19	+4
15. North-West Frontier Province		27.61	16.36	+11.25	+69
16. Baluchistan		6.90	8.25	-1.35	-16
17. Sind		12.18	6.63	+5'55	+84
18. Rajputana, West		26.32	11.81	+14'51	+123
19. Do. East		36.75	25.16	+11.20	+46
20. Gujrat		35'00	35.06	-0.06	0
21. Central India, West		32.64	34.62	-1.98	-6
22. Do. East		51.08	45'65	+5'43	+12
23. Berar		35.07	31.54	+3.83	+12
24. Central Provinces, West		46.20	45.65	+0.04	which out
25. Do. East		59.93	52.88		+2
26. Konkan		100.13		+7.05	+13
27. Bombay Deccan	dentil	marrow E. A.	113.14	-4.01	-4
Section of Lands and Thomas		26.78	32.17	-5:39	-17

TOTAL RAINFALL OF THE YEAR 1908.

		RAINFALL W	HOLE YEAR.	
Anni an Sub-division.	Actual.	Normal.	Departure from normal.	Percentage departure from normal.
	"	"	agla sjinit	continue of
28. Hyderabad, North	32.87	35.81	-2.94	-8
29. Do. South	34'15	29.72	+4.43	+15
30. Mysore	27.48	34.61	-7.13	-21
31. Malabar	131'24	128.68	+ 2.56	+2
32. Madras, South-east	30.64	35.66	-5.03	-14
33. Do. Deccan	20.33	24.79	-4.46	-18
34. Do. Coast, North	36.35	40'45	-4.10	-10

THE COLD WEATHER PERIOD, JANUARY AND FEBRUARY.

I.—General Summary.—January 1908, unlike the corresponding months, of several previous years, was associated with more rain than usual over a very large part of the country. The precipitation was remarkably heavy for the time of year in Orissa, south Hyderabad, Mysore and the north coast of Madras, which received as much as five to eight times the small normal fall of the month. In February, on the other hand, weather was unusually dry in north-west India and Central India, and very wet in Bengal, the Central Provinces, Mysore and Madras. The distribution of the precipitation of the season was thus very unusual. The aggregate of the period was within 15 per cent. of the normal in Eastern Bengal and Assam, the United Provinces, the Punjab, Rajputana, Central India and the Central Provinces, over 40 per cent. in excess in Bengal, the North-West Frontier Province, Sind, Hyderabad, Mysore and Madras, and decidedly below the small average quantity in Burma and Bombay.

Weather was even less disturbed in Baluchistan and Kashmir than in the Punjab, and the accumulations of snow on the mountain ranges of these regions at the end of the season were in general below their average depth.

The air was unusually dry in the Punjab, Central India, the Central Provinces and Hyderabad, the percentage of saturation being between 6 and 11 below normal in these areas. The quantity of cloud was very high over northeast India and a large part of the peninsula, and decidedly low in the Punjab and Rajputana.

As is ordinarily the case in a mild winter season the depatures of temperature from the normal were nowhere large, except locally in Kashmir and Baluchistan where weather was 3° warmer than usual.

Two cold waves of moderate severity affected northern and central India; the effects of the first lasted from the 9th to the 24th of January, and those of the second from the 1st to the 9th of February. A spell of abnormally warm weather was on the other hand experienced in northwest India from the 10th to the

20th of February: during this period day temperature at times became over 20° in excess in Baluchistan and 18° in Sind.

Burma.—The whole division received less rain than usual, but the deficiency was not large, for the normal fall does not exceed a quarter of an inch in amount. The departures from normal of temperature, humidity and cloud were generally of little significance.

Northeast India, including Orissa.—The precipitation of the period was 26 per cent. in defect over Assam, and more or less above the average over the rest of the division. The excess was as much as 75 per cent. in Bihar and Chota Nagpur, where it was most marked. Temperature and humidity departed but little from the normal. The amount of cloud was decidedly high, particularly in Eastern Bengal and Assam in spite of the defect of rainfall there.

The United Provinces, Central India and the Central Provinces.—Except in the Central Provinces East where it was in marked excess (+160 per cent.), and in Berar (which received 79 per cent. less than its normal quantity) the total fall of the period was very nearly normal over the division. The air was generally very dry, more especially in the Central Provinces where at some stations the percentage of saturation was from 10 to 17 below normal. Skies were clouded to about the usual extent in most places. Temperature did not differ materially from the average.

Northwest India.—The precipitation was much heavier than usual in Rajputana West, Sind, and the North-West Frontier Province, practically normal in the Punjab, Rajputana East and Gujarat, and in large defect in Kashmir and Baluchistan. The proportion of cloud was very low in the Punjab and Rajputana, while humidity was nearly normal except in the Punjab, where the percentage was 6 in defect, and in Sind where it was 5 in excess. Temperature was higher than usual in Baluchistan and Kashmir, the areas of scanty precipitation, but elsewhere the departures from the average were small in amount.

The Peninsula.—Weather was remarkably wet almost everywhere, the only part where the seasonal rainfall was short of the small normal quantity being the Konkan, the Bombay Deccan and Hyderabad North. The excess was greatest in actual amount in Madras Coast North, and by percentage comparison with the normal in Mysore. The air contained the average amount of moisture except in Hyderabad where it was unusually dry. The quantity of cloud was either equal to or above the normal in most parts of the division. Temperature agreed closely with the normal almost everywhere.*

^{*} Further details will be found in the two following tables, where, as in all the other tables contained in this memorandum, stations at an altitude above sea level greater than 3,200 feet are neglected; exception is made in the divisions of Kashmir and Baluchistan, where stations of all altitudes are included.

Constant on a	Rate	FALL, JANU	DV AND FEE	DITADY	Decape	URE FROM N	ORWAL OF
	DAIN	and land					DKMAL OF
Division.	le and		e from	ge depar	Mean temperature.	humidity	*
	Actual.	Normal	Departure normal.	Percentage depar- ture from normal.	Mean ten	Relative 8 hrs.	Cloud & hrs.
1004	100	Total .	1			-	THE R.
10-	"	. "			0	40 100	
Burma	0'14	0'26	-0.13	-46	+0.3	0	-0.3
Eastern Bengal and Assam.	1*56	1'77	-0.51	, —12	-0.3	+1	+1.1
Bengal	1.79	1'23	+0.26	+46	—r·5	+2	+0.1
United Provinces	1.23	1'51	+0'02	+ 1	-0.6	-5	-0.3
Punjab	1.04	2.13	-0.18	- 8	+1.6	-6	-1.0
North-West Frontier Province,	4.31	2.72	+1.29	+58	+0.8	+2	-0.4
Sind	0.77	0.23	+0.54	+45	+0.8	+5	-0.2
Rajputana	0.63	0.26	+0.04	+13	+0'2	0	-1.3
Bombay	0.07	0.18	-0.11	-61	-0.3	-3	+0.3
Central India	0.85	0.87	-002	-2	-0.6	-7	+0.3
Central Provinces	0.84	0.72	+0.00	+12	-0.0	-11	+0.1
Hyderabad	0.44	0'25	+0.13	+76	-0.4	-10	+0.7
Mysore	0.67	0,11	+0.26	+ 509	+0.0	+1	+0.2
Madras	1.64	0.86	+0.48	+91	-0.1	0	+0.8
-		- Inter		-	-		
Mean of India when the size of the above areas is taken into	1.02	0.00	+0.12	+17	-0.1	-3	0
account.	120	1100					DATE OF

DESCRIPTION CONTRACTOR OF THE PARTY OF THE P	-	RA	INFALL, JANUA	RY AND FEBRUA	ARY.
Sub-division.		Actual	Normal.	Departure from normal.	Percentage departure from normal.
		"	"		
I. Bay Islands		2.09	1.12	+0'94	+82
2. Lower Burma		0.02	0'24	-0.19	-79
3. Upper Burma		0.50	0.26	-0.06	-23
4. Assam		1.64	2.23	-0.59	-26
5. Eastern Bengal		1'48	1'29	+0.10	+15
6. Bengal		1.41	1.28	+0.13	+10
7. Orissa	***	1'44	1,00	+0'44	+44
8. Chota Nagpur		2.53	1'27	+0.02	+75
9. Bihar		2.19	1.25	+0.94	+75
10. United Provinces, East		1.23	1,53	0	0
11. Do. do. West		1.89	1.83	+0.06	+3
12. Punjab, East and North		2.16	2'39	-0.53	-10
13. Punjab, South-west		1.11	1.00	+0.03	+2
14. Kashmir		3.92	6.40	-2.48	-39
15. North-West Frontier Province		4'31	2'72	+1.59	+58
16. Baluchistan		1'34	2.83	-1.49	-53
17. Sind		0.77	0.23	+0.24	+45
18. Rajputana, West		0'39	0.30	+ 0.10	+34
19. Do. East		0.43	0.65	+0.08	+12
20. Gujarat		0.12	0.12	+0.03	+13
21. Central India, West		0.20	0'53	+0.00	+11
22. Do, East		1'36	1.20	-0.14	-9
23. Berar		0,11	0.2	-0:41	-79
24. Central Provinces, West		0.83	0.03	-0.10	-11
25. Do. do. East		5.51	0.85	+1.36	+160
26. Konkan		0.02	0.18	-0.11	-6t
27. Bombay Deccan		0,01	0.10	-0.18	-95
28. Hyderabad, North		0.11	0'24	-0.13	-54
29. Do. South		0.72	0.56	+0.46	+177
30. Mysore		0.67	0.11	+0.26	+509
	1				

					RAI	RFALL, JANUAR	Y AND FEBRUA	ARY.
		Sub-divisio	in.		Actual.	Normal.	Departure from normal.	Percentage departage from sormal.
-	market land o					"	- 4	the state of the s
31.	Malabar	****			0.24	0,40	+0.14	+35
32.	Madras,	South-east			2'00	1.31	+0.40	+65
33-	Do.	Deccan		***	087	0.53	+0.64	+278
34.	Do.	Coast, Nort	h		2.00	0.69	+1.31	+190

THE HOT WEATHER PERIOD, MARCH TO MAY.

11.—General Summary.—Meteorologically the hot weather season of 1908 contrasted strongly with the corresponding period of 1907. Weather was drier than usual in March, and the rainfall was scanty and below the normal throughout the country except locally in Madras, Mysore, Central India and the Central Provinces. Indeed over the greater part of northwest India the month was practically rainless. April was very unsettled over upper India, Baluchistan and in a small area in the peninsula, but over the rest of the country the month's precipitation was markedly in defect. May was also drier than usual and the rainfall more or less below the normal over nearly the whole of the country, but more specially in Malabar where it was in large defect. The rainfall of the hot season was thus short of the average all over the country with the exception of the Bay Islands, the Punjab, Kashmir, the North-West Frontier Province, Baluchistan, Berar, Central Provinces West and Mysore; the defect averaged more than 50 per cent. in amount in Hyderabad and Bombay.

On the mean of the whole country there was a defect of 25 per cent. in the seasonal rainfall, as compared with an excess of 20 per cent. in 1907.

As might be expected from the shortness of the rainfall, humidity and the amount of cloud were low in most divisions; the areas of the greatest dryness of the air were the Central Provinces and Hyderabad, where the percentage of saturation was about 8 in defect. The temperature conditions differed but little from the normal, the departures being within 1° of the normal in twelve of the fourteen divisions.

Burma.—The total precipitation of the period was below the average throughout the province, the deficiency averaging 24 per cent. in Lower Burma and 23 per cent. in Upper Burma. Humidity, cloud and temperature did not differ much from the normal.

Northeast India, including Orissa.—There was less rain than usual in all parts of the division; the proportional defect was greatest (about 50 per cent.) in Orissa, Chota Nagpur and Bihar, and least (18 per cent) in Eastern Bengal. The departures of temperature, humidity and cloud were determined by those of rainfall, but were not marked except in the case of Eastern Bengal and Assam where the quantity of cloud was appreciably less than the average.

The United Provinces, Central India and the Central Provinces.—Rainfall was practically normal in the west of Central India and of the Central Provinces, and 34 per cent. in excess in Berar; elsewhere there was a defect which was most pronounced in the Central Provinces East where it amounted to 84 per cent. The average amount of cloud was recorded except in Central India where skies were more clouded than usual. The moisture in the air was equal to the normal in Central India and below it in the Central Provinces and the United Provinces. Temperature was approximately normal.

Northwest India.—A large excess was shown in the precipitation over the North-West Frontier Province and Kashmir, and a small excess in the Punjab and Baluchistan, owing mainly to the heavy rain in April. In the rest of the division a defect occurred, ranging from 36 per cent. in Rajputana West to 100 per cent. in Gujarat. Humidity was low except in Sind and Kashmir, and temperature and cloud were both very nearly normal.

The Peninsula.—Mysore was the only part of the division where the precipitation was above the normal. The shortage exceeded 50 per cent. in amount in the Konkan, the Bombay Deccan and Hyderabad, being greatest in Hyderabad South which received only 18 per cent. of its normal quantity. On the mean of the period the air was very dry in Hyderabad, the region of largest percentage deficiency of rainfall. The departures of temperature and cloud were generally of no consequence.

			R	INFALL, A	MARCH TO MA	γ.		NORMAL (
Division.			Actual.	Normal.	Departure from normal.	Percentage de- parture from normal.	Mean tempera- ture.	Relative humi- dity 8 hrs.	Cloud 8 hrs.
			"	"	"		0		
Burma	.,.		8*15	10'65	-2.50	-23	+0.7	0	-0.2
Eastern Bengal and	d Assam	,	16.91	21.25	-4'35	-20	+1.3	-3	-1.1
Bengal			2'91	5'34	-2'43	-46	+1.1	-4	-0.6
United Provinces	**	***	0*60	1.51	-0.61	-50	+1.0	-5	-0.2
Punjab			1.84	1.71	+0.13	+ 8	-0.4	-6	-0'4
North-West Front	ier Provin	ce	6.45	3'79	+ 2*66	+70	-1.3	5	+0.2
Sind			0.55	0.39	-0.14	-44	-0.0	+2	-0.1
Rajputana			0.36	0.65	-0.59	-45	-0.6	-6	-0.5

	 R	AIFFALL, M	ARCH TO MA	γ.	DEP	NORMAL	
Division.	Actual.	Normal.	Departure from normal.	Percentage de- parture from normal,	Mean tempera- ture.	Relative humidity 8 hrs.	Cloud 8 hrs.
					0		
Bombay	 0.68	1.28	-0.30	-57	-1.0	-3	-0.2
Central India	 0,40	0.24	-0.14	-26	-0,1	-1	+0.0
Central Provinces	 0.08	1.18	-0.50	-17	-o·5	-7	0
Hyderabad	 0.48	1.86	-1.38	-74	+0.2	-9	+0.3
Mysore	 5.73	5'19	+0.24	+10	+0.1	+1	-0.1
Madras	 3.48	4.48	-1.00	-22	0	-1	+0.1
Mean of India when the the above areas is ta account.	3'37	4.20	-1'13	-25	+0,1	-4	-0.3

			RAINFALL, MARCH TO MAY.							
Sub-divisi	ion.		Actual.	Normal.	Departure from normal.	Percentage departure from normal.				
			b			90-149				
1. Bay Islands			15.74	15.45	+0.59	+ 2				
2. Lower Burma			11.58	14'81	-3.23	-24				
3. Upper Burma			5.61	7'24	-1.63	-23				
4. Assam			20.99	27.06	-6.07	-22				
5. Eastern Bengal			12.29	15.27	-2.68	-18				
6. Bengal			4'41	7.60	-3.19	-42				
7. Orissa	***		2.85	5.77	-2.92	-51				
8. Chota Nagpur	•••	***	2.08	3.91	-1.83	-47				
9. Bihar			1.64	3.13	-1.48	-47				
10. United Provinces, Ea	ast		0'46	1.13	-o·66	-59				
II. Do. do. W	est		0.76	1'31	-0.55	-42				

		lived	WHI I		RAINFALL, MARCH TO MAY.						
		Sub-div	ision.		Actual,	Normal.	Departure from normal.	Percentage departure from normal.			
-					,		"				
12.	Punjab,	East and	North		1.84	1.82	+0.03	+ 1			
13.	Punjab,	South-wes	st		1,01	1.29	+0.62	+48			
14.	Kashmi	r			8.45	6.88	+1.22	+23			
15	North-V	Vest Front	ier Province	· · ·	6.45	. 3'79	+ 2.66	+70			
16.	Baluchi	stan			2.00	1.80	+0'20	+11			
17.	Sind				0.53	0,39	-0.17	-44			
18.	Rajputa	na, West			0.28	0.44	-0.16	-36			
19.	Do.	East			0.39	0.4	-0.32	-47			
20.	Gujarat				0	0'27	-0.27	-100			
21.	Central	India, Wes	st		0.36	0.42	-0.06	-14			
22.	Do.	do. Eas	t		0.44	0.79	-o.32	-44			
23.	Berar		***		1.31	0.08	+0.33	+34			
24.	Central	Provinces,	West		1.01	0.97	+0.04	+ 4			
25.	Do.	do.	East		0.50	1.84	1.55	-84			
26.	Konkan				0.70	1.08	-1.58	-65			
27.	Bombay	Deccan			1.13	2.31	-1.19	-52			
28.	Hyderab	ad, North			0.57	1.20	-0.93	62			
29.	Do.	South			0.39	2'15	-1.76	-82			
30.	Mysore				5'73	5'19	+0*54	+10			
31.	Malabar				7.68	10.22	2.87	-27			
32.	Madras,	South-east	t		4.00	4.55	-0.22	-12			
33-	Do.	Deccan			2'08	2.21	-0.43	-17			
34.	Do.	Coast, No	orth		2'01	3'42	-1.41	-41			

THE SOUTH-WEST MONSOON PERIOD, JUNE TO SEPTEMBER.

III.—General Summary.—The monsoon currents were somewhat late in arrival in the coast districts, particularly on the west coast, and very slow in extending into the interior, with the result that in Central India and the northwest the establishment of the rains did not occur until about the 7th of July. As

measured by its rain-producing capacity the Bay current was weak throughout practically the whole of the monsoon season, and but seldom extended in full force into Bihar and the east of the United Provinces, where drought conditions prevailed almost incessantly. The Arabian Sea current on the other hand was very active during the greater part of the period from the second week of July to the 4th of September, more especially in northwest India; but after this it declined quickly and by the 10th had ceased to give rain in upper India. During the remainder of September the activity of the current was shown chiefly in the peninsula, where under the influence of a storm from the Bay it gave a deluge of rain which resulted in destructive floods in Hyderabad in the last week of the month.

The rainfall of the whole period June to September was abundant over nearly the whole of the region served by the Arabian Sea current, and was exceptionally heavy over the comparatively dry zone of northwest India. It was on the other hand normal and, on the whole, favourably distributed in Burma, and in slight defect in Eastern Bengal and Assam, Bengal and the United Provinces. The deficiency was large locally in Bihar (45 per cent.) and considerable in the United Provinces East and Eastern Bengal (21 per cent.) The monsoon rains of 1908 were thus chiefly noteworthy for their abundance in the northwest, and their persistent weakness in parts of northeast India.

The statement below contains monthly data regarding these two features:-

	HAINS	ALL.		All Mines State	PERCENTAGE DEPARTURE OF RAINFALL.			
Jane.	Jaly.	Jaly. August. September.		Region of drought.	Jare,	July	August	September.
-73	+33	+148	+11	Eastern Bengal	-19	-6	51	-10
-62	+37	+89	+263	Bihar	—58	-44	-40	-35
-83	+248	+15	-10 0	United Provinces, East	-6t	-15	+10	-57
-40	+113	+108	-19		-			-
	-73 -62 -83	-73 +33 -62 +37 -83 +248	-73 +248 +25	-73 +33 +148 +11 -62 +37 +89 +263 -83 +248 +25 -100	Region of drought. -73 +33 +148 +11 Eastern Bangal -62 +37 +89 +263 Bihar -83 +248 +26	Region of descapht. -73 +33 +148 +11 Eastern Bangal19 -62 +37 +89 +263 Bihar58 -83 +248 +25	Region of descapht. 1	Region of drought. 1

The excess in northwest India regarded as consisting of the Punjab, the North-West Frontier Province, Sind and Rajputana, is the largest on record, as is shown by the following statement giving data for all years of excess of rainfall:—

Excess of rainfall in northwest India, during rainy season of-

1875	1376	1878	1881	1882	1884	1887	1800	1893	1893	1894	1900	1905
+6'74	+1*41	+3'53	+1'07	+2'13	+1*89	+0'72	+0.02	+6'91	+3,01	+4'13	+1.93	+8.74

The departures of temperature, humidity and cloud were in the great majority of divisions small in amount and, as is ordinarily the case, were determined, almost entirely by those of the rainfall. Burma.—The total monsoon rainfall was very nearly normal in amount being 2 per cent in excess in Lower Burma and 5 per cent in defect in Upper Burma. Temperature, humidity and cloud departed but little from the mean.

Northeast India, including Orissa.—The precipitation of the period was almost normal in amount in Assam, Bengal and Chota Nagpur, in slight excess in Orissa, and 21 and 45 per cent. in defect in Eastern Bengal and Bihar, respectively. Temperature and humidity agreed closely with the average. The quantity of cloud was very low in Eastern Bengal and Assam, and about normal in Bengal.

The United Provinces, Central India and the Central Provinces.—Rainfall was 22 per cent. in defect in the United Provinces East, normal or within 6 per cent, of it in the United Provinces West, Central India West and the Central Provinces West, and greater than usual over the rest of the division. The largest excess with respect to the normal occurred in Berar which obtained 24 per cent. more than its average supply. The departures of humidity and temperature were generally small in amount. Skies were clouded less than usual in the United Provinces, and to about the average extent elsewhere.

Northwest India.—Rainfall was unusually heavy in this division. The excess ranged from 4 per cent. in Gujarat and 9 per cent. in Kashmir, to 104 per cent in Sind, 140 per cent. in Rajputana West and 142 per cent. in the Punjab Southwest. The departures of temperature, humidity and cloud were in general such as are associated with the prevalence of more rainy weather than usual, but were not however large in amount.

The Peninsula.—The rainfall of the period was in excess by 43 per cent. in Hyderabad South, 13 per cent. in Malabar and 10 per cent. in Madras Coast North; in defect by 11 per cent. in Mysore; and practically normal over the remainder of the division. On the average of the whole period the temperature and hygrometric conditions did not differ to any important extent from the normal.

	RA	INFALL JUN	E TO SEPTE	DEPARTURE FROM NORMAL OF			
Division.	Actual.	Normal,	Departure from normal.	Percentage departure fro a normal.	Mean temperature.	Relative humidity 8 hrs.	Cloud 8 hrs.
					0		-
Burma Eastern Bengal and Assam.	55'79	63.40	+0.01	- 12	+0.3	+1 -2	-0.1
Bengal United Provinces	38.77	43.76	-4'99	- 11	+0.4	-1	-0'3
Dunish	30.02	34'99	-4.03	11	+0.0	-4	-1.1
North-West Frontier Province.	25.37	8.61	+6.90	+ 57 + 80	-1.3	+1+2	+0.3
Sind	11.10	5'49	+5'70	+104	-0.6	+4	+0.6
Rajputana	32'91	19.68	+13.23	+ 67	-1.0	+4	-0.5
Bombay	42.08	42'38	+0.60	+ 1	-0.3	0	+0.1
Central India	37'20	35'39	+1.81	+ 5	+0.6	+1	+0.8
Central Provinces	42.60	36.02	+5.68	± 15	+0.1	-2	+0.5
Hyderabad	32'54	26.26	+6.28	+ 24	+0.2	-1	+0.1
Mysore	18'34	20.66	-2.32	- 11	-0.1	+1	ó
***	25'73	24.53	+1.20	+ 6	+ 0.3	-1	+0.1
Mean of India when the size of the above areas is taken into account.	37.45	35'35	+2.10	+ 6	-0.1	0	-0.1

Connected to Springer		RAINFALL, JUNE TO SEPTEMBER.							
Sub-division.	des	Actual.	Normal.	Departure from normal.	Percentage departure from normal.				
		,	"	"					
1. Bay Islands		73'58	60.12	+13'43	+ 22				
2. Lower Burma		100.76	99.06	+ 1.70	+ 2				
3. Upper Burma		26.65	27.95	- 1.30	— 5				
4. Assam		62.07	64.06	- 1.99	- 3				
5. Eastern Bengal		49'43	62.71	-13.28	- 21				
6. Bengal	233	45'97	44.66	+ 1.31	+ 3				
7. Orissa		51.24	44.02	+ 7.22	+ 16				
8. Chota Nagpur		42.40	44'92	- 2.22	- 6				
9. Bihar		23.08	42'13	-19.05	- 45				
10. United Provinces, East		27.77	35'44	- 7.67	- 22				
II. Do. do. West		34.60	34.46	+ 0.14	0				
12. Punjab, East and North		28.08	18.84	+ 9'24	+ 49				
13. Do. South-west	l	14.83	6.13	+ 8.71	+142				
14. Kashmir		12.91	11.82	+ 1.09	+ 9				
15. North-West Frontier Province		15.21	8.61	+ 6.90	+ 80				
16. Baluchistan		2.89	2.10	+ 0'79	+ 38				
17. Sind		11.19	5'49	+ 5.40	+104				
18. Rajputana, West		25.60	10.67	+14'93	+140				
19. ' Do. East	***	35'57	22.99	+12.58	+ 55				
20. Gujarat		34.79	33.47	+ 1'32	+ 4				
21. Central India, West		31.65	32.47	— o·82	- 3				
22. Do, East	0.000	48.51	41'04	+ 7'47	+ 18				
23. Berar	10122	33.26	27.16	+ 6.40	+ 24				
24. Central Provinces, West	Intel	43.99	41.31	+ 2.68	+ 6				
25. Do. do. East		56.82	47.47	+ 9.35	+ 20				
26. Konkan		107'19	105.22	+ 1.64	+ 2				
27. Bombay Deccan	1	24.77	25.03	- 0.25	- 1				
28. Hyderabad, North		32.17	30.16	+ 2'01	+ 7				
29. Do. South		32.86	23.01	+ 9.85	+ 43				
30. Mysore	17 222	18:34	20.66	- 2'32	- 11				
antile of the supply of the su	VIPCIC	The state of the s		The state of the s	Name of Street, or other Designation of the last of th				

			RAINFALL, JUNE TO SEPTEMBER.				
And the second	Sub-division.	though	Actual.	Normal.	Departure from normal.	Percentage departure from normal.	
				,			
31. Malabar			 116.04	102.74	+13.30	+ 13	
32. Madras,	South-east		 10,01	11.87	- 0.96	- 8	
33. Do.	Deccan'		 14.79	14.67	+ 0.13	+ 1	
34. Do.	Coast, North	1	 26.76	24'34	+ 2'42	+ 10	
			- Proposition				

THE RETREATING MONSOON PERIOD, OCTOBER TO DECEMBER.

IV.—General Summary.—The more striking features of the meteorology of this period were (a) the early cessation of the rains over the greater part of northern and central India, (b) the persistent feebleness of the Bay current in the peninsula, and (c) the feeble commencement of the cold weather rains in Persia and in the plains of northern India.

The rainfall of the whole season was in excess by 83 per cent. in Burma, 40 per cent. in Kashmir, and 8 per cent. in the North-West Frontier Province; it was very scanty in other divisions, more especially in Bengal, the Central Provinces and the greater part of the peninsula, which usually obtain moderate to heavy rain in this period.

As is ordinarily the case during periods of light precipitation, the air was drier and skies less clouded than usual over a large part of the country. A significant exception occurred however in the case of northwest India where, in spite of the defect of rainfall in the plains, the amount of moisture in the air was in excess, owing chiefly to the excessive precipitation of the monsoon period.

Temperature agreed with the normal within 1° in the case of twelve of the fourteen divisions; it was however generally inclined to be low.

Burma.—The seasonal precipitation exceeded the normal by 92 per cent. in Upper Burma and by 77 per cent. in Lower Burma. The amount of cloud over the division was normal, while the relative humidity was 3 per cent. in excess. Temperature was practically normal, the departure being less than 1°.

Northeast India, including Orissa.—Rainfall was generally much short of the normal: the defect was very large in Bengal, Bihar, Orissa and Chota Nagpur which obtained only from 20 to 30 per cent. of their respective normal quantities, while Eastern Bengal received a half. Both humidity and cloud were below the average. On the mean of the whole season the temperature conditions did not depart appreciably from the normal.

The United Provinces, Central India and the Central Provinces.—Light rain occurred in the United Provinces, the Central Provinces and Central India East, but in Central India West the weather was dry throughout: normally moderate rain is received in these areas in October. The air was generally drier and skies less clouded than usual. Temperature differed but little from the normal.

Northwest India.—Little or no rainfall occurred in Gujarat, Rajputana, Sind and the Punjab South-west, and only light precipitation in the Punjab East and North and Baluchistan. Weather was on the other hand more disturbed than usual in Kashmir and the North-West Frontier Province in December, and accordingly the total fall of the period was 40 per cent. in excess in the former region and normal in the latter. The air was slightly damper than usual in most of the plains districts, and drier in Baluchistan and Kashmir. Skies on the other hand were free from cloud to an unusual extent. Temperature did not depart appreciably from the average except in Rajputana where it was 1½° in defect.

The Peninsula.—Rainfall was decidedly below the normal throughout the division: the proportional deficiency was most marked in Hyderabad, the Bombay Deccan, the Konkan, Mysore and the Madras Deccan, which received only 2, 19, 22, 32 and 35 per cent. of their respective normal amounts. The cloud proportion was normal or below normal, while humidity was low everywhere. The air was about 1° cooler than usual in Hyderabad, while elsewhere the departures from normal of temperature were small and of no significance.

	RAINE	ALL, OCT	OBER TO D	ECEMBER.	DEPAR	TURE FRO	M NORMAL
Division.	Actual.	Normal.	Departure from normal.	Percentage depar- ture from normal.	Mean temperature.	Relative humidity 8 hrs.	Cloud 8 hrs.
		"	"	110	0	1	
Burma	13.39	7:30	+6.09	+83	-0.6	+3	Q
Eastern Bengal and Assam	3'57	6.08	-2.21	-41	-0.6	-3	-1.0
Bengal	1,00	4.50	-3.11	-74	-o·8	-7	-0.6
United Provinces	0.27	1.81	-1.24	-85	-0.5	6	-o·8
Punjab	0.26	0.80	-o·54	68	-0.2	+4	-0.7
North-West Frontier Province	1.34	1.24	+0,10	+ 8	-0.8	+5	-0.9
Sind	0	0.55	-0'22	-100	+0.1	+7	-0.8
Rajputana	0.06	0.68	-0.62	-91	-1:7	+1	-1.0
Bombay	0.67	3.68	-3.01	-82	-0.2	-5	-0.5
Central India	0.25	1.28	-1.33	-84	-0.2	-5	-0.3
Central Provinces	0.46	2.56	-2.10	-82	-0.9	-8	-0.7
Hyderabad	0,10	4'12	-4'02	-98	-1.3	-7	0
Mysore	2.74	8.65	-5'91	-68	+0.6	-6	-1'2
Madras	9.21	14'54	-5'33	-37	-0.4	-4	-0.4
Mean of India when the size of the above areas is taken into account.	2.99	4.44	-1'45	-33	-0.6	-3	-0.6

untel in Gujarat, Rapphines, sons obserior in the Panjab East and	I Secured a suppost, regulation of				BER.
Sub-division-	1011	Actual.	Normal.	Departure from normal,	Percentage departure from normal,
second lower and unmer white	To st				OR HOUSEN
1. Bay Islands		11.05	19.62	-8.57	-44
2. Lower Burma		15.46	8.75	+6.71	+77
3. Upper Burma		11.62	6.06	+5.26	+92
4. Assam		4.31	6.30	-1.89	-30
5. Eastern Bengal		2.81	5'94	-3.13	-53
6. Bengal		0'95	4'54	-3.59	-79
7. Orissa		1.01	6.94	-5.03	-72
8. Chota Nagpur		1.09	3.30	-2.51	-67
9. Bihar		0.86	2.88	-2.03	-70
10. United Provinces, East		0.40	2'31	-1.01	-83
11. Do. do. West		0.13	1.25	-1.13	-90
12. Punjab, East and North		0.33	0.03	-o·59	-64
13. Do. South-west		0.03	0.39	-0.36	-92
14. Kashmir		3'53	2.23	+1.01	+40
15. North-West Frontier Province		1.34	1.24	+0.10	+8
16. Baluchistan		0.67	1.2	-o·85	-56
17. Sind		0	0.55	-0.55	-100
18. Rajputana, West		0.02	0.41	-o·36	-88
19. Do. East		0.09	0.78	-0.42	-92
20. Gujarat		0'04	1.17	-1.13	-97
21. Central India, West		0.04	1.30	-1.16	-97
22. Do. do. East		0.44	2'32	-1.55	-67
23. Berar		0.00	2.28	-2.49	-97
24. Central Provinces, West		0.76	2'44	-1.68	-69
25. Do. do, East		0.61	2.72	-2.11	-78
26. Konkan		1.12	5'43	-4.26	-78
27. Bombay Deccan		0.88	4.65	-3.77	-81
28. Hyderabad, North		0.03	3.91	-3.89	-99
29. Do. South		0.18	4'30	-4'12	—96
			ofne mole	d same	renda edo

					R	AINFALL, OCTO	BER TO DECEM	SER.
	Sub-division.				Actual.	Normal,	Departure from normal.	Percentage departure from normal.
					"	"	"	1
30.	Mysore				2.74	8.65	-5.91	68
31.	Malabar				6.98	14'99	8.01	-53
32.	Madras,	South-east			13.73	18.03	-4.30	-24
33.	Do.	Deccan			2.29	7:38	-4'79	65
34-	Do.	Coast, North	h		5.28	12'00	-6.42	-54

SECTION II.

EUROPEAN ARMY OF INDIA.

2. The average daily strength of the European army of India during 1908 excluding officers, was 68,933. In many parts of the country the monsoon rainfall was abnormal in both quantity and distri-

bution, and cholera, malaria and dysentery were unusually prevalent among the general population. As regards the health of the European troops it will be seen from the statement in the margin that the rates of admission to hospital and of mortality were higher than those of the previous year. The increased sickness and

India.	All causes	All causes. Ratios per 1,00			
lesking rue		1902-06.	1907.	1908.	
Admissions		939'3	755.4	839'5	
Constantly sick	274	57'7	45.4	457	
Deaths	***	11.72	8.18	9.78	
Invalids		30'05	25'50	15'64	

mortality fell entirely upon the troops of the Northern army and was due chiefly to the greater prevalence of malaria, but excepting venereal disease nearly all the more important diseases were more prevalent than in 1907. There was a remarkable fall in the rate of invaliding; this was due partly to the healthiness

of 1907 but chiefly to the action taken to ensure that only those men should be invalided who were not likely to recover their health by a change to one of the hill stations in India.

The principal causes of death were enteric fever, cholera, and abscess of the liver; more than half the increase over the rate in 1907 being due to cholera, which caused 76 deaths as compared with two in that year.

The chief causes of invaliding were, in order, tubercle of the lungs, debility, malaria, syphilis, and valvular disease and disordered action of the heart, these together causing 361 invalidings (one-third of the total number) as compared with 811 in 1907. The causes of the decrease have already been mentioned.

If the marginal tables in the first paragraphs of this and the following section be compared it will be seen that the admission rate for European troops during 1908 was nearly one and a quarter times as high as that for Native troops and that the constantly sick rate was a little more than twice as high; the invaliding and death rates are not fairly comparable.

The average annual strength of the European troops with the Bazar Valley Field Force, the operations of which lasted from the 13th of February to the 2nd of March 1908, works out to 97 and altogether 45 admissions to hospital and one death were reported. The Mohmand Field Force was employed from the 17th of April to the 2nd of June and the average annual strength works out to 314. Altogether 524 admissions to hospital and 50 deaths occurred, 41 of the deaths being due to a severe outbreak of cholera.

3. The relative healthiness of the troops comprising the Northern and Southern armies. Divisions. Stations. Appendix A and Tables I, III, IV and V. Section. The much greater amount of sickness and mortality in the Northern army is noteworthy and from the

statistics in Table I of the standard tables it will be seen that nearly all the principal diseases contributed to the increase. The statistics relating to Divisions (Appendix A) show that the troops in the 1st (Peshawar) and 2nd (Rawalpindi) Divisions suffered most and that, as a result chiefly of cholera and enteric fever, the death rates in these two Divisions were very much higher than in 1907. The statistics of troops in the Quetta, Poona, and Secunderabad Divisions were more favourable than in the other Divisions during 1908.

In 1908 no fewer than twenty-two stations, as compared with seven last year, come in the list of those that, according to the statistical method adopted in this report, are to be regarded as having been especially unhealthy. Full abstracts of the sanitary reports on these stations will be found in Table V so it is not necessary to do more than draw attention to them here. As regards the prevalence of important diseases in plains stations where the average annual strength was 500 or more, the incidence of enteric fever was greatest at Jubbulpore, Rawalpindi, Peshawar and Sitapur; of malarial fevers at Meerut, Agra, Ferozepore and Multan; of dysentery at Madras, Jubbulpore, Kirkee and Allahabad; and of venereal diseases at Fort William, Madras, Shwebo and Fyzabad.

4. In Appendix B to this section and in Table II of the standard tables will be found the statistics of European Geographical groups. troops arranged according to the geographical areas into which India has been divided from the meteorological point of view. It will be seen that the admission rates were higher than in 1907 in the five areas numbered consecutively IV to VIII, which include the plains of Bengal and Orissa, the United Provinces, the Punjab, the North-West Frontier Province, Sind, Rajputana, and Central India. In all these areas, except the United Provinces, the monsoon rainfall was in excess of the normal, the excess being very great in the South-West of the Punjab, Western Rajputana, Sind and the North-West Frontier Province. The areas numbered VII and VI (which include the North-West Frontier Province and the Punjab) were the most unhealthy for European troops during 1908 and the Hill stations (XIIa) were, as usual the most healthy. Malaria, enteric fever, and other fevers were the diseases that caused areas VII and VI to be so unhealthy.

5. Influenza caused an admission rate of 6'3 per thousand among the Influenza. Appendix B. Table VI. European troops as compared with 12'5 per thousand in the previous year and 11'4 in 1906. The disease was confined almost entirely to the troops of the Northern army, those located in group VII (Indus Valley) being affected to the extent of 21 per thousand of their strength. Cases were reported from thirty-two of the 82 stations for European troops but in most the number was very small, Peshawar, Sialkot and Meerut being the only stations where the disease prevailed in epidemic form. In Peshawar the disease appeared in February but most of the cases occurred during August and September. In Sialkot 66 of the 82 cases occurred during July, August and September.

6. Cholera was unusually prevalent among the general population of India
Cholera. Appendices A and B. Table VII. during 1908 and 93 cases with 76 deaths
occurred among the European troops. Of
these cases no fewer than fifty were among the troops of the Mohmand Field

Force which was operating in a highly infected area. The Royal Munster Fusiliers suffered severely, 43 cases with 36 deaths occurring in four days. A board of inquiry appointed to investigate the cause of the outbreak in this regiment considered that it was due to the drinking of infected water from wayside sources on the march to Shabkadar. The cases that occurred among troops not of this field force were distributed over seventeen stations of which Cawnpore, Peshawar and Rawalpindi were the only ones with more than four cases.

7. Small-pox was also more prevalent in India and there was an increase in Small-pox. Appendices A and B. Tables III the number of cases among European troops, fifty-three admissions to hospital and two deaths being recorded as compared with thirty admissions and one death in 1907. One or more cases were recorded in twenty stations during 1908; there were fourteen at Lucknow, five at Rawalpindi and five at Fyzabad. Of the two patients who died one had been vaccinated in infancy but had not been revaccinated, the other bore no marks and there was no record of his having been vaccinated.

8. In a number of stations occupied by troops of the Northern Army during

1908 an unusually heavy monsoon rainfall was followed by a severe prevalence of malaria with the result that among European troops the number of admissions to hospital for this disease rose from 10,652 (154 per thousand) in 1907 to 16,824 (244 per thousand), and the number of deaths from 14 to 35. The troops of the 1st (Peshawar), 7th (Meerut), and 5th (Mhow) Divisions located in the Indus Valley, Upper Sub-Himalaya, Central India and Deccan geographical groups suffered most, but excluding the Hill stations the disease was more prevalent than in 1907 in 39 stations and was less prevalent in only 17. Omitting stations with an average strength below 200 the highest admission rates were recorded at Delhi, Meerut, Agra, Ferozepore, Multan, Peshawar and Hyderabad, the rates in all these being above 612 per thousand.

Anyone who has before him a table showing for a number of years the Remarks based upon the reports of Medical admission rates from malaria among Euro-Officers.

Pean troops in India cannot fail to be struck by the lowness of the rates in recent as compared with early years. The rate for the decennial period ending with 1888, for example, was 485 per thousand, for the decennium ending with 1898 it was 374, and for that ending with 1908 it was only 223. The reduction has been brought about by a diminution in the rates recorded at a large number of stations, the quinquennial rates during the last 30 years in a few of which are shown in the following table—

many and sales	UP SYNT	1	Admission rates from malaria per 1,000 of average strength.								
		1879 to 1883.	1884 to 1888.	1889 to 1893.	1894 to 1898.	1899 to 1903.	1904 to 1908				
Ameitsar Delhi Ferozepore Karachi Lahore Cantonia Peshawar	nt o	507'4 1982'7 2450'8 6789 1554'1 1735'2 1735'8 930'3	1423'5 1107'8 2395'2 718'1 511'9 1232'6 750'5 292'2	222'7 149'77 1200'3 605'3 451'3 1048'4 928'4 418'0	294'6 713'5 1308'7 839'5 1173'0 '937'8 925'0 417'1	280°5 648°9 888°3 835°9 371°5 831°5 384°4 240°4	1181 2598 7070 3492 1995 2927 4967 2266				

In one year (1908) of the period the statistics of Fort Lahore have unavoidably been included.

To review in a detailed manner the many causes to which the reduction might be ascribed would occupy an unreasonable amount of space, but a few remarks are necessary. There are to be considered in the first place the causes by which a statistical reduction might be brought about without a reduction in the prevalence of the disease. An important cause of this kind was introduced when, as a result of Major Ross's discovery, definite operations against mosquitoes were started in nearly every cantonment. The immediate result of these operations was a re-awakening of interest in malaria and especially in its diagnosis. Medical officers who believed that the inevitable outcome of starting a "mosquito brigade" would be an immediate reduction of malaria, unconsciously began to be more careful in diagnosis. The use of the microscope became more frequent and, whereas in former years almost every case of "fever" was diagnosed as malaria, it now became the rule to record many cases under the headings simple continued fever, heat-stroke, debility, and congestion of the liver. In some stations the reluctance to diagnose a case as malaria was so great that no case was so recorded unless parasites were found at the first and only examination of the blood. The change in diagnostic procedure produced a decline in recorded malaria, but at the same time it caused the admission rate from simple continued fever to rise steadily from 14 per thousand in 1902 to 74 per thousand in 1908. Attention was drawn to the matter in the issue of this report for 1906 and an example was given showing that although in seven stations the total admissions from malaria in 1905-06 were less by 2,288 than in 1901-02 the number recorded under simple continued fever was greater by 2,308 so that the total number recorded under both headings was about the same in the two periods. The change in diagnostic procedure was not, however, the only influence tending to lower the admission rates of malaria among European troops in India, for in September 1903 there was introduced the system known as "treatment in barracks", under which patients whose disease is mild are not admitted to hospital, but receive treatment as out-patients, their names not being entered in the returns showing admissions to hospital. During the years 1904 to 1908 no fewer than 25,668 cases of malaria among European troops in India were treated out of hospital* and to this must be ascribed a considerable proportion of the reduction that (as will be seen from the table given above) is so evident in the rates of admission to hospital during the most recent quinquennial period. In view of the effect of these two causes it is difficult to estimate how much of the recorded reduction in malaria is due to a real diminution of prevalence. There are, however, certain measures which in the opinion of nearly all medical officers have produced a real diminution. Of these the most important are: (1) the "after treatment" now given in all stations to patients who have been admitted to hospital with malaria, (2) the prophylactic administration of quinine, (3) the retention of regiments in hill stations until the worst period of the malaria season in the plains is passed. For carrying out the system of "after treatment" nominal rolls of patients who have suffered from malaria are kept in the station hospitals and the patients are required to attend at first daily and afterwards twice weekly for from six weeks to two months to receive a dose of quinine. The treatment has caused a marked decrease in the number of re-admissions for relapses, which are the chief cause of the high admission rates in certain stations. The prophylactic administration of quinine has been carried out for many years in nearly all stations in the plains, but with very varying strictness in different places and at different periods. The arrange-

In 1908 the number so treated was 6,703 as compared with 4,944 in 1907.

ments adopted have been detailed each year in this report and as regards 1908 a few words will suffice. The measure was carried out in 53 of the 58 stations in the plains, the dose usually given being 10 grains on two consecutive days weekly. The results reported by medical officers are more conflicting and not so satisfactory as usual but in not a few stations the unsatisfactory results may, I think, justly be attributed to the lack of strictness with which the administration was carried out. At Rawalpindi the medical officer's previous experience had led him to have little faith in the measure and during 1908 the administration was carried out without medical supervision. The report from Multan contains no mention of the plan adopted for ensuring that the soldiers received the doses. At Allahabad the quinine was distributed by the sergeants of companies. At Campore it was issued under the supervision of a subordinate. At Karachi it is said that the corps of Artillery "being rather distant from the hospital" carried out the quinine parades without medical supervision. Other stations at which the administration was not under medical supervision were Mhow, Nasirabad and Nowgong. It is quite possible, of course, that quinine given in the doses and at the intervals usually recommended may sometimes fail to prevent malaria among European soldiers, but before accepting this view it is necessary to show that reported failures cannot be accounted for by the common reasons that are found to afford an adequate explanation of failures among other classes of people in India. Further remarks on this subject will be made in the section relating to the general population (Section VI) and on the whole it appears not improbable that as regards reported failures among European troops the distribution of effort over a number of quite dissimilar anti-malarial measures has tended to prevent that concentration of attention upon quinine prophylaxis from which alone successful results by this method can be attained. The practice of keeping regiments in hill stations longer than was customary some years ago and the removal of regiments to camps at some distance from the barracks have certainly tended to diminish the amount of malaria, and it is suggested by several medical officers that these measures should be more widely adopted in very malarious years. Lastly there are the measures taken to prevent men being bitten by mosquitoes and those taken with the object of destroying mosquitoes. The use of mosquito-curtains is still confined to a few regiments in about nine stations. Operations against mosquitoes by such measures as can be accomplished by mosquito brigades have now been in practice in nearly all stations in the plains for several years. In most stations they are thoroughly carried out, but it is the general opinion of medical officers that by limited measures of this kind an appreciable reduction of the number of anopheline mosquitoes is not produced. In one or two stations measures of a more extensive kind have been undertaken, notably in Lahore Cantonment, in regard to which the results obtained are being examined by a Committee appointed by the Government of India.

9. In the statistical returns for 1908 the heading "Pyrexia of uncertain origin" appears for the first time and it may be said at once that it has been used by medical officers as a substitute for the heading "simple continued fever" which has been removed from the Nomenclature of Diseases. There were in all 5,096 admissions to hospital recorded under the heading during 1908 which gives an admission rate of 73'9 per thousand, but in addition 1,526 cases were treated "in barracks"; if these are included the incidence rate would be

96'1 per thousand. It appears from the reports of medical officers that a number of the cases were malarial in origin and that a few were cases of dengue. No death was recorded under the heading during the year.

- Malta Fever. Table LIII. cases in 1908 occurred at Sialkot, Barian, and Murree. The source of infection was not discovered in any case and in all the diagnosis was made on the results of the serum test. The patient at Barian was treated for some time as a case of lumbago.
- and during the year four cases with one death were recorded among European troops. The cases occurred at Madras, Wellington, Jhansi and Jubbulpore. In two of the cases the diagnosis was confirmed by finding the Leishman-Donovan parasites in blood taken from the spleen or liver.
- 12. Among the problems frequently discussed in the annual summary of the literature upon enteric fever that has appeared for many years in this place, none is of more importance, and none is more difficult and confusing, than that which owes its origin to the discovery in diseases clinically like true typhoid fever, of bacilli that differ in some respects from the true typhoid bacillus. As a result chiefly of the use of better media and methods of isolation and differentiation, the number of these "typhosus-like" organisms is now very considerable and is being added to every year. In the literature for the year with which we are now dealing, there is an account by Baumann1 of no fewer than 40 typhosus-like bacilli isolated by him from the fæces or urine of patients who, presumably, were suffering from diseases resembling enteric fever, and Rimbaud and Rubinstein² record the isolation from the fæces of 28 enteric fever patients of many varieties of bacilli belonging to the coli-Eberth family. The same observers report in another article that they were able to isolate from the fæces of ten persons 23 varieties of typhosus-like or coli-like bacilli. Indeed the bacilli found in various enteric-like diseases, and usually regarded by their discoverers as the cause of the disease in which they were found, are now so numerous, and their bacteriological position as well as their properties and relations to one another are so uncertain, that in the present state of knowledge some sort of classification in groups is essential. For this purpose most authors are content to describe a type bacillus for each group and to arrange under it the very large number of "intermediate forms" that resemble it most closely. Passing from the bacilli allied to the B. typhosus on the one hand, to those allied to the B. coli on the other, the following are the names of the bacilli that are taken as the types of the different groups now usually recognised: -1.B. facalis alkaligenes; 2. B. typhosus (Eberth-Gaffky); 3. B. paratyphosus A (Brion-Kayser); 4. B. paratyphosus B, (Schottmüller); 4 a.B. enteritidis type I (Flügge, Aertryck, etc.); 4 b. B. typhi murium (Löffler); 4 c. B. suipestifer (Salmon-Smith); 4 d. B. psittacosis (Nocard); 5. B. enteritidis type II (Gærtner, etc.); 5 a. the rat pathogenic bacilli (Danysz, Isatschenko, Dunbar, and "ratin"); 6. B. paracoli; 7. B. coli, Without attaching great importance to the subject it is of interest to note that in addition to the usual list of outbreaks due to the B. typhosus, which need not be

referred to here, the literature for the year contains records of illness said to be due to bacilli of one or other of nearly all the above groups. Laforgue3 gives an account of a case which was considered clinically to be enteric fever but in which the method of blood culture showed the presence of the B. fæcalis alkaligenes, and Trincas and Olla4 report five cases of severe gastro-intestinal illness as a result of eating cheese from which the same bacillus was isolated. Proescher and Roddy⁵ describe 48 cases of fever due to type A of the paratyphoid bacillus and Bondi also describes a case due to this bacillus. Among the many cases and outbreaks ascribed to type B of the paratyphoid bacillus may be mentioned the more or less considerable outbreaks reported by Konrich⁶, Collin and Fortineau,7 Marx,8 and Ruge and Rogge.9 Savage and Gunson10 report an outbreak of 18 cases of illness with 3 deaths due to eating brawn from which a bacillus described as the B. enteritidis, Aertryck type, was isolated, and Fleischanderl11 observed three cases of severe and three of mild illness due to a bacillus described as the B. typhi murium. It was the active ingredient of a preparation that had been used for the destruction of field mice and in order to ascertain whether the cases were really due to it Fleischanderl himself took some of the culture medium the result being that he suffered from symptoms of acute enteritis similar to the symptoms complained of by the original patients. The bacillus was isolated from specimens of the fæces. Pepere12 records a fatal case of an enteric fever-like disease which he considered to be due to the B. suipestifer, and Drewes13 records a case of illness contracted from a parrot in the alimentary canal of which a paratyphoid bacillus of type B (? B. psittacosts) was found, Handson, Williams, and Klein14 have reported an outbreak of twelve cases of severe but not fatal gastro-intestinal illness accompanied by fever and collapse, which they believed to be due to a rat pathogenic bacillus contained in a preparation used for the destruction of those animals. Finally Meinicke and Neuhaus15 record a fatal case of food poisoning due to a bacillus which they describe as the B. paracoli, and Schöne, Babes and Feodorasco. Wiens, 16 and others record cases of typhoid-like illness said to be proved bacteriologically to be due to the B. coli. As representing examples from the literature of only one year this list is sufficiently long, and it is plain that if we agree with those who consider that the bacilli found by them are distinct species and are the cause of the disease in which they were isolated, we ought at once to say that the clinical term enteric fever includes a number of diseases which it is advisable in future to call by their correct names, such as the paratyphoid A and B diseases, the enteritidis I and II diseases, and many others that are presumed to be caused by various similar but distinct bacilli. But, according to Kolle and Hetsch17, experience of the bacteriological findings in cholera and other specific infectious diseases is entirely against the correctness of such a classification of the typhoid-like diseases under numerous headings each with its own name. And those authorities point out that the extensive researches carried out in the German bacteriological stations during recent years show that at present, as regards enteric fever and the diseases allied to it, we have really to do with only two etiologically different diseases, namely typhoid and paratyphoid, the latter including the illnesses due to meat poisoning; and that as regards the bacilli, the distinctness and pathogenic significance of the majority of the so-called "intermediate forms" is by no means sufficiently proved, so that at present they should be classed in one or other of only two species or groups, namely as typhoid or paratyphoid, the latter including (perhaps as a sub-species or group) the various bacilli of meat poisoning. In addi-

tion it is to be noted that, in comparison with the widespread nature of diseases caused by true typhoid and paratyphoid bacilli, the diseases said to be caused by intermediate forms are quite rare and must be regarded as interesting pathological conditions rather than as important factors in sickness and death. So far as our present knowledge of the bacteriology of enteric fever in India justifies an opinion (and it must be acknowledged that the subject requires further investigation than it has yet received) this is the correct view to take in this country, for as regards the great majority of cases here diagnosed as enteric fever it is known that they are due to the true typhoid bacillus, and as regards a few cases it is known that they are due to one or other of the well established paratyphoid bacilli. Perhaps, when bacteriological investigation of cases becomes more general, bacilli of intermediate types will occasionally be isolated, but it is unlikely that such bacilli will be found to be a frequent cause of disease. Nevertheless the subject of these intermediate and rare forms is not without importance as affording possibly a clue to the diagnosis and source of origin of some of the anomalous so-called "sporadic" cases that occur often at wide intervals of time and in an isolated manner among British and Native soldiers in India. In regard to the source of origin of such cases the subject may possibly be of importance from our knowledge that although the classical B. typhosus is parasitic in man alone some of the other bacilli of the family are commonly present in animals, from which human beings may, directly or indirectly, become infected. Further remarks upon this aspect of the enteric fever problem will be made in the paragraph dealing with epidemiology.

The bacteriological methods now in general use for the diagnosis of typhoid

Bacteriological methods of diagnosis.

and paratyphoid fevers were dealt with at length in these reports for 1906 and 1907 and the literature that has since appeared upon the subject can therefore be dealt with briefly.

The isolation of the bacillus from the peripheral blood continues to be regarded as the best method of diagnosis in the early stages of the disease, and during recent years the chief work upon the method has had for its object the removal of difficulties of technique. Advance in this connexion has been great, and it may be said that at the present time the method bids fair to take its place alongside the Widal test as a routine clinical method of diagnosis. According to Kolle and Hetsch the best results are obtained, when the modern method of planting in bile is adopted, by the use of from 1 to 2'5 c. c. of blood, 1 an amount which is not greater than can be obtained without undue inconvenience to the patient by pricking the lobe of the ear moderately deeply. In the literature under notice Peabody 2 reports that this plan was adopted as a routine measure in the general hospital at Massachusetts and that a positive result was obtained in 100 per cent. of cases examined during the first week of the disease, in 70 per cent. during the second week and in 43 per cent. during the third and fourth weeks. Bates 3 has shown, by the examination of 68 patients, the great value of the method for the diagnosis of mild and atypical cases. The observations of Stühlern 4 on 42 cases tended to show that as a rule in severe cases the bacilli are present in the blood stream in greater number and remain there longer than in mild cases. In regard to the media and methods usually employed for isolating the bacilli from the blood, Bohne⁵ as a result of a comparative study of the methods recommended respectively by Schottmüller, Conradi, Meyerstein, and Rosen Runge, reported that he had been most successful with the method of Meyerstein. Conradi⁶ has criticised his results chiefly on the ground that the investigation was not quantitative. Other observations of importance on this subject during the current year were those of Busse ⁷ who reported four cases of intestinal tuberculosis (two being fatal) in persons who were chronic typhoid bacillus carriers and in whom a pure culture of the typhoid bacillus was isolated from the peripheral blood. It was presumed that the bacilli had again invaded the blood by way of the intestinal lesions.

The uses and limitations of the Widal test are described in detail in articles by Volk 8 and Kreissl 9 that have appeared in the recently published Handbuch der Technik und Methodik der Immunitätsforschung of Kraus and Levaditi. The causes of fallacy in the test are of two kinds, those of technique and those which arise from a peculiarity of the patient's serum or other unavoidable condition. In regard to technique the chief cause of fallacy, according to Kreissl, arises from the employment of an unsatisfactory strain of the bacillus. Different strains of the same bacillus differ greatly as regards their property of being agglutinated and for clinical purposes the most easily agglutinated strain is not always the best to employ. Certain strains, also, can be agglutinated by normal sera even in a high dilution, and other strains commonly exhibit the phenomenon called "spontaneous agglutination". In order to avoid some of these difficulties the use of a mixture of several strains of the test bacillus has been recommended, but Geisse 10 and others have obtained unsatisfactory results with such mixtures and in using them there is the disadvantage that one or more of the strains may not possess all the properties of the classical bacillus. The age of the culture, the medium on which the test bacillus is grown, the amount of the growth used, the temperature at which the mixture of test bacilli and serum is kept, and the length of time during which the action is allowed to continue are all of great importance. When causes of fallacy under the above headings have been avoided, error or uncertainty may arise (1) from the use of the test too early in the course of the disease; (2) from the presence of certain constitutional or other conditions (such as chlorosis or jaundice or the influence of some medicines) which may cause the serum of the patient to act in an anomalous manner; (3) from the fact that in some proved cases of typhoid the Widal reaction remains negative throughout the illness; (4) from the presence of a concurrent infection with other organisms, such as staphylococci; (5) from the occurrence of the phenomenon of group agglutination by which is meant that the serum agglutinates the bacillus of another disease as well as that of the disease from which the patient is suffering; (6) from the occurrence of the phenomenon first observed by De Blasi that agglutination hardly results with a low dilution of the serum, but is marked when a high dilution is employed; (7) from the fact that the patient has been recently inoculated against enteric fever or has previously suffered from the disease. In regard to the positive results sometimes obtained with the blood of patients suffering from jaundice, Kolle and Hetsch point out that the illness is frequently due to a typhoid cholecystitis, and Kreissl mentions the frequent infection of the biliary system with B. coli or allied organisms which might cause a positive result by the phenomenon of group agglutination. He notes that in cases of jaundice a positive result with the test is by no means constant and usually occurs only in low dilutions of the serum so that it cannot often be a source of error. Of greater importance are the positive results which have sometimes been recorded in cases of malignant endocarditis, sepsis, influenza, 28

malaria, miliary tuberculosis and meningitis." It appears, however, that in a number of these cases the condition is one of a mixed infection with typhoid and another organism.

It is of interest to know whether positive results with the Widal test are the rule in regard to healthy chronic bacillus-carriers. Forster and Kayser obtained positive results with the blood of the majority of such persons whom they examined and Lentz reported a positive result, mostly with a dilution of only 1 in 50 and in a few cases of 1 in 100, as regards ten out of eleven carriers. Other observers have reported that except when only low dilutions are employed positive results are rare, and Kolle and Hetsch state that in the blood of healthy bacillus-carriers it is not the rule to be able to prove the presence of specific agglutinins. In the examination of chronic bacillus-carriers at the Naini Tal depôt in India in 1908 the blood of one of the most persistent carriers was found to possess little or no agglutinating power. Gaehtgens " in an investigation to ascertain whether the estimation of the opsonic index would be of assistance in detecting carriers examined 16 of these people and in six cases obtained a positive result with the Widal test in dilutions of I in 200 or more. In six others the test was positive in a dilution of 1 in 100 and in the remainder in a dilution of 1 in 50.

On account of the phenomenon of group agglutination the Widal test cannot be entirely relied upon for the diagnosis of paratyphoid fever, and in cases presumed to be due to this disease as well as in all cases in which the result of the test is uncertain it should be supplemented by other diagnostic methods.

As a method of diagnosis during the acute stages of the disease the isolation of the bacillus from the fæces or urine has now been superseded almost entirely by the methods above referred to, but as it is the only method of investigation which enables us to say when an enteric fever patient may be allowed out of quarantine and the only method by which bacillus-carriers can be discovered, it must always remain of the highest importance. Chiefly on account of the absence of a selective method of enrichment of typhoid bacilli similar to that which has proved of such service for the isolation of the cholera vibrio, the difficulties attending the isolation of typhoid bacilli from the fæces are great, but every year new methods and media are being tried and the investigation is much easier and the results more sure than they were even a few years ago. Nearly all the newer methods and media have given good results in the hands of some workers and it is doubtless true that success depends far less upon the particular medium used than upon the skill, practice, and experience of the worker. The following was the routine adopted in the search for bacillus-carriers at the Naini Tal convalescent depôt in 1908. A tin box containing a strong test tube fitted with a cork through which passed the handle of a small spoon was used for the collection of the samples of fæces. Half the spoonful of fæces was transferred to a small sedimenting tube and 5 c. c. of tap water added to it. The fæces were broken up and mixed with the water by a glass rod and then allowed to stand for an hour at the end of which time the solid matter and feebly motile colon bacilli, and cocci had sunk to the bottom of the tube. The actively motile typhoid bacilli, when present, remained in the upper part of the fluid, a few c. c. of which were then poured on a previously prepared plate of the Drigalski-Conradi medium. The fluid was spread over the plate with a bent glass rod and a second plate was then inoculated by means of the same rod. The plates were allowed

to dry in the air and then placed in the incubator for 24 hours. At the examination of them on the next morning, such colonies as appeared to be those of the typhoid bacillus were tested with a specific serum of high agglutinating power and if the result was positive, inoculations on agar slopes were made and the next day the growth was tested with agglutinating sera and by planting into various sugar media and by animal experiment. The investigation of the urine was begun by pouring 5 c. c. on to a Drigalski-Conradi plate, the same procedure as for the examination of the fæces being afterwards carried out. In regard to the numerous methods and media employed by different workers it may be noted that in addition to the Drigalski-Conradi medium which is essential in all laboratories, Kolle and Hetsch recommend those of Hoffmann and Ficker, of Endo, and of Lentz and Tietz, the constituents of all of which have been stated in previous issues of this report. Among the new media described in the literature of the current year may be mentioned those of Conradi, 13 Kindborg, 14 Loeffler, 15 Padlewsky, 16 and Hesse. 17 An important matter in connexion with some of these media is the high cost of the chemically pure materials which they contain and this might probably prohibit their use to such an extent as is necessary in the daily work of large laboratories where the search for bacillus carriers is carried out as a routine measure.

The subject of bacillus-carriers still occupies a chief place in the literature of enteric fever and as yet there is no Epidemiology. Bacillus-carriers. indication that the importance of these agents in the spread of the disease has been exaggerated. It is especially interesting that the work done upon the subject is likely to prove of great benefit to India. The depôt which was opened at Naini Tal in April 1908 received up to the end of the year 310 convalescents of whom 190 underwent the bacteriological examinations necessary for the detection of carriers and 120 remained to be examined. All convalescents are kept at the depot more than four months so that it is necessary to discover only those men who excrete the bacilli longer than this. Among the 190 men examined two were found to be excreting the bacilli six months after their attack, one eight months, one twelve months, one sixteen months, and one eighteen months; five of these men were invalided to England during the year and one remained at the depôt. In Germany three terms are now in general use to denote the different classes of carriers, (1) akute Bazillenträger (temporary carrier) which signifies a person who is excreting the bacilli without suffering and without having ever suffered from enteric fever, (2) Basillenträger, which signifies a person who excretes the bacilli for less than three months after an attack of enteric fever, (3) Dauerausscheider, which signifies a person who excretes the bacilli for more than three months after an attack of enteric fever. The six carriers discovered during 1908 in the examinations at the Naini Tal depôt come in the last (which is by far the most important) of these classes and the proportion of such persons discovered (3 per cent.) was about the same as in other countries. Frosch 'reports that in the campaign against enteric fever on the south-west frontier of Germany among 6,708 persons who during three years suffered from the disease 166 (2'47 per cent.) were found to be excreting the bacilli more than three months after their attack and 144 (2'15 per cent.) less than that time. These figures include the results of the examination of female as well as male patients, and the significant fact was established that women formed more than 80 per cent. of the

people classed as Dauerausscheider. The finding explains the frequency with which outbreaks of enteric fever in so-called "typhoid houses" and in institutions are traceable to a female servant. Five out of seven "carrier outbreaks" that have been referenced since last year for the purposes of this report were due to a female carrier but the figures do not include outbreaks among British troops, in regard to all of which a female agent could be excluded. The important features of outbreaks caused by carriers have been illustrated by examples in several previous issues of this report and as the instances recorded in the literature for the present year throw no new light upon the subject it is unnecessary to describe them in detail, but a short account of one or two of the more interesting instances will be found in the paragraph relating to infection by milk. The problem of how to rid typhoid carriers of the bacilli which they harbour and excrete is at present perhaps the most important in connection with the disease. It rests largely upon a study of the relation of the bacilli to the biliary organs in which they are stored. Chiarolanza and J. Koch 2 have attacked the subject by endeavouring to ascertain the path by which the bacilli reach the gall bladder. The results of their examination of the changes found in the gall bladder in fatal cases of enteric fever and of a series of experiments on animals render it probable that the bacilli reach the gall bladder not from the intestine, but from the blood stream. They consider that the bacilli which are in the blood of a patient suffering from enteric fever form small emboli in the capillary network of the mucous membrane of the gall bladder the result being necrosis of the papillæ and an emptying of the clumps of bacilli into the viscus. They report the occurrence of a similar process in the large and small bile ducts and it is obvious that if the bacillary foci are actually in the substance of the mucous membrane and are not lying free in the interior of the gall bladder or bile passages, the difficulty of attacking them is enormously increased. The presence of bacillary foci in the biliary passages as well as in the gall bladder also shows that extirpation of the gall bladder, an operation advocated by Grimme and Dehler,3 may not effect the desired result. Treatment with drugs such as salol and urotropine which it was hoped might kill the bacilli in the intestinal and urinary passages has proved quite ineffective, and at present the most hopeful suggestion is possibly that of Liefmann who recommends that an attempt should be made to change the intestinal flora and to introduce bacteria inimical to the enteric bacillus. In England the Army Medical Advisory Board appointed a committee to investigate the best methods of treating the bacillus-carriers who had been invalided from India and as a result it was decided to treat two of the patients with cultures of Metchnikoff's Bulgarian lactic acid bacillus grown in extract of malt and three with subcutaneous injections of antityphoid vaccine. These experiments are being continued.4

But while there can be no doubt that the prevention of enteric fever depends largely upon the detection and isolation of the human host who is harbouring the bacillus it would doubtless be unwise, in the present state of knowledge, to regard this as representing the whole solution of the problem. Among other things the matter is complicated by the fact that although man may be the only host of the classical B. typhosus, he is certainly not the only host of the other bacilli in the family. The researches of Uhlenhuth, Hübener, and many others have shown that a number of domestic animals frequently harbour bacilli of the paratyphoid groups which may cause enteric fever in man and that, indeed,

tive investigation.

we have to reckon with animal as well as human bacillus-carriers. The infection of man may result not only from eating the flesh of animals infected with such bacilli (and many instances of this kind of poisoning have been referenced in previous issues of this report), but from direct or indirect contact with living animal bacillus-carriers which may or may not show symptoms of disease. Rimpau 7 and others consider that contact with such animals offers a reasonable explanation of the frequency with which paratyphoid bacilli are found in human beings and that although the strains are often non-virulent and therefore not dangerous, the possibility that they may at any time become virulent has to be reckoned with. Among the instances of infection from animal bacillus-carriers reported in the literature for the year under review the case reported by Drewes 8 may be mentioned. It refers to a clergyman who was attacked with a disease which was diagnosed first as influenza then as pneumonia and finally as paratyphoid fever due to the B. paratyphosus type B. The researches to ascertain the source of infection were fruitless until attention was directed to a parrot which the clergyman had tended during an illness associated with diarrhoea and emaciation. The bird was examined bacteriologically with the result that the B. paratyphosus type B. was isolated from its alimentary canal. Further enquiries to ascertain how the parrot became infected led to the discovery that the dealer from whom the bird had been bought was a paratyphoid bacillus. carrier. The apparent ease with which the somewhat complicated cycle of events was traced in this instance may justify a difference of opinion in regard to the accuracy of the findings, but it is only by recognising the possibility that enteric fever may be contracted in such an unusual manner and by carrying out investigations with this possibility in mind that we can hope ever to hunt down the source of infection in some of the so-called "sporadic" cases that occur in India. We are aware, for example, that horses and dogs-the animals with which the British soldier in India comes into closest association-are among those in which bacilli of the coli-paratyphoid groups have been frequently found, and without for a moment suggesting that the cavalryman not infrequently derives his infection from a bacillus-carrying horse or the infantryman from a bacillus-carrying pet dog, it is not out of place to suggest that the

It is now generally recognised that enteric fever is spread (1) by a vehicle such as water or milk the source of supply of which is common to a large number of people, and (2) by contact infection from person to person. The first method usually causes the simultaneous infection of many people and results in a sudden and extensive, but often short epidemic, the second is associated with the continued prevalence for a considerable period of a variable number of cases occurring at short intervals. In different localities and conditions the relative importance of these methods differs greatly and similar differences exist as regards the relative importance of the various vehicles and agencies concerned in the spread of the disease by each method. The trend of opinion in regard to the rôle of the methods and vehicles has been chronicled year by year in this report and for the current year the following remarks will serve to bring the record up to date.

recognition of such a possibility might be sufficient reason for carrying out what would be, even if the results were entirely negative, an interesting and instruc-

The rarity with which in recent years outbreaks of enteric fever have been attributed to polluted drinking water indicates an important change of opinion in

regard to the part played by that medium in spreading the disease. With the exception of a report upon an outbreak in a rural district in England ' and one upon an outbreak of 24 cases in a seminary near Washington, 'the available literature for the year contains no account in which a waterborne view held the chief place and there is no doubt that at present most observers, before favouring such a view, require evidence more conclusive than that which a few years ago would have been considered amply sufficient. This has been emphasised by Welch and others at the recent annual meeting of the American Medical Association. It has been exemplified also by Konrich 'in his account of an outbreak in which, despite the discovery of typhoid bacilli in the water-supply, this medium was proved to be not responsible for the cases; and Konrich points out that in an attempt to establish the correctness of a theory that the outbreak is water-borne, the results of bacteriological research, unless confirmed by the epidemiological findings, may lead the observer astray.

The reports of milkborne epidemics and outbreaks are (as has been usual during recent years) considerable in number and for the most part conclusive in proof. Trask has published accounts of 317 epidemics spread by this medium and Harrington 5 reports that of 18 outbreaks investigated under his direction during the last two years in different parts of Massachusetts 14 were traced to the milk supply. In most of the outbreaks described in detail during the year with which we are now dealing, a chronic bacillus-carrier was responsible for the contamination of the milk but an extensive outbreak described by Harrington 6 was due to a typhoid patient in the acute stage of the disease. This outbreak was one of 410 cases in six weeks. The milkman who was proved to be responsible had been ailing for 14 days before he was discovered to be suffering from enteric fever and during that period he had been handling the milk daily. He died eight days later and the nature of his illness was confirmed at a post-mortem examination. In this instance the milk was infected by the distributing agency, but in other instances contamination occurred at the farm of supply. An example of this is given by Lumsden and Woodward, in a report of an outbreak of 54 cases in a part of the city of Washington. Careful investigation of this outbreak caused suspicion to rest upon a particular farm from which the milk vendors whose customers were being attacked obtained their supplies of milk. The inhabitants of the farm numbered 13 including the proprietress who had suffered from typhoid fever 18 years before the investigation and one of the employés who had suffered eight years before. A fatal case of typhoid fever had also occurred on the farm seven years before the investigation. At the time of the enquiry no history of recent illness on the farm could be obtained and the infection of the milk could be accounted for only on the assumption that one of the persons who handled the milk was a chronic carrier. Specimens of the dejecta of the :3 inhabitants were obtained and the proprietress was found to be excreting numerous typhoid bacilli in her fæces. The supply of milk from the farm was at once stopped, and the outbreak ceased suddenly eight days later.

Kersten 8 has shown that in raw milk as sold by the trade the paratyphoid bacillus type B retains its vitality and virulence and multiplies for at least 4½ months. At the end of this period his experiments were discontinued.

Although the literature for the year contains no article dealing exclusively with the subject of contact infection, this mode of spread still holds the position of high importance which it attained some years ago. Kolle and Hetsch in the

recently published second edition of their text-book on experimental bacteriology and infectious diseases attach very great significance to it especially in the maintenance of endemic typhoid in cities, towns, and rural districts, and draw attention to its great importance in the spread of the disease in armies when the exigencies of war or other circumstances necessitate the crowding together of large numbers in a confined area. They point out also how the continuance of a small number of cases as a result of contact infection provides opportunities for the contamination of water and milk supplies by which extensive epidemics are caused. In the discussion of the epidemiology of typhoid fever at the recent annual meeting of the American Medical Association a number of speakers drew attention to the great importance of this mode of spread and some striking instances of its influence were given. 9 Dr. Welch stated that in Washington during the summer of 1907 about 19 per cent., of the cases were found to be due to contact infection, Dr. Hurty gave an instance in which this method alone had caused 65 cases in a Soldiers' Home, and Dr. Freeman stated that a systematic investigation of 30 outbreaks in Virginia had shown that by far the majority of cases of typhoid fever in the smaller towns were due to the conveyance of infection from house to house either in articles of food or by the house to house visits of patients' friends. The ways in which infection by contact may occur are many and various and in devising plans to guard against them it is highly important to know how long the bacilli can remain alive when deposited in fæces or urine on the ground or in a latrine or in a filth trench or on articles of bedding or clothing. The experiments on this subject made by the members of the committee of enquiry on enteric fever in India were referred to in this report for 1906 and Major Morgan and Captain Harvey have carried out a similar investigation at the Naini Tal convalescent depôt during the year under review. " Their experiments were made on the bacilli voided with the urine and fæces of chronic bacillus-carriers. The following were some of the results: (1) urine was passed by a typhoid bacillus-carrier on a patch of dry soil which received direct sunlight for 31 hours. A sample of the soil taken six hours after the beginning of the experiment yielded numerous typhoid bacilli, but none could be detected in a sample taken at the end of thirty hours, (2) urine was passed by the same person on the earthen floor of a dark hut. Typhoid bacilli were detected in samples of the earth taken at intervals up to 30 hours but not later, (3) from a piece of towelling contaminated with urine containing 50,000 typhoid bacilli per c. c. and exposed to daylight the bacilli could be recovered up to the fourth day and from a similar piece kept in the dark up to the eleventh day, (4) fæces were passed by a bacilluscarrier and dealt with in a manner similar to that adopted in dry earth methods of disposal; from the surface of the fæcal mass typhoid bacilli could be recovered for a week and from the interior of the mass for 18 days, but not later, (5) from a piece of blanket smeared with infected fæces and kept in a closed vessel in the shade, the bacilli were isolated up to the fortieth day. While these results show that the typhoid bacillus is incapable of living very long outside the human body they indicate that the bacillus lives yet sufficiently long to make the danger of infection by contact, especially in latrines, a very real one. A recent investigation by Brückner" is of interest in this connexion as is also an investigation by Galvagno and Calderini " who found that typhoid bacilli can retain their vitality and virulence for at least fifteen days in the contents of privies and earth-closets. These three observers draw attention to the danger of infected material being spread by the agency of flies or dust or on the boots of people who visit the latrines, and as regards the importance of flies in spreading infection Captain

Ainsworth, R. A. M. C., has shown how closely the seasonal incidence of enteric fever and the prevalence of flies corresponds in Poona. But evidence of this kind, however carefully worked out, cannot lead beyond the suggestion that a connection between the prevalence of house flies and of enteric fever is possible, and on the other hand Dr. L. O. Howard's study of the seasonal abundance of flies in Washington during 1908 showed that in that city the seasonal prevalence of flies and of enteric fever did not correspond. It was found also that the proportion of cases of enteric fever was not higher among persons living in unscreened houses or among those whose occupations rendered them especially liable to be attacked if flies were an important agent in the spread of the disease ".

The modern method of attempting to reduce the prevalence of typhoid fever-which differs from the old in being essentially a method of attack rather than of defencehas been frequently outlined in previous issues of this report. It is being carried out on a large scale in the campaign on the south-west frontier of the German empire. Kirchner's complete account of this campaign was referred to in last year's summary and in the literature for the current year Klinger ' describes the epidemiological findings and results up to 1908. The area under the control of the German Commission includes four towns of considerable size as well as a number of industrial and some very poor agricultural districts, and its population is nearly 2,300,000. Before the campaign was initiated the number of cases and deaths reported as due to typhoid fever by no means represented accurately the true amount of sickness and death caused by this disease, and it will therefore be difficult for some years to estimate by statistics the full effect of the operations. The following table compiled from statistics given in the article by Klinger shows the figures for the area under the control of the German Commission from 1904 to 1907.

per di manda de la composition della composition			ACTUAL	NUMBERS.	RATIOS PER 10,000 OF POPULATIO		
		Year.		Cases.	Deaths.	.Cases.	Deaths,
1904	/			2,567	235	11'2	1'02
905				2,052	215	8.9	*94
906				2,080	220	9.1	•96
1907				1,787	189	7.8	-82

As regards the separate statistics for the 31 circles in the area a considerable fall in the number of cases occurred in 21 circles and no fall or a rise in nine. Klinger expresses the opinion that, considering the statistics refer chiefly to a period when the organisation is being built up and perfected, the belief is justifiable that great success will ultimately be attained. The epidemiological findings were of great interest and showed the difficulties which

attend an attempt to reduce the prevalence of the disease among the civil population in so wide an area. During 1906 and 1907, the source and vehicle of infection were definitely discovered in only 36 per cent. of all the cases, that occurred. This 36 per cent. represented a total of 1,397 cases, and in no fewer than 1,272 of these the source of infection was a person actually suffering from the disease, only 125 of the cases being traced to healthy bacillus-carriers. The large part played by the former class of persons in the spread of the disease was attributed by Klinger to their great number in comparison with the number of healthy carriers and to the higher virulence of the bacilli excreted by such patients. One of the chief difficulties was that of discovering cases at a sufficiently early stage of the disease to prevent new infections being caused by them. and on account of this difficulty it happened that of the 1,397 cases in which the source of origin was discovered no fewer than 912 were referable to patients before the time when they came under control. During the investigations 431 healthy bacillus-carriers were found, and of these 211 excreted the bacilli for less than three months and 220 longer than this. In regard to the mode of spread, direct contact played by far the greatest part, infection by the hands alone being traceable 1,315 times as compared with only 59 times in which the vehicle was found to be milk, 22 times in which it was found to be contaminated food, and twice in which it was found to be water.

A list of recent articles dealing with the statistics of anti-typhoid inoculation will be found as usual at the end of this Section and among them may be noted a paper by Dr. Maynard which is the first published account of an attempt to treat the subject according to "modern statistical methods." On the very imperfect data dealt with in the paper the conclusion is arrived at that "the general trend is to show a positive result in favour of the process."

As usual the reports upon enteric fever by medical officers in charge of station hospitals are concerned largely with accounts of the enquiries made with the object of ascertaining the source and mode

of infection, and as usual the enquiries failed in the great majority of instances to yield a definite result. The failure is generally due to the difficulties that always attend an enquiry into the origin of cases occurring at intervals of some days and often of some weeks, but it may not be out of place to remark upon the possibility that the well worn phrase "the source of infection could not be traced" would appear less frequently in the reports if in the conduct of the enquiries more attention were directed to the line of investigation that recent advances in knowledge of the epidemiology of enteric fever have shown to be all-important. With a number of noteworthy exceptions, to which reference will presently be made, the tendency to be content with an endeavour to ascertain the particular vehicle by which infection was conveyed, rather than to conduct the enquiry with the object of discovering the human host responsible, is a characteristic of many reports. To limit an enquiry to the problem of the rôle played by water, milk, lemonade, dust, flies, and latrines, is to fail to realise that the usefulness of an opinion, however accurate, in regard to this problem is unimportant in comparison with the value of the discovery of the human host who is harbouring the bacillus and infecting those media. That the search for and discovery of persons who are likely to be carriers of infection is not beyond the powers of the usual medical staff in most of

the larger stations is apparent from the successful results attending the adoption of this method of enquiry in Wellington, Sialkot, Mhow, Jubbulpore, Erinpura, and some other stations. At Wellington the search was carried out with great thoroughness by the bacteriological examination of the excreta of all convalescents three times a week, and by this means one man was found to have chronic typhoid bacilluria 13 months after his attack of enteric fever. At Sialkot the search revealed the great danger which may arise from the employment of native cooks in the kitchens of British regiments. A servant in the officers' mess who had previously been assistant cook was found to have typhoid bacilluria and two cooks of one of the squadrons of the cavalry regiment were found to be suffering from the same condition. Afterwards all natives applying for the post of cook were examined and by this means another carrier was detected. In the reports from Mhow, Jubbulpore and Erinpura the method of search was limited to an examination of the blood of suspected persons by the Widal test, and although a person whose blood gives a positive reaction with this test is not necessarily a carrier the method affords a good starting point for more detailed investigation. At Mhow blood specimens from three natives employed in the regimental institutes (two in the coffee shop and one in the bakery) were found to give a positive reaction to this test and at Erinpura the blood of one of the servants in the officers' mess where three officers had apparently contracted enteric fever was found to give a similar reaction. At Jubbulpore one European and three native servants were dismissed on the grounds of a positive reaction with the test. In the reports from Jhansi, Dinapore, Dalhousie and Fyzabad attention is also directed to the danger of native cooks. In the first of these stations suspicion rested on two cooks employed in the Royal Artillery coffee shop. One of these men had been employed as a sweeper before being engaged as assistant cook and the other lived with his mother who worked as a sweeper. It is said that the outbreak of enteric fever in Jhansi ceased about three weeks after the dismissal of these men. In view of these instances the opinion expressed in one of the Divisional Sanitary Officer's reports to the effect that "in the present state of knowledge as to the cause of the rise and fall of enteric incidence all we can do towards prevention lies in general sanitary measures and inoculation" cannot be regarded as correct. The examples just referred to deal chiefly with the danger arising from "chronic carriers" but the reports contain, as usual, much evidence of the danger of infection from patients during the acute stage of the disease and this is a matter to which frequent reference has been made in previous issues of this report. The danger is fully recognised at all stations, but despite the careful precautions adopted three orderlies nursing patients suffering from enteric fever at Rawalpindi contracted the disease and four orderlies at other stations; in addition two men became infected while they were patients in hospital, one at Sialkot by visiting a friend who was dying from enteric fever, the other at Nasirabad. But the chief danger from this source arises because many soldiers neglect to report that they are ill until they have suffered from fever for some days. Strenuous efforts to overcome this foolish prejudice against reporting sick are made at nearly all stations, but every year the reports contain evidence that many men fail to profit by the advice. At Rawalpindi and at Ahmednagar it was found that men had been ill for as long as seven to ten days before reporting the fact. In concluding this portion of the remarks upon the reports it is worthy of mention that other stations at which it was thought that an undiscovered carrier

of infection among the troops either in the acute stage of the disease, the convalescent stage, or the stage termed chronic carrier, was to blame were Campbellpore, Ranikhet, and Jullundur, but that at Nowshera, Multan, Kamptee and Thayetmyo it was definitely stated that carriers were not responsible.

It has been stated already that much attention is given in the reports to the different vehicles by which infection may be conveyed. As a general rule the evidence implicating any particular vehicle is very slight. No outbreak was conclusively traced to water during the year but it was suggested as the probable cause of infection of patients at Sitapur, Agra, Chakrata, Allahabad, Purandhar, Sialkot and some other stations. At Sitapur twelve of the 20 cases occurred during a fortnight. At Agra it was said that the B. coli was found in the municipal drinking water and that the presence of the B. typhosus was suspected. Milk was suggested as being possibly the cause of cases at Rawalpindi, Multan and Shwebo, ice-creams at Karachi, lemonade at Allahabad and soda water at Sialkot. Food taken in eating houses outside cantonment limits was thought to be the infecting agent at Calcutta, Madras and Quetta, and as usual a number of cases were attributed to articles of food or drink obtained in native bazaars. Infection through the medium of latrines was considered the most likely cause at Ahmednagar and Subathu and infected clothing was suspected with good reason at Kirkee. Among Europeans and Natives about 40 cases were contracted on the Bazar Valley expedition, the limited area of the camps, their proximity to insanitary villages, fouled ground, bad water, the prevalence of flies and of dust, and the incessant toil inseparable from active service being regarded as the important factors concerned. There is, as usual, a long list of stations at which either flies or dust, or both, were considered to be all-important but as regards flies the evidence is chiefly of the nature that they were present in large numbers about the time that most cases of enteric fever occurred; the evidence implicating dust is very similar. The presence of flies in such numbers as to constitute a "plague" was reported at Poona, Kirkee and Secunderabad.

13. The statement in the margin shows at a glance the number of admissions

Enteric fever in 1908-Appendices A and B to Section III, Table admission and death rates per thousand

IV.

of average strength, recorded from enteric fever among European troops in India during each of the last five years. Although as compared with 1907 there was a slight increase in the admission rate, the death rate was lower than in any year since 1885. The average length of stay of patients in hospital during 1908 was only 68 days as compared with 80 in 1907 and as a result the average number constantly sick was less by about 16 and the total loss of service due to the disease was less by 5,542 days than in that year. Taking into account the cases that remained under treatment at the end of 1907 the case-

	Years.		Admissions.	Deaths.
1904	25110	}	1,395	267
			196	3.76
1005		5	1,146	213
1905	-		16.1	299
1906		5	1,095	224
1900		{	15.6	3.19
1000		5	910	192
1907		{	13.1	2.77
0		5	1,001	190
1908	***	{	145	275

mortality during 1908 was only 17 per cent. which compares favourably with the figures for males of approximately the same ages under treatment in hospitals in England.

Enteric fever in the two Armies and in the Divisions and Geographical groups. Appendices the Southern army and as regards Divisions and B. Table VIII.

its incidence was greatest among troops in the 1st (Peshawar) and 2nd (Rawalpindi) Divisions, and least among troops in the 1oth (Burma) Division. Although the number of cases recorded as having occurred among troops of the Bazar Valley and Mohmand Field Forces is small the influence of these expeditions is perhaps seen in the high incidence of the disease among troops of the Peshawar Division. The admission rates in all except four of the geographical groups were higher than in 1907; in the North-West-Frontier and Indus Valley group (VII) which contains the stations Peshawar and Nowshera the admission rate rose from 7.4 to 20.0 per thousand.

Enteric fever in stations. Appendix C. fact that admission rates of over 30 per thousand were recorded in eleven stations as compared with six in 1907. The following is a list of stations (irrespective of strength) at which the highest rates were recorded, and in Appendix C will be found the admission and death rates in stations where the strength is over one thousand.

In group V.	In group VI.	In group VII.	In group IX.	In group XIIa.	In group XIIb.
	Campbellpore 36'6 Rawalpindi 31'9		Jubbulpore 34'6		Purandhar 57'1 Murree 41'4

The stations where the largest numbers of cases occurred were Rawalpindi (93), Secunderabad (80), Meerut (54), Peshawar (52), Bangalore (43), and Quetta (42). The points of interest in connection with the prevalence of the disease at these and other stations have been dealt with in a previous paragraph.

16. Among European troops in India there were only two cases of plague during 1908 as compared with eight in the Plague and some other diseases. Table L111. previous year and seventeen in 1906. Mhow and Kirkee were the stations at which a case occurred during 1908, the case at the latter station being fatal. Measles caused 45 admissions to hospital and erysipelas fifteen. Of beri-beri 35 cases were recorded, 28 being at Aden and six at Rangoon. The medical officer at Aden reported that the incidence of the disease was not greater among beer drinkers than among others and that it did not depend upon residence in particular buildings. The medical officer at Rangoon stated that the disease is endemic in the town. Dengue caused 165 admissions as compared with 79 in the previous year. More than two-thirds of the cases occurred at Thayetmyo where it was said that the disease became epidemic during the rains. The remaining cases were recorded at Rangoon, Madras, St. Thomas' Mount, and Dum Dum. At Madras it was considered that a number of the cases returned as " pyrexia of uncertain origin " (of which there were 74) were probably cases of atypical dengue. Rheumatic affections, as usual, were responsible for a large number of admissions to hospital (namely, 511) and 27 soldiers were invalided for these diseases.

Tubercle of the lungs. Appendices A to Section II, and E to Section IV. Tables III and IV.

The rate of admission to hospital fell from 16 per thousand in 1907 to 1'3 and the number of men invalided fell from 107 to 73. The stations at which the largest numbers of admissions occurred were Cawnpore, Colaba, Rawalpindi and Aden but the number was not more than six in any station. The death rates from tubercle of the lungs among European troops, Native troops, and native prisoners during the year were in the proportions of 10, 18, and 181, but the practice of invaliding and of granting "sick leave" in the army prevents the figures being comparable.

18. In accordance with the practice adopted in the new edition of the Nomenclature of Diseases, pneumonia has been
Pneumonia. Appendices A and B to Section II
and H to Section III. Tables XI, III and IV.
removed from the list of respiratory diseases. The admission and death rates from it in 1908 were 3.9 and 3.9 per
thousand, respectively, as compared with 2.8 and 3.5 in 1907, the total numbers
of admissions and deaths in each year being 269 and 27 in 1908 and 195 and
24 in 1907. The disease was considerably more prevalent in the Northern than
in the Southern army and as regards its incidence in comparison with its incidence in 1907 it was more prevalent in nine of the geographical areas and less
so in only two. Excluding stations where the average strength was below 200,
Hyderabad, Dum Dum, Nowgong, Allahabad, and Dagshai were the stations
with the highest admission rates during 1908.

19. There was a decrease in the admission rate on account of respiratory disRespiratory diseases. Appendices A and B to Section II. Tables III and IV.

Respiratory diseases. Appendices A and B to Section II. Tables III and IV.

17'4 and there were six deaths from these diseases as compared with eight in that year. The Upper Sub-Himalaya area was that in which the diseases were most frequent, and as regards stations with a strength of over 200, Bellary, Bareilly, Ahmednagar, and Kirkee were those in which the highest admission rates were recorded. Of the six deaths under the heading two were due to bronchopneumonia, one to bronchitis, two to empyema, and one to cirrhosis of the lung.

Dysentery was more prevalent among all classes of people in India than during 1907, and the admission and death rates among European troops rose from It 7 and 33 per thousand, respectively, to 14'4 and '42. The disease was more

prevalent and fatal in the Southern than in the Northern army, and as regards Divisions it was most prevalent among troops in the 5th (Mhow), the 9th (Secunderabad) and the 6th (Poona) Divisions. As regards geographical groups the disease was most prevalent in the Southern India group (XI) and most fatal in the Burma Inland group (II). Excluding stations with a strength below 150, the highest admission rates were recorded at Saugor, Madras, and Jubbulpore. For the European army as a whole the months of greatest prevalence were August and September, and those of least prevalence February and January.

There were 1,217 admissions with one death on account of diarrhoea as compared with 992 admissions and 29 deaths on account of dysentery. The admission rates were highest among troops in groups VII and VI, and among stations

where the strength was 200 or above, Lebong, Neemuch, and Nowshera were those at which the disease was most prevalent.

21. Abscess of the liver was considerably less prevalent during 1908, the number of admissions to hospital being 115 and the deaths 55 as compared with 165 and 70, respectively, in the previous year. The

disease caused more admissions and deaths among the troops of the Northern than of the Southern army, and as regards Divisions the admission rate was highest among troops in the 2nd (Rawalpindi) Division and the death rate among troops in the 1st (Peshawar) Division. One or more cases occurred in 46 stations, the largest numbers of cases being in Lucknow, Poona, and Rawalpindi.

22. There were only 71 admissions to hospital and only three deaths from alcoholism. Table LIII.

Alcoholism. Table LIII.

and seven deaths during 1907. A very satisfactory decline in the admissions to hospital under this heading has occurred in recent years.

The recorded admission rate for all venereal diseases in 1908 was 69'6 per

thousand, the death rate was '04 per
thousand and the constantly sick rate was
8'8 per thousand. These figures are represented in actual numbers by 4,801 the
total admissions, 3 the deaths, and 606'13 the number constantly sick
throughout the year. The admissions were less by 1,435 than in 1907 and the
total number constantly sick was less by 129'14. The causes of the rapid and
steady fall in the rates relating to these diseases which has formed so remarkable
a feature of the health statistics of European troops in India during recent years
have been referred to at length in previous issues of this report. The table in

	Years.		Number of names on the syphilis register.
1004	***		2.047
1905		***	1,470
1900	***	***	936
1907		***	797
1908	100		545

the margin shows that the indication of the decline in syphilis afforded by the figures of the "syphilis register" continues to be satisfactory. The register contains the names of all men who came under treatment for syphilis for the first time, which means that it contains the names

of those who contract the disease during the year to which the register relates.

The average period of detention in hospital of a patient suffering from any form of venereal disease during 1908 was 46'21 days, and the total loss of service involved amounted to 221,844 days, the non-efficiency thus reckoned being more than three times as much as that incurred on account of enteric fever.

There were only three deaths attributed to venereal diseases during 1908 and the number of men invalided for this cause was only 74. The figures compare favourably with those of former years.

Venereal diseases are always less prevalent among troops serving in the north of India than among those serving in the south, and in 1908 the admission rate among troops of the Northern army was only 58.3 per thousand as compared with a rate of 84.1 among troops of the Southern army. As regards Divisions the admission rates were, as usual, highest among troops in the Burma and Secunderabad Divisions. Excluding stations at which the average strength

was below 100, the highest admission rates were recorded as regards the Northern army at Fort William, Delhi, and Fyzabad, and as regards the Southern army at Madras, Mandalay, and Shwebo.

The admission rate on account of gonorrhoa was 37.8 per thousand and that on account of soft chancre 16.1 as compared with rates of 48.0 and 19.7 respectively in 1907. Fifteen men as compared with 21 in the previous year were invalided for gonorrhoa during 1908.

- 24. The total number of deaths recorded as a result of heat-stroke during

 Heat stroke. Appendix A. Tables III, IV 1908 was 37 as compared with 26 in the
 previous year and 39 in 1906. The
 stations at which most deaths from this cause occurred were Nowshera, Lucknow, Lahore Cantonment, and Peshawar.
- 25. The mean annual number of suicides reported in the decade 1897 to
 1906 was 20, and in 1908 the number was
 26 of which nineteen were by gunshot, four
 by cut throat, two by drowning and one by being run over by a train.
- 26. From the European army of India 1,078 men were invalided in 1908 (15.64 Invaliding. Appendix A. Table LIII. per thousand of strength) as compared with 1,768 (25.50 per thousand) in the previous year. In the Northern army the rate was 16.06 per thousand of strength and in the Southern army it was 16.17 per thousand.

The practice of sending men, who a few years ago would have been invalided to England, to one of the hill stations in India has been the chief factor in reducing the invaliding rate among European troops. The chief diseases for which invaliding was necessary in 1908 have already been mentioned in paragraph 2. Of the total number of men invalided 82 per cent were under 30 years of age, and 70 per cent had been less than five years in India.

27. The average strength of commissioned officers with European troops in Officers. Appendix D to Section II. Table India during 1908 was 2,188, and among them there were 1,462 cases of sickness, 92 were invalided, and 21 died during the year. The admission and death rates were higher than in 1907, but the invaliding rate fell from 55'35 per thousand to 42'05.

Enteric fever was more prevalent among the commissioned officers than among the non-commissioned officers and men, but the death rate among them was only 1.37 per thousand as compared with 2.76 among the men. The officers suffered much less than the rest of the army from malaria and this was attributed in some stations (e.g., Lahore cantonment) to the careful use of mosquito curtains and other measures of individual prophylaxis. No case of plague occurred, but there were eight non-fatal cases of small-pox and one fatal case of cholera. Enteric fever and malaria were the chief causes of invaliding.

Women. Appendix E to Section II. Tables of 200 on that of the previous year. The statistics of health were unfavourable, the rates of admission to hospital and of death being 7197 and 13'53 per thousand, respectively, as compared with 657'6 and 6'58 in 1907. The constantly sick rate

was 30.5 per thousand as compared with 28.8. The chief causes of admission to hospital were, as usual, debility, malaria, and diseases peculiar to women, which together accounted for 62.82 per cent of the total number of admissions from all causes. Of the 50 deaths seven were due to enteric fever, seven to small-pox, seven to childbirth and abortion, six to malaria, three to cholera and three to pneumonia. The admission rate from small-pox was twelve times as high as among the men and the death rate was sixty-three times as high. Except the neglect of vaccination and revaccination among the women there is no reason that adequately accounts for the great difference.

29. The admission, constantly sick and death rates among the children Children. Appendix F to Section II. Tables were all much higher than in 1907. The XXII to XXV and LIII. strength was 5,819, the admission rate 450°1 per thousand, the constantly sick rate 16°3 and the death rate 50°18. The chief causes of sickness were malaria, diarrhæa, and respiratory diseases which together accounted for 34 per cent of the total admissions. Of the 292 deaths 46 were attributed to diarrhæa, 30 to debility and immaturity at birth, 27 to respiratory diseases, 21 to convulsions and 15 to dysentery. There were 21 admissions to hospital with two deaths from enteric fever and 361 admissions with 13 deaths from malaria. Among the exanthemata to which children are liable there came under treatment during the year 190 cases of measles, 20 of chicken-pox, eight of small-pox and two of scarlet fever. There were also 36 cases of whooping cough, eleven of mumps and eleven of diphtheria.

The strength at different age periods, the death rates per mille and the relative liability to death at each of these periods are shown in Table XXV. Immaturity at birth was the cause of 14 per cent of the total number of deaths among children under six months of age.

PAPERS AND BOOKS REFERRED TO IN SECTION II.

Abbreviations used below.

A. H. = Archiv für Hygiene.

A. K. G. A = Arbeiten aus dem kaiserlichen Gesundheitsamte.

A. P. = Annales de l'Institut Pasteur.

B. I. P. = Bulletin de l'Institut Pasteur.

B. J. H. H. = Bulletin of the Johns Hopkins Hospital.

B. K. W. = Berliner klinische Wochenschrift.

B. M. J. = British Medical Journal.

C. B. = Centralblatt für Bakteriologie.

D. M. W. = Deutsche medizinische Wochenschrift.

H. R. = Hygienische Rundschau.

I. M. G. = Indian Medical Gazette.

J. A. M. A. = Journal of the American Medical Association.

J. H. = Journal of Hygiene.

J. I. D. = Journal of Infectious Diseases.

J.R.A.M.C. = Journal of the Royal Army Medical Corps.

J. T. M. = Journal of Tropical Medicine.

J. W. P. = Jahresbericht of Waldeyer and Posner.

L. = Lancet.

L. G. B. = Report of Medical Officer, Local Government Board.

M. M. W. = Münchener Medizinische Wochenschrift.

N. = Nature.

P. J. S. = Phillipine Journal of Science.

S. C. I. = Annual Report of the Sanitary Commissioner with the Government of India.

Z. H. = Zeitschrift für Hygiene.

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276; 'Memorandum published in June 1909, by the Director-General, Army Medical Service; band 'Uhlenhuth, Hübener, Xylander and Bohtz in A. K. G. A. XXX, heft 2, April 1909, page 217; 'Rimpau in the same, page 330; 'Drewes as above,

Modes of spread.—¹L. of February 13th 1909, page 486; ²Lumsden in J. A. M. A. October 16th 1909, page 1258; ³Konrich in Z. H., Volume LX, 1908, page 208; ⁴Trask in J. A. M. A. October 31st 1908, page 1491; °Harrington reported by Trask as above; °Harrington in Boston Medical and Surgical Journal, July 2nd 1908, reported in J. A. M. A. July 18th 1908, page 255; 7Lumsden and Woodward in J. A. M. A. March 6th 1909, page 749; °Kersten in A. K. G. A. Volume XXX, heft 2, 1909, page 341; °See J. A. M. A. October 16th 1909, pages 1261 to 1264; ¹oMorgan and Harvey in J. R. A. M. C. June 1909, page 587; ¹¹Brückner in A. K. G. A. XXX, heft 3, page 619; ¹²Galvagno and Calderini in Z. H. Volume 61, heft 2, 1908, page 185; ¹³Ainsworth in J. R. A. M. C. May 1909, page 485; ¹⁴Howard reported by Welch, see J. A. M. A. October 16th 1909, page 1264.

Preventive measures.—¹Klinger in A. K. G. A. Volume XXX, heft 3, May 1909, page 584; ²Lancet, June 5th 1909, page 1602; J. R. A. M. C. XI, October 1908, page 327; J. R. A. M. C. XII, February 1909, pages 163 and 169; J. R. A. M. C. July 1909, page 62; Maynard in Biometrika, Volume VI, Part IV, March 1909, page 366.

SECTION III.

NATIVE ARMY OF INDIA.

30. The average strength of the Native troops, including those on duty in India. Appendices A and B to China and other stations outside India, was Section III, Tables XXVI and LIII. 126,975 as compared with 126,392 in 1907. From the statement in the margin it will be seen that their statistics of health,

All causes. Ratios per mille Native troops. 1902-06. 1907. 1908. Admissions 649'5 6280 6744 Constantly 24'4 22-8 21'7 Deaths 8.93 6.27 7'41 Invalids 6.63 10,00 576

while being more favourable than those of European troops, were not quite so satisfactory as in 1907 when the rates of constantly sick, of invaliding, and of mortality were the lowest on record. The death rates shown in the table do not include the statistics of men who died while on sick leave or on furlough at their homes; if these were included the death rate for 1908 would be 8'49 per thousand instead of 7'41.

The increase in the rate of admission to hospital was due almost entirely to the greater prevalence of malaria, the admission rate from this disease being 266 per thousand as compared with 225 in 1907, but among the more important diseases the admission rates from dysentery, diarrhœa, enteric fever and cholera were also higher than in that year. On the other hand respiratory diseases, influenza, anæmia and debility, scurvy, Malta fever, and plague were considerably less prevalent, and from typhus fever there were only four admissions and two deaths in the year under review as compared with 24 and four, respectively, in 1907. The increased death rate was due chiefly to a higher mortality from cholera, enteric fever, and pneumonia, but the death rates from respiratory diseases and tubercle of the lungs were also higher than in 1907. Plague caused only 14 deaths as compared with 56 in that year, and malaria only 74 as compared with 84, but as regards the latter disease the removal of the heading "remittent fever" from the returns is doubtless the most important factor concerned in the reduction.

The chief causes of sickness were malaria, dysentery, respiratory diseases, pyrexia of uncertain origin, and venereal diseases, in order of their relative prevalence, malaria accounting for over 39 per cent. and dysentery for about 6 per cent. of the total number of admissions from all causes. The principal causes of death were pneumonia, cholera, malaria, enteric fever and tubercle of the lungs, these diseases accounting, respectively, for 29.7 per cent. 12.3 per cent. 7.9 per cent, 7.8 per cent, and 5.6 per cent of the total number of deaths from all causes.

The number of men invalided for discharge from the service was 842 as compared with 728 in 1907, mainly from tubercle of the lungs, injuries, debility, and malaria.

If table XXVI be compared with table I it will be seen that the Native troops suffered less than the European troops from pyrexia of uncertain origin, venereal diseases, enteric fever, diarrhœa, hepatic affections, and influenza, but that they suffered more from each of the other causes of sickness tabulated. An interesting comparison is that dealing with the relative incidence among the two classes of troops of malaria and pyrexia of uncertain origin on the one hand and of dysentery and diarrhæa on the other. According to the statistics the Native troops suffer more than the European troops from malaria and dysentery, but less from pyrexia of uncertain origin and diarrhæa. An analysis of the statistics and case sheets indicates that the recorded contrast is due chiefly to differences of diagnosis, and that a proportion of the cases diagnosed as malaria and dysentery, respectively, in the Native army would if they occurred in the European army be diagnosed as pyrexia of uncertain origin and diarrhæa.

The statistics of Native troops located in stations outside India will be found in Tables XXVIII and XXIX and the following summary contains details not given in those tables. The average strength of the troops serving in North China was 863, the rate of admission to hospital was 450'8 per thousand and the death rate was only 2'32 per thousand. The good state of health of these troops is indicated by the fact that of the 389 admissions to hospital no fewer than 288 were for causes that are not considered sufficiently important to be tabulated separately in the standard tables. The average strength of the troops in Colombo and Singapore was 1,540, the admission rate was 613'6 per thousand and the death rate only 1'95. In the stations of the Aden Brigade (Aden, Khormaksar, and Perim) the average strength was 801, the admission rate was 619'2 per thousand and the death rate 6'24; and the corresponding figures for troops in stations on the Persian Gulf were 240. 629'2, and 37'50. The average annual strength of Native troops employed with the Bazaar Valley and Mohmand Field Forces, which have already been referred to in Section II, works out to 1,518, and the rates of admission to hospital and of mortality were 442'0 and 28'99 per thousand respectively. The number of men killed in action or who died from wounds received in action was 36. Wounds and injuries were the chief causes of admission to hospital and of mortality. There were twelve cases of cholera with five deaths.

- Northern and Southern Armies.
 Divisions, Appendix A. Table XXVI. ern Army were much greater than among those of the Southern Army, the admission rate per thousand being higher by 1979 and the death rate by 2.39. The higher admission rate in the Northern Army was due almost entirely to the prevalence of malaria and the higher death rate was due chiefly to the mortality from pneumonia and cholera. The relative incidence of different diseases on the Native and European troops of the two armies corresponded, except in regard to influenza, small-pox, respiratory diseases, pyrexia of uncertain origin, dysentery and diarrhœa. As regards the Divisions, the statistics of troops in the 1st (Peshawar) Division were the least favourable during 1908, the 2nd (Rawalpindi) Division standing next in the list, and the 7th (Meerut) Division third.
- 32. For the year under review as in the previous year the geographical areas

 Geographical groups. Appendices numbered VII (North-West Frontier), and X

 B and C. Table XXVII. (Western Coast) must be considered to have
 been most unhealthy for Native troops. Malaria and pneumonia were most prevalent in the North-West Frontier geographical group, tubercle of the lungs

in the Gangetic plain group and dysentery in the Burma Coast group. The highest death rates were recorded in groups XII (Hill Stations) where the mortality was due chiefly to pneumonia, and X (Western Coast) where it was due chiefly to malaria and pneumonia.

- 33. In 1908 there were 41 stations in which the average strength of Native Stations, Tables XXVIII to XXX, troops was over one thousand. The rates of Regiments. admission to hospital were very high in five, namely, Dera Ismail Khan, Edwardesabad, Peshawar, Dehra Dun, and Kohat, and the death rates were high in Abbottabad, Dera Ismail Khan, Peshawar, Lahore Cantonment, and Sialkot. In Dera Ismail Khan the admission rate was 1,881'2 per thousand and the death rate 11'82, the chief cause of the large amount of sickness being malaria, which accounted for 59 per cent of the total admissions to hospital. In Edwardesabad the admission rate was 1,200'5 per thousand, in Peshawar it was 1,127'8, in Dehra Dun it was 1,080.6 and in Kohat 1,058.8, malaria being in all these stations the chief cause of the high rate. The highest death rate in any of the larger stations during the year was 18:56 per thousand recorded at Abbottabad, the chief causes of the mortality being cholera, pneumonia, and enteric fever. Abstracts of the cantonment sanitary reports upon 24 of the most unhealthy stations will be found in Table XXX, so it is unnecessary to refer to them in detail here. Among regiments with a record of much sickness and mortality during the year were the 1-6th Gurkhas at Abbottabad, the 86th Carnatic Infantry at Secunderabad, the 112th Infantry at Nasirabad, the 1-2nd Gurkhas at Drosh, and the 41st Dogras at Cawnpore. The admission rates in these regiments ranged between 420 and 1,040 per thousand, and the death rates between 21'46 and 33'16 per thousand.
- 34. Influenza was less prevalent among Native than among European troops, Influenza. Appendices B and G. and the rate of admission to hospital fell from Tables XXVI to XXIX and XXXI.

 6.5 per thousand in 1907 to 3.8. Most cases occurred at Hong Kong, Secunderabad, Kirkee, Bakloh, and Nowshera. Among the Native troops as a whole January, February, and March were the months during which the disease was chiefly prevalent, and June was the month in which it was least prevalent.
- 35. In the Native army, as in the European, cholera was much more prevalent Cholera. Appendices A and B. Tables XXVI to XXIX and XXXII. than in the previous year, 174 cases with 116 deaths being reported compared with only 34 and 24 in that year. The disease was widespread among the general population of the country and as regards the Native troops the increased incidence is shown by the fact that a case or cases occurred in fifty regiments located in 29 stations as compared with thirteen regiments located in eleven stations in 1907. At Abbottabad there were 36 cases with 29 deaths, at Secunderabad 32 cases with 13 deaths, at Cawnpore 14 cases with eight deaths and at Nowshera eleven cases with ten deaths. Twelve cases with five deaths occurred among the Native troops of the Mohmand Field Force. The regiments with most cases were the 1-6th Gurkhas at Abbottabad in which there were nineteen, the 86th Carnatic Infantry at Secunderabad in which there were eighteen and the 41st Dogras at Cawnpore in which there were fourteen. The outbreak at Abbottabad was investigated by the Sanitary Officer of the Rawalpindi Division. Apparently some of the

patients became infected in a brothel situated just outside cantonment limits, but the most interesting feature of the outbreak was the large proportion of attacks among persons who came in contact with cholera patients in hospital. There were eleven cases among such persons, namely, hospital cook one, sweepers two, soldier patients five, soldier nursing attendants two, women segregated in the hospital compound one. The Sanitary Officer found that in the hospitals of the Gurkha regiments the arrangements in connexion with the water supply and with the removal and disposal of patients' excreta were very unsatisfactory.

36. There were 103 admissions to hospital on account of small-pox during 1908 as compared with 48 during 1907, but Small-pox. Appendices A and B. Tables the number of deaths from the disease was XXVI to XXIX. only three as compared with five. The rate of mortality per thousand of strength was lower than the rate for European troops. For a number of years it has been the rule that the statistics of this disease among Native troops compare favourably with the statistics among European troops. Prior to 1886 the reverse was invariably the case, and the change indicates that of late years vaccination and revaccination have been more thoroughly attended to in the Native than in the European army. Small-pox is usually a very fatal disease among natives of India, but that vaccination and revaccination have conferred upon the Native troops a remarkable protection from death from this disease is shown by the fact that only 30 out of the 695 cases that have occurred among them during the last ten years were fatal. These figures give a case-mortality of only 4'3 per cent which is only about one-four-

During 1908 a case or cases of small-pox occurred in 40 regiments, but there was only one case in 19 regiments and there were only two in ten. The largest numbers in any regiment were sixteen in the 73rd Carnatic Infantry and fifteen in the 79th Carnatic Infantry both at Aurangabad. But there was no death from the disease in either of these regiments and it is said that on account of previous vaccination the cases were of a remarkably mild type. On the other hand ten cases that occurred among unvaccinated women and children of one of these regiments were very severe and four of the ten were fatal.

teenth that of cholera and about one-fifth that of pneumonia.

37. Malaria accounted for over 39 per cent. of the total number of admissions from all causes and the admission rate Malaria. Appendices A, B, and C. Tables per thousand was 266 as compared with 225 XXVI to XXIX and XXXIV to XXXVI. in 1907. The increase was chiefly among troops of the Northern Army, but the admission rates recorded in all except two of the twelve geographical groups were higher than in 1907, the two exceptions being Burma Coast (I) and Bengal and Orissa (IV). For the whole Native Army the months of greatest prevalence were, as usual, October and November. In stations where the average strength was over 150 those at which the highest admission rates were recorded were Chakdara (1,546 per thousand), Dargai (1,159), Dera Ismail Khan (1,112), Jandola (1,033), Simla (868), Baroda (702), Peshawar (647), Dehra Dun (620), Dibrugarh (612) and Delhi (601). In five other stations the admission rate was over 500 per thousand of strength and in seven more it was over 400. The high admission rate among the troops at Dargai appears to have been due to residence not at Dargai, but at Chakdara, where despite careful arrangements for administering quinine prophylactically and efforts to destroy larvæ and adult mosquitoes, malaria was exceedingly prevalent in the 82nd Punjabis. On account

of the severity of the outbreak all the recruits of the regiment were sent to Dargai early in October. Dera Ismail Khan was garrisoned by the 29th Mountain Battery, the 16th Cavalry, the 20th Infantry, the 69th Punjabis, the 47th Sikh Infantry, and a wing of the 27th Punjabis, the average annual strength of the Native troops being 2,475. The 29th Mountain Battery, the 16th Cavalry, and the 47th Sikhs suffered most. It is said that the river overflowed its banks and that large areas of water existed within a short distance of the cantonment. Anti-mosquito operations and the administration of quinine prophylactically were carried out. The high admission rate at Simla was due to the arrival there in October of the 34th Pioneers from Lahore Cantonment where the regiment became very heavily infected with malaria. For the three months from October to December the annual admission rate from the disease in this regiment was 2,227 per thousand and the death rate 25°21 per thousand. In another regiment, the 32nd Pioneers, which arrived about the same time from Ambala, the annual admission rate from malaria for the three months was only 230 per thousand.

The following table is of interest in connexion with the remarks upon malaria that were made in the section relating to the European army.

Malaria in the Native army. Quinquennial admission rates per 1,000 of strength.

1879-1883	1854—1888	1889—1893	1894—1898	1899—1903	1904-1908
652	451-	467	341'	305-	228

Unfortunately the practice of treating Native soldiers suffering from malaria as out-patients prevails to so great an extent and varies so greatly in different years and in the practice of different medical officers that very little, if any, importance can be attached to these figures. The statistics of Native soldiers treated as out-patients are not shown in any published return and there is evidence that in recent years the introduction of special anti-malarial measures has sometimes been followed by the use of the out-patient system of treatment to an extent that makes the recorded rates of admission to hospital quite valueless as an indication of the amount of malaria among the Native troops.

38. Under the heading "Pyrexia of uncertain origin," which appears for the Pyrexia of uncertain origin.

first time in the returns for 1908, there were Appendix B. Tables XXVI to XXIX recorded 2,056 admissions to hospital and eleven deaths. To a great extent the heading has been used as a substitute for the heading "simple continued fever," which no longer appears in the returns, but a number of severe illnesses, having fever as a prominent symptom in which the diagnosis was obscure, were also included under it. The Sanitary Officer of the Rawalpindi Division investigated the cause of fevers of undetermined origin among the Gurkha troops and followers at Abbottabad. He considered that some of the cases that occurred from March to May among musicians and followers of the 1-5th Gurkhas were probably typhus fever and that most of the undeter-

mined fevers of long duration were typhoid or paratyphoid fever. The fevers of short duration were difficult to diagnose but he thought that some of them were influenza and others mild cases of malaria. He was of opinion that the more general employment of all the diagnostic methods at present available would show that no hitherto unknown disease is included among the "fevers" at Abbottabad. This remark, however, is not applicable generally for an examination of the case sheets of the eleven fatal cases recorded under the heading during 1908 shows that in some instances the diagnosis remained obscure although no known diagnostic method was left untried.

39. There were nine cases diagnosed as kala-azar during the year as compared with twelve in 1907. They occurred in the following regiments and stations: six in the 2-2nd Gurkha Rifles at Dehra Dun, one in the 1-2nd Gurkhas at Kila Drosh, one in the 2-5th Gurkhas at Abbottabad and one in the 2-9th Gurkhas at Dehra Dun. Four of the cases were fatal during the year. The diagnosis was confirmed by finding the Leishman-Donovan parasites in blood obtained by splenic or hepatic puncture or in smears from the spleen after death. The medical officer of one of the regiments at Dehra Dun considered that the prevalence of the disease in that station is increasing.

40. In 1908 only four admissions and two deaths from typhus fever were reTyphus fever. Relapsing fever. corded among Native troops as compared with 24
admissions and four deaths in 1907. The cases occurred in the 17th Cavalry at Bannu, the 57th Rifles and the 59th Scinde Rifles at Peshawar and the 5th Mountain Battery at Quetta. It has already been mentioned that the disease may also have been present at Abbottabad. Relapsing fever which had caused 26 admissions and three deaths in 1907 caused only two admissions and one death in 1908. The cases occurred in the 110th Mahratta Light Infantry at Ahmednagar and the 1st Lancers at Lucknow.

41. The table in the margin shows the noteworthy increase that has occurred

Enteric fever. Appendices A. B and
D. Tables XXVI to XXIX and
in the number of cases diagnosed as enteric fever
in the Native army during recent years. It is coin-

cident with a yearly decline in the number of cases recorded under the heading remittent fever, and the unusually large increase in 1908 is perhaps due to the removal of that heading from the list of diseases in the annual returns. Since the beginning of 1908, the possible headings for the return of a case in which fever of long duration is the only prominent symptom, have been malaria, enteric fever, Malta fever, and pyrexia of uncertain origin, and, having regard to the much greater care that is now adopted before returning a case as malaria, as well as to the more general employment of the serum tests in diagnosis, and to the omission of the previously much used

Enteric fever. Native troops.						
Years.	Total ad- missions.	Admission rate per 1,000				
1902	50	4				
1903	So	-6				
1904	70	-6				
1905	130	Li				
1906	127	1.0				
1907	182	1'4				
1908	350	2-8				

heading remittent fever a marked increase in the admissions recorded under the heading enteric fever, was to be expected. (See this report for 1904, page 44.) The probability that altered diagnosis rather than a real extension of prevalence

is the cause of the recorded increase is supported by the results of a more detailed examination of the statistics. Such an examination shows that the comparatively large number of cases is due, not to the appearance of the disease in epidemic form in particular regiments, but to the occurrence of from one to three cases in a much larger number of regiments than in former years. Thus the 350 attacks recorded in 1908 comprised cases from no fewer than 113 regiments of which there were 52 in which only one case occurred, eighteen in which two cases occurred, thirteen in which three cases occurred and nine in which four cases occurred, so we are left with only 21 regiments in which more than this number occurred during the year. It is found also that, in the regiments in which a considerable number of cases were reported, as in the 1-9th and 2-9th Gurkha Rifles in which there were 24 and 18 respectively, the incidence of the cases was such as to negative the view that the disease was present in epidemic form. An investigation of the disease in Dehra Dun, where those regiments were stationed, was made by the Sanitary Officer of the Meerut Division, who reported that nearly 49 per cent. of the patients had contracted the disease by casual infection from different sources and at different times outside the cantonment, and that, of the remainder, probably a considerable number had become infected in Rajpur. The source of infection was not definitely ascertained in any case that occurred among Native troops during the year and this is not surprising when we know that the great majority were diagnosed on their admission to hospital as malaria and that usually to days or a fortnight elapsed before the diagnosis of enteric fever was made by the ineffectiveness of quinine in treatment and by the results of a serum test. It will probably be some years before what may be called the normal incidence of enteric fever among Native troops is accurately reported and until then it would be wrong to consider that the real prevalence of the disease is increasing among them.

Malta fever. Tables XXVI to increase in the number of cases of Malta fever among Native troops there has been a fall to 23

cases in 1908. Of these eleven occurred in Ambala, two in Lahore Cantonment, two in Sehore and one in each of the following stations: Sialkot, Rawalpindi, Dera Ismail Khan, Multan, Jhansi, Drosh, Chitral and Fort Lockhart. The largest number of cases in any regiment was seven in the 32nd Sikh Pioneers at Ambala. All the patients in this regiment gave a history of having drunk goat's milk, but although many goats in an adjacent village were examined none was found to be infected. An order was issued prohibiting the bringing of female goats to the lines, and it is said that after the issue of this order only one doubtful case of Malta fever occurred.

Malta fever. Native troops.						
Years.	Total ad-	Total deaths.				
1902	4	1631				
1903	8					
1904	5	1				
1905	43	1				
1906	38	1				
1907	62	2				
1908	23					

43. Coincident with a great decrease of plague among the general population

Plague. Tables XXIV to XXIX.

of India in 1908 the number of cases among

Native troops fell from 85 in 1907 to 36, and the

number of deaths from 56 to 14. Of the cases, fifteen with five deaths occurred
at Poona and ten with six deaths at Bangalore. The 26th Light Cavalry, the

8oth Carnatic Infantry and the 20th Deccan Horse were the regiments affected

at those stations. The remaining cases occurred in 10 different regiments located in 8 stations.

44. The total number of admissions to hospital on account of scurvy during 1908 was 191 which gives a ratio of Scurvy. Tables XXVI to XXIX. 1'5 per thousand as compared with a ratio of 2'3 per thousand in the previous year. About 58 per cent. of the admissions in 1908 were recorded among troops in the Southern Army and about 39 per cent. among troops in the Northern Army; and as regards geographical groups over 25 per cent. of the admissions occurred among troops in group XII (Hill stations) and about 21 per cent. among troops in group VIII (North-West Frontier). The largest numbers of cases were recorded in the 126th Baluch Infantry (18 admissions) and the 112th Infantry (14 admissions). The head-quarters of the 126th Baluch Infantry was at Ouetta. but 17 of the cases of scurvy occurred among men of the detachment at Robat where the only vegetables available were onions, and even these were not obtained during June. Thirteen of the cases occurred during July. The 112th Infantry were stationed at Nasirabad, but they provided detachments for stations on the Persian Gulf where the cases of scurvy occurred.

45. The admission rate on account of tubercle of the lungs rose from 2'5 per Tubercle of the lungs. Appendices thousand in 1907 to 3'0 and the death rate A, C. and E. Tables XXVI to XXIX. from '33 to '42, the total number of admissions and deaths being 322 and 42 in 1907, and 378 and 53 in 1908. Among Gurkhas there were 77 cases and 22 deaths as compared with 62 cases and 14 deaths in the previous year, the admission and death rates among this class of the Native troops being 5'0 and 1'43 per thousand, respectively, as compared with 2'7 and '28 among the rest of the Native army. But the statement in the margin shows

TUBERCER OF THE LUNGS AMONG GURKHAS. RATIOS PER THOUSAND.					
Years.	Admissions.	Deaths.			
1899	15'4	5'09			
1900	14'4	4'34			
1901	13.1	3'95			
1902	156	4*24			
1903	28.9	2.88			
1904	10.6	2.66			
1905	6-1	1.28			
1906	5'2	2'41			
1907	4.8	1'03			
1908	5'0	1*43			

the noteworthy decline in the prevalence of and mortality from the disease that has occurred among Gurkha troops during the last four years. Next to Gurkhas, the Dogras in the Native army suffer most from tubercle of the lungs and in 1908 the largest number of admissions in any regiment occurred in the 41st Dogras who were stationed during 1907 and part of 1908 at Shan-hai-kwan, Tongshan and Tientsin in North China. Among regiments stationed in India the largest numbers of admissions were recorded in the 1-7th Gurkha Rifles at Quetta (14), the Queen's Own Corps of Guides at Mardan (10), and the 2-1st Gurkha Rifles at Dharmsala (8). Frequent inspections for the discovery and invaliding of early cases of tubercle as well as improved arrangements

for the ventilation of barracks have doubtless been important factors in reducing the prevalence of the disease in Gurkha regiments.

46. The admission rate on account of pneumonia was 12.8 per thousand and the Pneumonia. Appendices A, B, C, death rate 2.20 as compared with rates of 12.4 and H. Tables XXVI to XXIX and and 1.99 per thousand, respectively, in 1907. The disease was more prevalent than in the previous year in nine of the twelve geographical groups the highest admission rates for

the year being recorded in the North-West Frontier group (21'3 per thousand) and the Hill Stations group (15'5). The months of greatest prevalence were, as usual, January, February, March, November and December. Among stations where the average strength was over 100 the highest admission rates were recorded in Kherwara (93'5 per thousand), Jacobabad (45'9), Fort Sandeman (44'5) and Amritsar (41'3), and as regards regiments the highest rates were recorded in the 20th Infantry at Dera Ismail Khan, the Queen's Own Corps of Guides at Mardan, and the 52nd Sikhs at the Malakand. In the Frontier stations, where the winter is severe, the custom of visiting the latrines in the early morning without wearing sufficient clothing to protect against a chill is stated to be a common cause of pneumonia.

Dysentery and diarrhoma. Appendices A, B, and C. Tables XXVI to at Jandola, Barrackpore, Santa Cruz, Singapore XXIX and XXXVIII. and Allahabad. The medical officer of the 2nd Rajput Light Infantry in which most cases occurred thought that the disease was due to inferior food stuffs purchased in bazaars. It was next most prevalent in the 99th Deccan Infantry at Singapore where the medical officer reported that the climate and the condition of the barracks and their surroundings were very unfavourable to the health of the troops. He stated that the barracks were condemned eight years ago, and that they are surrounded by swamps, insanitary houses and highly manured fields.

There were in all 1,115 admissions to hospital and eight deaths from diarrhea as compared with 859 and two in 1907. The regiments in which most cases occurred were the 2-7th Gurkha Rifles, the 113th Infantry, and the 129th Baluchis. Chills and indiscretions in diet were regarded as the important causes.

48. The statement in the margin shows that while the admission rates from

Venereal diseases. Appendices B and F, Tables XXVI to XXIX.

	VENEREAL DISEASES, ADMISSION RATES PER 1,000.			
Years.	Native Troops.	European Troops.		
1903	24'5	247'0		
1904	20.6	198.5		
1905	196	153'7		
1906	16-2	117'3		
1907	14'7	89'9		
1908	15'2	69*6		

venereal diseases among both Native and European troops have decreased during recent years the decrease among Native troops has not been nearly so marked as among European troops. It shows also the great difference that exists between the recorded prevalence of the diseases among the two classes of troops. During 1908, among European troops with an annual average strength of 68,933 there were 4,801 admissions from venereal diseases while among Native troops with an annual average strength of 126,975, there were only 1,934 admissions. The slight increase in the admission rate among Native troops in 1908, as compared with the rate in 1907, was confined to troops of the Southern Army, and among those troops the diseases were, as usual, more prevalent than among troops of the Northern Army, the

admission rates being, respectively, 20'1 and 12'8 per thousand. The prevalence of venereal diseases among Gurkha troops continues to diminish and in 1908

the admission rate among them was only 18 per thousand as compared with 15 per thousand a mong the remainder of the troops. Excluding stations at which the average strength was less than 100, the highest admission rates among Native troops in the Northern Army were recorded at Almora, Kohima, Simla, Dehra Dun, Fort William and Mardan, and among troops of the Southern Army at Cannanore, Bombay, Belgaum, Poona and Jacobabad. Among all the Native troops in India the admission rate for syphilis was 4'9 per thousand, for soft chancre it was 4'3 and for gonorrhœa it was 6'0 as compared, respectively, with the figures 4'9, 4'3 and 5'8 in 1907.

49. There were thirteen admissions to hospital and there was no death from Beri beri. Table LIII. beri beri during 1908, the figures, as usual, comparing favourably with those for European troops. Ten of the cases occurred in the 83rd Light Infantry stationed at Cannanore and one case in each of the following regiments—the 79th Carnatic Infantry at Aurangabad, the 93rd Burma Infantry at Mandalay and the 98th Infantry at Colombo. In the 83rd Infantry the disease was of a mild type and was confined to recruits. No case was reported among the civil population of the district and, beyond suggesting that the consumption of bad rice may have been concerned, the medical officer was unable to account for the outbreak.

50. During the ten years 1898 to 1907, there were altogether 119 cases of suicide. Table LIII. suicide in the Native army, a mean of about twelve per annum. There were only seven in 1908, of which five were by gunshot and two by hanging.

SECTION IV.

JAILS OF INDIA.

considerable departure from the normal either in amount or distribution generally sets in motion a train of consequences ending in poverty, sickness and death. The health of the prisoners must always be influenced to some extent by the condition of the people, owing to the continuous flow into the jails of large numbers of the poorest and lowest classes. In ordinary years the effect of this influx is not perceptible, the numbers are not in excess of the accommodation provided, the proportion of sick persons among the newly admitted prisoners is small and the figures relating to them are lost in the general statistics, while the precautions against the introduction of infectious diseases into the jails rarely fail. In extraordinarily unfavourable years, however, the position is profoundly changed, the number of prisoners is so greatly increased that many of the jails are overcrowded, the proportion of sick among the newly admitted is so large that

the general statistics are modified, and so severe is the constant strain on the precautions against the importation of infection, that they occasionally

break down.

In 1908 all the conditions influencing the health of the prisoners The south-west monsoon of 1907 were extraordinarily unfavourable. receded prematurely, and in consequence the spring crops of 1908 were bad everywhere, excepting in Eastern Bengal and Assam and in Lower Burma, and, although the autumn crops were generally good, except in Bengal, the epidemic of malarial fever which ravaged Upper India delayed the harvest. Poor and belated harvests raised the already high prices; high prices led to an increase of crime, and the number of prisoners admitted into the prisons rose from 291,165 in the preceding year to 341,831, a total increase equal to 17 per cent. The increase was not, however, equally distributed; it was 50 per cent in the Central Provinces, 28 per cent in Bengal and the Punjab and 26 per cent in the United Provinces, all administrations in which tubercle, or diseases of the lungs, or both, levied a higher toll of deaths than usual. Not only were many of the prisons continuously overcrowded, but, as we shall see, a large proportion of the newly admitted prisoners were in a bad state of health owing to the effects of scarcity and malarial infection.

The rainfall of 1908 was abnormal: in the cold weather it was in excess, but irregularly distributed, in the hot weather it was in defect, except in Upper India, Berar and Mysore, and during the monsoon period although in defect in the eastern parts of Upper India, it was in enormous excess over north-western India. In every province, except Eastern Bengal and Assam and Bombay, the general mortality was greater than usual, the increase in the death rates being specially noticeable in Upper India, where the mortality of the previous quinquennium, with which comparison is made, was greatly enhanced by plague, which was happily not a serious factor in the death rates of 1908.

It is highly creditable to those concerned with the administration and management of the prisons that, in spite of all those adverse conditions, the health of the prisoners remained fairly good; the admission and constantly sick rates were only slightly higher than the low rates to which we have been accustomed in recent years, and, although the death rate (24.17 per 1,000) represents more than a check in the steady fall that has been taking place, it would have been considered a low rate ten years ago.

52. Comparisons are frequently made between death rates of prisoners and of

Comparison of death rates among prisoners and among the general population. the general population, and such comparisons may be useful and instructive if sufficient allowance is made for the very different circumstances of the two communities. Prisoners labour

under certain disadvantages, but these are much more than balanced by Prisoners are below the average of the general population in general vitality, they are exposed to the depressing influences of jail life and to a certain monotony of routine and diet, and they live together in large numbers, so that if an infectious disease does become established among them the consequences may be serious. On the other hand, save that the proportion of females, who everywhere (except in the Punjab) die at a lower rate than males, is small, the constitution of the prison population is favourable to a low death rate; there are no children, the majority of prisoners are in the prime of life and the number of very aged among them is usually small. Prisoners are well housed and clad and abundantly fed, they are watchfully cared for in health and skilfully tended in sickness. It is obvious, then, that the death rate among them ought to be lower than that of the general population. It is, perhaps, not so obvious that measures that are successful in preventing or curing a particular disease among prisoners, may not be equally successful among the general population. Among prisoners such measures can be efficiently carried out in every detail, and they are aided by all the conditions of good hygiene; among the general population some conditions, including perhaps one that is essential to success, may be absent, while other factors that favour the disease may be present.

The mean daily prison population, including the convicts at the Andamans, was 115,403 or 7,728 more than in 1907, and the death rate was 24'47 per thousand. The figures regarding the 14,067 convicts at the Andamans are excluded from the general statistics discussed in the following paragraphs because the circumstances of their lives differ widely from those of prisoners in the jails.

In India and Burma the mean daily prison population in 1908 was 101,336, compared with 93,264 in the previous year. In every thousand, 646 were admitted to hospital during the year and 29 were constantly on the sick list, compared with 624 and 27 in 1907. The death rate, which in the previous five years ranged from 19'50 in 1903 to 17'61 in 1904, rose to 24'17, or 6'45 per thousand more than in 1907.

Every administration except Bombay and the North-West Frontier Province shared in the increased mortality, the most striking advances in the death rate compared with 1907 being from 16'94 to 31'61 per thousand in Bengal, 18'79 to 29'80 in Madras, and 15'03 to 24'09 in the United Provinces.

The average daily number of convicted prisoners in confinement was 94,262, and among them the death rate was 24'32 per thousand, ranging from 31'96 in Eastern Bengal and Assam to 13'09 in Burma, the rates being under 20 per thousand only in Burma, the North-West Frontier Province and Bombay.

53. Among the appendices (page XVI) will be found two statements F and G, central and District jails. in which the distribution and mortality of prisoners in central and district jails during the last five years are analysed. It will be observed that in India as a whole the number of prisoners in central and district jails are nearly equal, although in the separate provinces this is not generally the case. As usual the mortality in the central jails was lower than in the district jails, and, as was to be expected in a peculiarly unhealthy year, the death rate (33.61) among prisoners recently admitted into district jails was exceptionally high. The next highest rate, 31.31, occurred among prisoners in central jails who had been in confinement between 3 and 7 years; nearly one-third of the deaths among them was due to tubercle of the lungs.

- 54. The diseases which caused the highest rates of admission to hospital were malaria (1977 per 1,000), dysentery (76.9), abscesses, ulcers and boils (65.2) and diarrhœa (37.6); and those which caused the highest death rates were dysentery (4.67 per 1,000), tubercle of the lungs (3.76) and pneumonia (3.24).
- cause a great deal of suffering and loss of labour, are very seldom the direct cause of death in prison.

 In 1908 there were 20,039 cases of malarial fever admitted into the jail hospitals and only 105 terminated fatally. Assuming that all the recorded deaths were due to malaria and malaria only, which the records show was by no means the case, only one attack in 191 ended in death, which proves that even in a year when malaria is peculiarly severe, malarial diseases when efficiently treated—using the term in its fullest sense—are by no means fatal.

The mean admission rate in India and Burma was 197'7 per thousand, compared with 191'3 in 1907, and the death rate 1'04 compared with '94.

The numbers of cases of malaria occurring in the jails have been steadily falling in recent years. The fall is well shown by a comparison of a series of admission rates: in the five years ending with 1893, the mean admission rate on account of malaria was 393 per thousand, in the following five years it had fallen to 320, and in the next five years to 277; in the five years ending with 1908 the rate was 199 per thousand. This is, of course, highly satisfactory, and the questions arise, "To what is the reduction in the number of malarial infections due?", and " Is the decline likely to continue?" Before endeavouring to reply to these questions we must assure ourselves that the decline is a real one, for it is obvious that changes in nomenclature and greater precision in diagnosis might be responsible for an apparent improvement. The test is, of course, the general admission rates; if we find that they have declined along with and in proportion to the admission rates on account of malaria, we may safely conclude that the incidence of malaria has been reduced. The jail statistics stand the test; the general admission rates in the four quinquennial periods were, respectively, 1028'8, 981'1, 825'7 and 650'o. In the earlier years some reduction in the number of cases returned as malaria was, no doubt, due to more careful or more scientific diagnosis, but this cause has not been effective in recent years, and although the records of fatal cases show that more care in diagnosis, particularly in the smaller jails of some provinces, is required, they also point to the probability that there are quite as many cases of other diseases erroneously ascribed to malaria, as there are cases of malaria registered under other headings.

It is now a good many years since specific anti-malarial measures-the destruction of mosquitoes and the prophylactic use Prophylaxis. of quinine, have been in general use in the jails. Measures directed against mosquitoes, such as the removal of under-growth, drainage, the application of kerosine oil to bodies of water, the introduction of fish into tanks, etc., although certainly useful, can obviously be employed only within the area over which the superintendent has, or can obtain control, and their value is therefore at the best limited, while at the worst, when the country is flooded, when anopheles are breeding in every pool, and a large proportion of the people are infected with malaria, their value must be much reduced. Quinine prophylaxis is, however, always available, and its use is not affected by external circumstances, indeed, it is evidently just when these circumstances are most unfavourable that quinine becomes most useful. In the autumn of 1908, over a great part of Upper India the conditions in most places were such that limited measures against mosquitoes can have had but small effect, and such results as were obtained in the struggle with malaria were generally due to quinine prophylaxis. The history of the malarious autumn of 1908 in the United Provinces, the Punjab and the North-West Frontier Province is therefore of peculiar interest and importance.

In the United Provinces the epidemic of fever began towards the end of August and prevailed with extraordinary severity until the end of the year. "Quinine was given in most jails to all prisoners with spleen or who had suffered from fever on admission or in jail." The general admission rate among the prisoners rose from 201'0 to 281'3 per thousand, the smallness of the increase being, according to the Inspector-General, "probably owing to quinine being given more systematically." The statistics of the individual jails show that the admission rates for malaria varied enormously, from 1,2036 in the third class district jail at Muzaffarnagar to 8'3 in the central jail at Lucknow. In the central jail at Lucknow there were only 14 admissions on account of malaria and the general admission rate 140'0 was less than one-fifth of the provincial mean, while Lucknow district and Lucknow town suffered severely from malaria. The 14 cases admitted represent only the severer cases of malarial infection, slight cases were not admitted to hospital, but no special anti-malarial measures appear to have been in force in the jail and there was no prophylactic issue of quinine. The jail is well situated at a distance of about three miles from the city and the Superintendent attributes the exemption from malaria to the general excellence of hygienic conditions.

Two "usually very unhealthy jails," at Gorakhpur and Saharanpur were selected for a special experiment in quinine prophylaxis, the drug being given in weekly doses of 15 grains to males and 10 grains to females from the 30th August to the end of the year. The results were considered satisfactory—the cases of malaria were fewer and milder than in the previous year, dysentery was less prevalent, and the general health of the prisoners, judged by their appearance and by the reduction in the death rate, was improved.

In the Punjab an experiment on a great scale was undertaken under the personal direction of the Inspector-General, Lieutenant-Colonel Braide, who spared no trouble to ensure that it should be carried out thoroughly. During the four autumn months, August to November, each new prisoner was given ten grains of quinine at the time of his admission to jail, and every prisoner was given 15 grains once a week.

The effects were very remarkable. The autumn was the most malarious in the history of the Punjab, the general fever death rate rising from 20'16 per

thousand in the preceding year to 34.66; in jails the admission rate on account of malaria and "pyrexia of uncertain origin" fell from 234.5 per thousand in 1907 to 173.5—a rate far lower than any previously recorded in the history of the Punjab jails. That this result was not contrived by classifying doubtful cases under headings other than malaria becomes evident when the total admission rates are examined; these rates fell from 890.5 per thousand, the mean of the five years ending with 1906, and 706.8 in 1907, to 581.2 in 1908. There was, it is true, a serious increase in the death rate, which rose from 19.81 per thousand in 1907 to 23.49 in 1908, but this increase was due to dysentery and tubercle of the lungs.

In the North-West Frontier Province in 1908 the fever death rate among the general population was less than in the previous year, but the details of the statistics show that fever was exceedingly prevalent in the autumn, especially in the Peshawar district, and that the mortality from it in the towns was exceptionally high. In this province experiments in quinine prophylaxis were carried out in two jails at Peshawar and Dera Ismail Khan. The experiments in both jails were on the same principle, three similar gangs of men were selected, to one gang no quinine was given, to the second gang five grains of quinine were given daily, and to the third gang 15 grains of quinine were given every fifth and sixth day. Very curious results were obtained. We may consider the experiment at Peshawar first, because fever was certainly more severe there than at Dera Ismail Khan. The three gangs consisted of 53 men each. To the men of A gang no quinine was given, and there were 25 admissions on account of malaria. To the men of B gang 5 grains of quinine were given daily, and there were 49 admissions on account of malaria. To the men of C gang 15 grains of quinine were given on every 5th and 6th day, and there were 53 admissions on account of malaria. The account of the experiment is too imperfect to permit of criticism or of any attempt at an explanation of the surprising fact that in this jail the effect of giving quinine in ample doses was to produce attacks of malarial fever, but it is obvious that the value of the experiment depends upon there having been no change in the personnel of the gangs-a matter difficult to arrange in a district jail. It may be noted that among the police, whose lines adjoin the Peshawar jail, the percentage of admissions from fever was four times as great as it was among the prisoners. The Inspector-General is "not, however, inclined to attribute the comparative immunity of the prisoners in the Peshawar jail entirely to the prophylactic use of quinine". He points out that, while the prisoners sleep in airy barracks which afford no cover for mosquitoes, "the rooms occupied by the policemen are swarming with these insects ".

At Dera Ismail Khan a fourth gang averaging 147 men who had been admitted to prison after the 16th July, were given 15 grains of quinine every 5th and 6th day. The experiment may be most simply represented in a table.

or part of man and the bas	Gang A. (no quinine).	Gang B. (5 grains quinine daily)-	Gang C. (15 grains of quinine every 5th and 6th day).	Gang X. (15 grains of quinine every 5th and 6th day).
Daily average strength	56	56	56	147
Total admissions on account of malaria	22	4	6	29
Daily average sick from malaria	1'32	'43	.00	'77
Percentage sick on account of malaria	39'3	7'1	10.3	19'0

It appears from the evidence, whatever the value of measures taken against mosquitoes—whether to prevent their breeding or to prevent their biting—that in a very malarious year in prisons, the administration of quinine is for the present the remedy upon which reliance must be placed. Judging by the success attained in the Punjab, and generally elsewhere when special efforts were made to carry out the administration of quinine in a thorough manner, there is reason to hope that, as the prophylactic use of quinine becomes more widely adopted, the decline in the frequency of malarial infections will continue.

In discussing in 1906, preventive measures against malaria, it was suggested that the Inspector-General in each province "should lay down for each jail in his administration exactly what measures are to be carried out, the dates between which these measures are to remain in force and the precautions to be observed to guard against failure." In many quarters this seems to have been held to suggest that the Inspector-General should, without reference to the Superintendent, order indiscriminate dosing with quinine. This was not the intention, as indeed the context clearly shows. It was intended that the circumstances of each jail should be carefully considered and the means necessary and likely to be effective in preventing malaria adopted with reference to these circumstances. This can be done only by the Inspector-General who has better means of becoming acquainted with the past history and present needs of the jails under his administration than even the Superintendents. The Superintendents would of course be consulted, and it is not likely that the opinion of an experienced Superintendent would ever be disregarded.

- pysentery.

 year; in 1908 the cases were very numerous and exceedingly severe. The number of cases rose from 6,328 in 1907 to 7,796, and the number of deaths from 240 to 473. In the earlier months of the year dysentery was rather less prevalent than usual, and it was not until July that the numbers of admissions became very large. From August until the end of the year the numbers of cases were exceptionally large and this was especially noticeable in Bengal, the United Provinces and Punjab. The disease was much more fatal than usual—the case-mortality was twice as high as in 1907; and although the admission rate rose only from 670 per 1,000 in 1907 to 760 in 1908, the death rate rose from 2.57 to 4.67, the rates in the provinces ranging from 8.54 in Bengal to .88 in Bombay and .74 in the North-West Frontier Province. Of the 473 prisoners who died of dysentery during the year, no less than 253, or nearly fifty-three per cent, had been less than six months in prison.
- 57. The admission and death rates from diarrhoea also were higher than in the previous year, the former rising from 34'4 to 37'6 per thousand, and the latter from '80 to '94. It is noteworthy that in Madras, where the death rates from cholera (7'05) and dysentery (7'05) were exceptionally high, only 74 cases were recorded as due to diarrhoea and there was no death.
- 58. Until recently dysentery was invariably the most common cause of death in the jails, but in 1904 the death rate from dysentery was lower than the death rate from tubercle of the lungs. This change in the relative positions of the death rates was due to a decrease in the number of fatal cases of dysentery. In the following year the

death rate from dysentery was again lower than the death rate from tubercle, and this occurred again in 1907, but in 1906 and in 1908 the death rates from dysentery were the higher. In respect of prevalence among prisoners the two diseases are related to each other—that is to say, in any year in which dysentery is exceptionally prevalent in the prisons, tubercle of the lungs will be found to be exceptionally prevalent also, and in years when the numbers of cases of dysentery are comparatively small, tubercle of the lungs is also less common than usual. While, however, there has been a distinct diminution during the last decade in the prevalence and fatality of dysentery, preventive and curative measures have been less successful in the case of tubercle of the lungs.

The opinion is widely held and evidence has been brought forward to prove that tubercular disease, particularly tubercle of the lungs, is increasing in India, especially in the towns. The jail population is mainly composed of persons who have led an outdoor life before their incarceration, but it might be expected that any rapid increase in the prevalence of the disease in the country generally would be reflected in the jail statistics. In the review of these statistics in 1904, it was shown that, whatever might be the case in particular jails, there was no reason to think that tubercle was on the increase among the whole body of prisoners. If we examine the statistics for the ten years 1898-1907 we find that the general admission rate on account of tubercle of the lungs has fluctuated within very narrow limits. In 1898 the admission rate was 7'9 per 1,000, the rates then rose steadily to a maximum of 9'1 in 1901 (when the prison population was affected by the effects of the famine of the previous year), after which the admission rates fell steadily to the minimum of the ten years' period, 7'5 in 1907. The death rates followed a similar course, but the maximum occurred in 1900. In 1898 the death rate was 2'99 per 1,000, in 1000 it was 3'76, after which the rates fell irregularly, the minimum, 2'74, occurring in 1907. In comparing the admission with the death rates it appears that the case-mortality was considerably higher in the earlier part of the decennium than in the later. The lowest case-mortality occurred in 1902, and since then it has been very slightly higher and remarkably constant. It appears then that tubercle of the lungs is not increasing among the prisoners as a body, and either that cases are diagnosed at an earlier stage than formerly, or that treatment is rather more successful.

An examination of the statistics of the provinces separately yields somewhat different results; but it must be remembered that in the smaller numbers in the several administrations considerable fluctuations are to be expected. In Bengal and the Punjab admission rates and, in a less degree, death rates tend to rise; in the United Provinces death rates tend to fall, and in Madras both admission and death rates tend to fall. The figures relating to single jails, of course, fluctuate from year to year more than those relating to administrations, but in a few jails the admission and death rates have risen in recent years. This is especially noticeable in the case of the Alipore Central Jail where, particularly since 1904, the admission rates have been very high.

In those jails in which tubercle of the lungs is on the increase, special measures to prevent the spread of infection are obviously required, not only in the interests of the inmates of those jails, but in the interests of the prisoners in other jails in the administration and of the general public among

whom infected prisoners may carry the contagion of their disease when they are transferred or released.

In 1908 the admission rate on account of tubercle of the lungs was very high, 9'4 per 1,000, and the death rate, 3'76, was the highest since 1900. In that year the high death rate was largely due to the admission of many prisoners in an advanced stage of the disease; in 1908 of the 381 fatal cases no less than 122, or upwards of 32 per cent, were sent to hospital on account of tubercle of the lungs within three months of their admission to jail, 49 of them within a week. Most of those who died had been only a short time in prison, only 91, or 24 per cent of the deaths occurring among prisoners who had been in confinement for more than three years.

the admission rate, which had always been over 13 per 1,000, fell to 10.7, and the death rate, which had always been over 3 and frequently over 4 per 1,000, fell to 2.79. In the following two years the improvement was more than maintained, but in 1907 the admission rate rose to 11.5 and the death rate to 2.90. In 1908 the admission rate rose to 12.4 and the death rate to 3.24 per 1,000. The seasonal distribution of the disease was abnormal, the numbers of cases occurring in January, March and October being much greater than usual, mainly owing to the extraordinary frequency of the disease in the United Provinces in those months. The death rates in the several administrations ranged from 4.91 per 1,000 in the United Provinces to 1.0 in the Central Provinces.

60. In 1908 there were 1,194 cases and 56 deaths ascribed to anæmia and debility compared with 1,048 cases and 42 deaths in the preceding year. The Nomenclature of Diseases no longer contains a heading "old age" and deaths considered by medical officers to be due to that condition are returned under anæmia and debility.

Cholera.

The administrations which suffered most were Madras and Bengal. In Madras the cases numbered 150 and the deaths 74, equal to a death rate of 7.05 per 1,000. All the deaths except three occurred in the four northern jails where the prevalence and severe mortality from the disease are attributed by the Inspector General to conditions of famine among the people. In Bengal there were 113 cases and 57 deaths, equal to a death rate of 3.98 per 1,000. In contrast to Madras the disease appeared in no less than 16 jails and in one subsidiary jail. The largest numbers of deaths in the several jails being nine each in Bankipore and Naya Dumka, eight in Angul and seven in Gaya.

62. There were 122 cases of small-pox and 15 deaths equal to a death rate

Small-pox, Plague and Enteric Fever.

of '15. The highest provincial death rate
was '50 in the Central Provinces where
there were three cases and two deaths. There were ten cases of plague and
five deaths compared with 50 and 30 in 1907. There were 113 cases ascribed
to enteric fever of which 36 terminated fatally. In 21 jails two or more cases
were recorded. In all but four of the fatal cases the post-mortem appearances
confirmed or supported the diagnosis.

63. Climatic conditions in Bengal during 1908 were abnormal chiefly in the early cessation of the monsoon rains and Bengal. the large defect in the rainfall from October to the end of the year. The dry autumn may have tended to diminish the prevalence of malarial fevers, but throughout the province cholera was rife and this together with conditions of scarcity in a number of districts made the year as a whole an unhealthy one. The effect of the unfavourable conditions upon the health of the jail population was enhanced by the serious overcrowding which resulted from a great increase in the number of prisoners, the admissions to jail having risen from 78,891 in 1907 to 101,000 in 1908 and the daily average strength from 14,408 to 15,565. As there is accommodation in the 37 central and district jails for only about 15,200 prisoners of both sexes and all classes it is not surprising to find that according to the reports of medical superintendents no fewer than 30 jails were more or less seriously overcrowded during a part or the whole of the year.

The striking feature of the vital statistics is a great increase of mortality in the absence of a corresponding increase in the amount of sickness. The rate of admission to hospital was only 930 per thousand as compared with 938 in 1907, and the incidence of such important causes of sickness as malaria, pneumonia, and respiratory diseases was considerably diminished, but the death rate rose from the comparatively low rate of 16'94, to 31'61 per thousand and there were no fewer than 492 deaths as compared with 244. The increased mortality was due almost entirely to the unusually large numbers of deaths from dysentery, tubercle of the lungs, cholera, and "anæmia and debility." Dysentery caused 133 deaths as against 41, tubercle of the lungs 78 as against 45, cholera 62 as against 5 and anæmia and debility 15 as against 6. Excepting cholera, of which there were 1-21 more cases in 1908 than in 1907, the admission rates from the above diseases were not very markedly higher in the year under review than in the previous year, the greater number of deaths being due chiefly to their much greater fatality. So far as can be judged from the reports of the Inspector-General and of medical superintendents it appears that the most important causes of the high casemortality were the serious degree of overcrowding which existed in almost all jails and the fact that as a result of conditions of scarcity or famine the prisoners admitted to a number of the jails were broken down in health and very feeble. The prevention of the diseases mentioned is rendered more difficult by the absence from all except 14 jails of separate hospital accommodation for cases of infectious disease.

Cholera which was exceedingly prevalent among the general population of the province was introduced into 16 jails, but it was prevented from attacking more than one or two prisoners in all except six. The largest number of admissions from it in any jail was thirty at Naya Dumka. From malarial fevers the admission rate declined from 347 to 248 per thousand and the death rate from 1.04 to .84, the admission rate being the lowest since 1896 and the death rate is the lowest on record. The prophylactic use of quinine is systematically carried out. The industry of making up pice-packets and tablets of quinine for use in the province generally has been transferred to the prison for juveniles recently opened at Alipore, and more than four million packets were made up and despatched to various post offices during the year.

64. The number of prisoners who passed through the jails of Eastern Bengal and Assam during 1908 was nearly the Eastern Bengal and Assam. same as during 1907, but the average daily strength fell from 7,310 to 7,118. There was overcrowding during part of the year in 21 of the 25 jails; in the Dacca central jail it was considerable throughout the year. The chief feature of the climatic conditions was a marked deficiency of rainfall, especially in Eastern Bengal, from June until the end of the year, the monsoon rainfall in that portion of the administration being 21 per cent in defect of the normal and the rainfall from October to December 53 per cent in defect. The rate of admission to hospital rose from 861 per thousand in 1907 to 917 and the death rate from 29.55 to 31.89, the mortality from all the principal diseases being increased. The admission rate from malaria was 283 per thousand as compared with 257 in 1907, but the increase was due to an unusual prevalence in a few jails, the admission rates in the majority being lower than in the previous year; and there were only nine deaths from the disease as compared with 19 in 1907. In the jails as a whole there was a slight decrease in the prevalence of dysentery, but 60 deaths occurred as compared with 53 in 1907, and in some jails such as Noakhali, Rangpur, Mymensingh, Rampur Boalia and Dacca the disease was severely prevalent.

Among the larger jails death rates over 40 per thousand were recorded at Rangpur (97.46 per thousand), Gauhati (51.95), Rampur Boalia (49.81) and Dinajpur (43.48).

65. Climatic and other conditions were very unfavourable to the health of the United Provinces in 1908, and the effect was evident in an increased amount of sickness and mortality among the jail population. Until the end of May the rainfall was not far removed from the normal and in June the rainfall was generally below the average. The monsoon rainfall was irregularly distributed, in the west of the province, the total amount was just over the average, but it all fell within two months, in the east of the province the amount was in considerable defect. Prices of food grains were exceedingly high throughout the year, wheat for the jail population being bought on an average at only 8 seers and 10 chitaks per rupee as compared with 12 seers and 4 chitaks in 1907, and gram at 9 seers and 2 chitaks as compared with 15 seers and 15 chitaks. The provinces were visited in the autumn by an epidemic of malaria of exceptional severity.

The daily average strength of the prisoners rose from 23,887 in 1907 to 28,308. According to the reports of medical superintendents there was overcrowding for periods varying from a few days to the whole year in 36 of the 56 jails in this administration. From the middle of August to the beginning of December the old reformatory at Bareilly was used, with the object of avoiding overcrowding in the jails, to accommodate about 200 short term prisoners.

The rate of admission to hospital rose from 603 per thousand in 1907 to 679, and the constantly sick rate from 29 to 31, but, as in several other administrations, the most striking feature of the statistics is a rise in the death rate out of proportion to the increase in the amount of sickness. The rate was 24'09 per

thousand as compared with 15.03 in 1907, the total number of deaths being 682 as compared with 359. There was an increase in the mortality from all the chief diseases but it was greatest as regards dysentery, pneumonia, and tubercle of the lungs. Until August dysentery was not much more prevalent than in 1907, but during the last five months of the year it caused 880 admissions to hospital and 84 deaths, as compared with 516 admissions and 27 deaths in the same period of 1907. The seasonal prevalence was very similar to that of malaria and in two jails, Gorakhpur and Saharanpur, which, on account of their unhealthiness in most years, had been selected for a rigid trial of quinine as a prophylactic of malaria, it appeared to the medical superintendents that the administration of the prophylactic doses had a marked effect in reducing the number of cases of dysentery as well as of malaria. In the Gorakhpur jail during the last four months of the year (the period during which quinine was administered) the statistics show only 14 admissions to hospital for dysentery as compared with 35 during the previous four months and 34 during the first four months. Perhaps the great deficiency of the rainfall in the Eastern portion of the provinces, where Gorakhpur is situated, may have tended to reduce the prevalence of dysentery in this jail, but against this view may be set the fact that in some other jails in the same area (such as Ghazipur) dysentery was exceedingly prevalent and fatal. In all the jails pneumonia caused 139 deaths as compared with 82 in 1907. There were 270 cases during the first half of the year and 246 during the second half. The admission rate from tubercle of the lungs was 8.2 per thousand and the death rate 2.79, as compared with rates of 5'4 and 1'67 in the previous year. The highest rates were recorded in the jails at Etah, Dehra Dun, and Bijnor. Malaria caused 41 per cent of the total admissions to hospital during the year as compared with 33 per cent in 1907. The admission rates varied enormously in different jails, but in 40 jails they were higher and in 16 jails lower than in 1907. The highest rates per thousand were 1481 in Mainpuri, 1203 in Muzaffarnagar, and 1100 in Bulandshahr, and the lowest 8 in the Lucknow central jail, 27 in Mirzapur, 46 in the Lucknow district jail, 60 in Rai Bareli, and 65 in the Allahabad central jail. The number of deaths increased from 21 to 44. The Inspector-General considered that in comparison with the free population the prisoners escaped the disease to a very considerable extent probably owing to the prophylactic use of quinine in most jails. The good results of this measure at Gorakhpur and Saharanpur, which are specially mentioned as the jails where it was carried out systematically under the supervision of the medical superintendents, have already been referred to. The death rate from all causes in the first of these two jails fell from 38.89 per thousand in 1907 to 20.87 and in the second from 53.10 to 34.21.

66. The unusual abundance of the monsoon rainfall in the Punjab from July to September was followed by a very unhealthy autumn, but as regards the prison population the success attained in counteracting the influences of adverse climatic conditions is a noteworthy feature of the year. The number of jails was the same as in 1907 and with an increase of about 2,000 in the number of persons imprisoned and a rise in the daily average population from 11,154 to 11,919 there was overcrowding in seven jails. In some districts the homes of many people were destroyed by floods and this as well as the high price of food may have helped to fill the prisons. A year characterised by adverse climatic and other conditions is one in which the efforts of medical superintendents to

counteract the influence of such conditions can be well tested, and as regards the prison population of the Punjab the success attained was great. The rate of admission to hospital was only 581 per thousand as compared with 707 in the previous year and the constantly sick rate only 26 as compared with 30. The deaths, however, numbered 280 as compared with 221 the rates per thousand being 23'49 and 19'81 respectively. This increase was due entirely to the greater prevalence of and mortality from tubercle of the lungs, dysentery, and pneumonia. On the other hand the statistics of malaria, another disease greatly influenced by climatic conditions, show in a remarkable manner the effect of the control exercised by medical superintendents upon the incidence of preventable disease. In many parts of the Punjab the autumn was the most malarious of which there is record, but, as a result of the thorough manner in which the prophylactic administration of quinine was carried out, the prisoners enjoyed a remarkable immunity, the admission rate being only 164 per thousand as compared with 232 in 1907 and 365 the mean rate for the years 1902-06. There were only five deaths ascribed to malaria during the year and in none of these was the fatal issue due to malaria alone. A special report on the protection from malaria afforded to the prisoners by the use of quinine has been written by the Inspector-General, Lieutenant-Colonel Braide, I.M.S., and widely circulated. Tubercle of the lungs caused 154 admissions to hospital and 70 deaths as compared with 118 admissions and 43 deaths in 1907. In the Montgomery central jail there were 62 admissions with 27 deaths and in the Lahore central jail 20 admissions with 13 deaths. The former jail was overcrowded throughout the year and is not yet provided with a special ward for the segregation and treatment of tuberculous patients. There is a special ward in the latter jail as well as in the jails at Rawalpindi and Multan (central and district). The Inspector-General advocates the provision of a special prison for tuberculous patients. Dysentery caused twice as many deaths as in 1907, September and October being the months of greatest prevalence. Four cases of plague occurred during the year and there were five cases of cholera with one death. and 16 of smallpox with two deaths. Thirteen prisoners were released on medical grounds as compared with eight in 1907.

67. The average strength of the population in the five prisons of the North-West Frontier Province during 1908 was North-West Frontier Province. 1,345 as compared with 1,183 in the previous year, the increase being attributed to the increase of crime which usually follows a rise in the price of food. All the jails were overcrowded during a portion of the year, the periods of overcrowding varying from 28 days at Dera Ismail Khan to 211 at Peshawar. The exceptionally heavy rainfall of the year was unfavourable to the health of the free population; among the prisoners, however, the rate of admission to hospital was only slightly higher than in 1907 and the death rate was only 15.61 per thousand, which is less by 2'14 than the rate of that year. Malaria was very prevalent in the Peshawar jail, the admission rate being 1247 per thousand as compared with 559 in 1907, but there was no death from the disease in this jail and only two from it in the other jails. From all causes there were 21 deaths in the five jails, the number being the same as in the previous year. Six of the deaths were due to pneumonia, three to respiratory diseases, one to tubercle of the lungs and one to dysentery. Although cholera was prevalent in the province, no case

occurred among the prisoners. In the Peshawar jail a small outbreak of typhus fever, causing six cases and one death, occurred in March. The hospital appeared to be the place where infection was contracted and there was reason to think that bed bugs, which were abundant in the corners and joints of the iron bed-steads, were carriers of the infection. In addition to adopting the usual measures of isolation and disinfection, all bed bugs were killed by placing the bed-steads in fires made by burning dried leaves. The outbreak ceased shortly afterwards.

68. With an increase in the average daily strength of the prisoners in the Central Provinces from 3,241 in 1907 to Central Provinces and Berar. 4,013 in 1908, there was occasional or continuous overcrowding in 13 of the 21 central and district jails. The monsoon broke about the middle of June and gave good rain in all districts. The rainfall was heavy and continuous in July and August and until near the end of September the amount being 6 per cent in excess in the west of the Central Provinces; 20 per cent in excess in the east and 24 per cent in excess in Berar. The admission, constantly sick and death rates were all considerably higher than in 1907. Malaria, abscesses, and dysentery were the principal causes of sickness, and dysentery, tubercle of the lungs, and respiratory diseases the principal causes of death. The admission rate of malaria rose from 160 per thousand in 1907 to 239, and that of dysentery from 34 to 45. In all except the central jails at Jubbulpore, Raipur, and Nagpur, the average annual strength is too small to permit of fair comparison between the rates in different jails, but it may be said that the highest admission rate from malaria was recorded in the Nagpur central jail which is in the area where the excess of the monsoon rainfall over the normal was least. In this jail the disease caused 461 admissions to hospital and one death. On the other hand in the Amraoti and Akola jails in Berar where the monsoon rainfall was 24 per cent in excess of the normal the admission rates from malaria were only 17.8 and 90.4 per thousand respectively. An attempt to carry out a systematic experiment to test the value of quinine as a prophylactic of malaria was without definite result. Tubercle of the lungs caused in all the jails 40 admissions to hospital and 16 deaths, of which seven occurred in the Nagpur central jail and three in the Raipur central jail. Three cases of small pox occurred during the year; there was no case of cholera or plague.

Madras.

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increased mortality. The different jails shared very unequally in the increase of sickness and mortality, and although in only two jails (Coimbatore and Tanjore) were both the admission and death rates lower than in 1907, there were out of the 16 jails five in which the admission rate was lower than in that year and seven in which the death rate was lower. Cholera appeared in six jails and accounted for 152 cases and 75 deaths, as compared with 106 and 39 in 1907. Sixty-eight of the cases occurred in July and 53 in August. In proportion to population Russellkonda, with a death rate from this disease of 200 per thousand, was the jail most severely affected, but most cases and deaths (64 and 24) occurred in the Rajahmundry central jail. Dysentery caused an admission rate of 64 per thousand and a death rate of 7'05, as compared with rates of 57 and 2.85, respectively, in 1907. No jail was entirely free from the disease, but the jails at Rajahmundry, Vizagapatam, Berhampur, and Russellkonda situated in the scarcity area (to which cholera was almost confined), were among those with the highest admission rates. August was the month in which most cases occurred, but in several jails the numbers of admissions in each month of the year were almost equal. The case-mortality rose from 4'7 per cent in 1907 to 10'6 per cent. The death rate from tubercle of the lungs rose from 2:46 to 3:20 per thousand, only five jails being without a death from this disease. There are specially constructed wards for the treatment of tuberculous patients on the open air system at Trichinopoly and Bellary, and in several other jails there are wards set apart entirely for such cases.

70. The daily average population of the 17 prisons in Bombay increased from

7,537 in 1907 to 7,930 in 1908, and seven of the prisons were overcrowded for a considerable part or the whole of the year. Four of the remaining prisons were overcrowded for short periods. The admission, constantly sick and death rates were 654, 33, and 18:16 per thousand, respectively, as compared with 693, 32, and 20'96 in 1907, the death rate being, with the exception of that in 1905, the lowest on record. Cholera was prevalent among the free population of the province during the year, and severe outbreaks of malarial fever followed disastrous floods in Hyderabad, but only one death from the former disease occurred among the prisoners, and the admission rate from the latter was only 126 per thousand as compared with 178 in the previous year. The decrease in the prevalence of malaria was most marked in the Yerrowda central prison where there were only 272 admissions as compared with 673 in 1907. Quinine prophylaxis was carefully carried out in this jail and in some others, the decrease being attributed generally to this measure. It was attributed to anti-mosquito measures in only one jail, Rajkot, in regard to which it was said: "a weekly mosquito inspection has been made and it appears reasonable to ascribe to this the almost complete absence of admissions to hospital for malaria." The average population of the jail was only 80. Pneumonia and tubercle of the lungs were, as usual, the principal causes of death among the prisoners in this administration, the former disease being most prevalent and fatal among convicts in the Sind gang. The prisoners in this gang are employed on railway work, and during the year under review were exposed to unusual hardship on account of the destruction of their temporary barracks by heavy rainfall in July. A new hospital for cases of pneumonia in this gang has been built. Tubercle of the lungs caused 52 admissions to hospital and

24 deaths, as compared with 44 admissions and 19 deaths in 1907. The largest

number of cases and deaths (21 and 9) occurred in the Yerrowda central prison. In 7 jails no case was recorded, and the Deccan and Sind gangs, both of which are engaged entirely in extra-mural labour, were also free from the disease. Two outbreaks of cerebro-spinal fever occurred in the Hyderabad central prison and caused in all 15 cases with 12 deaths.

71. In Burma the monsoon rainfall of 1908 was normal and favourably distributed, but the rainfall from October until Burma. the end of the year was greatly in excess. This was unfavourable to health, and the steady almost yearly decrease in the sickness and mortality which has become a striking characteristic of the vital statistics of prisoners in this administration was interrupted. The average daily strength of the jail population was 13,871, as compared with 13,721 in 1907, the rate of admission to hospital was 277 per thousand, as compared with 256, and the death rate was 13'27, as compared with 11'88. Abscesses, malaria, and dysentery were the principal causes of sickness, and tubercle of the lungs, dysentery, and pneumonia the principal causes of death. The admission rate from malaria fell from 36'4 per thousand in 1907 to 35'6, and only seven deaths from this disease were recorded, the admission rate being, as usual, much lower than in any other administration. In the jail at Sandoway no case of malaria occurred, and there was only one case in each of five other jails, among which is included Henzada where more than 1,800 prisoners were received during the year. In this jail prophylaxis by the administration of quinine was carefully carried out during the whole year. Dysentery caused 269 admissions to hospital, as compared with 275 in 1907, but there were 19 deaths as compared with only ten in that year. A case or cases occurred in 22 of the 30 jails, the largest number (96) being in the Myingyan central jail. In 17 jails there was no death from the disease. There were 106 cases of tubercle of the lungs with 47 deaths, as compared with 67 cases and 42 deaths in 1907. The difficulty of disinfecting clothing and blankets used by tuberculous patients has been overcome by the installation of a Thresh's disinfector in each central jail. Nine jails were entirely free from both tubercle of the lungs and pneumonia during the year. Cholera caused 17 admissions with eleven deaths, and plague three admissions with two deaths. Rat killing was carried on, and the store rooms for grain in all jails have now been made rat-proof.

The old jail at Moulmein was vacated and the new one occupied on the 14th of November 1908.

72. There was no overcrowding in the jail at Ajmer during 1908. The water-supply from the jail wells during the first nine months was deficient and had to be supplemented by purchase of Foy Sagar (municipal pipe) water. The average annual strength of the prisoners was 359 and 123 admissions into hospital and five deaths occurred during the year, giving ratios of 342.6 and 13.93 per thousand, respectively, compared with 431.5 and 15.50 in 1907. In the Mercara jail, where the average annual strength was 92, there were six deaths during the year, two of which were due to pneumonia. At Quetta, where the average strength was 51, there was no death, and at Secunderabad (average strength 85) there were two deaths during the year, one from pneumonia and one from dysentery.

73. The conditions in which convicts in the Andamans live render it impossible, under existing arrangements, for the supervision of all matters relating to

labour, dieting, and health to be so thorough as in Indian prisons, with the result that the statistics of sickness and mortality among these convicts contrast unfavourably with those of convicts in India. The reduction of the age limit for transportation to 40 years, the more stringent rules regarding the selection of convicts for transportation, and improvements in the sleeping accommodation have resulted in a great diminution in the deaths among new arrivals to the settlement, and this has made the death rate for convicts as a whole appear more favourable. but among men of more than one year's residence the statistics of health are still very unsatisfactory. The average strength of the convict population during 1908 was 14,067, or 404 less than in 1907, and there was no overcrowding, except in the hospitals, during the year. The monsoon rainfall was abnormally heavy, but it is not apparent that the excess was markedly unfavourable to health for the rate of admission to hospital from all causes was only 1,439 per thousand compared with 1,903 in the previous year, and malarial fevers, pneumonia, respiratory diseases and scurvy were all considerably less prevalent. The admission rate from dysentery was one per thousand higher than in 1907, and from tubercle of the lungs it was 2'3 per thousand higher. The latter disease caused 100 deaths as compared with 75 in 1907, and to the greater mortality from this disease was due almost entirely the rise in the general death rate from 23'59 per thousand in 1907 to 26'66 in 1908. Dysentery and pneumonia were the other most important causes of death in the settlement, the former causing 61 deaths and the latter 58, compared with 45 and 62, respectively, in 1907. A noteworthy feature brought out in the statistics of the settlement is the good health of the convicts in what is called the "Jail district" compared with that of convicts in the Eastern and Western districts. It suggests that if all the convicts could be subject to closer medical control the amount of sickness and mortality in the settlement would be much reduced.

SECTION V.

VITAL STATISTICS OF THE GENERAL POPULATION.

74. The populations among which births and deaths were registered in 1908 numbered 226,409,600, and the number Births in British India. of births recorded among them during the year was 8,554,427, compared with 8,505,563 in 1907. The birth rate was 37.78 per thousand, compared with 37.65 in 1907, and a quinquennial mean of 39.23. By far the highest birth rate was 52.84 per thousand, recorded in the Central Provinces. In only three other provinces were the rates over 40 per 1,000, namely, Ajmer-Merwara, 42'48, Eastern Bengal and Assam, 41'14, and the Punjab, 41.8. In only the small province of Coorg was the rate below 30; there the low rate, 24'17, is due to exceptional conditions, among them the small proportion of females in the population. In the other provinces the rates varied between 37'46 in the United Provinces and 32'4 in Madras. In all provinces, except Bengal and the United Provinces, the birth rates of 1908 were higher than those of 1907, and in all provinces, except Bengal, the United Provinces, the Punjab and Coorg, the births recorded were more numerous than the deaths, the excess being most noteworthy in the Central Provinces (14'72 per thousand), Eastern Bengal and Assam (10'40) and Bombay (8'57). The percentage of male to female births varied from 123'6 in the North-West Frontier Province to 104'03 in the Central Provinces and Berar and 101'43 in Coorg.

75. The total number of deaths registered was 8,653,007, compared with

8,399,623 in 1907 and a five years mean of
7,680,007. The death rate was 38:21, or 1:03 per
thousand higher than in 1907 and 4:25 higher than the mean death rate of the
previous five years. In the different provinces the rates ranged from 52:73 per
thousand in the United Provinces to 26:2 in Madras. In all provinces except
Bombay, the Punjab, the Central Provinces and Coorg the death rates were higher
than in 1907, and in all provinces except Eastern Bengal and Bombay they were
higher than the quinquennial means. In all provinces except Bengal, Eastern
Bengal and Assam, the United Provinces, the Central Provinces and the NorthWest Frontier Province the urban death rates were higher than the rural, and in
all provinces, save the United Provinces, the Punjab, the North-West Frontier
Province, Coorg and Ajmer-Merwara the death rates of males were higher than
the death rates of females.

In India as a whole the lowest death rate was registered in July, and this was the month in which the lowest rates were registered in the United Provinces, the Punjab, the North-West Frontier Province, Ajmer-Merwara, and the Central Provinces. The highest death rate was recorded in November, when the highest mortality occurred in the United Provinces and the North-West Frontier Province.

Cholera was present in every province except Ajmer-Merwara, and was severe in Bengal (death rate 5'32 per thousand) and Madras (3'9). Small-pox was more prevalent than in 1907, especially in Northern India, and rates of over '5 per

thousand were recorded in six provinces, including rates of 1.81 in Ajmer-Merwara, 1'42 in the Punjab and 1'26 in the United Provinces. Compared with 1907 there was an enormous reduction in the mortality from plague throughout the country, the most conspicuous falls in the death rates being in the Punjab from 30'27 per thousand to 1'53, in the United Provinces from 6'90 to '48 and in Bombay from 5'06 to 1'48. In Madras the plague death rate of 'I per thousand remained unchanged and there was a rise in the comparatively low rates recorded in Ajmer-Merwara and Coorg. Owing to the severe epidemic of malarial fever in the autumn the fever death rates in the United Provinces (41'31), the Punjab (34'66) and Ajmer-Merwara (30'79) were exceptionally high. A reference to statement No. VII of the appendices to this section will show that in a few provinces the death rates under "all other causes" vary inversely with those under fever. The death rates registered under dysentery and diarrhœa and under respiratory diseases, as usual, vary greatly in the different provinces, the variation being due in most cases rather to defect in registration than to the varying prevalence of the diseases.

76. A legacy of high prices from the preceding year, defective and irregularly distributed spring rains, and the premature cessation of the monsoon resulted in conditions which were very unfavourable to the public health. The birth rates were generally low, and the death rates from cholera and bowel complaints owing to scanty and polluted water-supplies and the use among the poorer classes of unsuitable food were higher than usual.

Among the 50,528,446 people who constitute the census population under registration in Bengal there were recorded in 1908 a total of 1,823,716 births, equal to a rate of 36'09 per mille, compared with 37'70 in 1907 and 38'90, the mean of the previous five years. The highest district birth rates were 44'68 per thousand in Muzaffarpur, 43'85 in Champaran and 42'44 in Sambalpur, while excluding the urban district of Calcutta, where the rate was only 20'10, the lowest rates were 30'30 in Hooghly, 28'76 in Birbhum and 26'31 in Burdwan.

In only two of the 128 towns, Jamalpur (58.02) and Sahibganj (55.43), were the birth rates over 50 per thousand, while in no less than 84 the rates were below 25, the lowest rate being 6.96 in Tittaghar.

The percentage of male to female births was 105, the district percentages ranging from 109 in the 24-Parganas and Purnea to 101 in Singhbhum.

The deaths registered numbered 1,948,513, and the death rate was 38.56 per thousand, compared with 37.72 in 1907 and a mean of 35.53 in the previous five years. The death rate was 2.47 per thousand higher than the birth rate in the province generally, and in 17 of the 38 districts the deaths outnumbered the births.

In all the districts of Chota Nagpur, and most of the districts of Orissa and Burdwan, the birth rates were exceptionally low and the death rates exceedingly high. The highest district death rates were 67:44 in Balasore, 59:45 in Palamau and 59:11 in Puri, in all of which cholera was terribly prevalent; the lowest death rates were 29:31 in Howrah, 28:63 in Darbhanga and 26:44 in the 24-Parganas. In rural areas the mean death rate was 39:06 per thousand

compared with 31'20 in the towns, in which it is said improved sanitation is now exercising an appreciable effect. Among the towns by far the highest death rate was 94'25 recorded in the small Sonthal town of Dumka, where cholera and small-pox were very severe. The next highest rate was 59'83 registered in Roserha in Darbhanga and 57'73 in Gaya, the high mortality being due to plague in the former and to cholera, small-pox and fevers in the latter. No town was entirely free from cholera at one time or another during the year. The highest monthly death rate in the province as a whole occurred in June, and the lowest in October. Hindus died at the rate of 39'53 per thousand, Muhammadans at the rate of 34'22, and "other classes" at the rate of 40'52; the death rates of Christians and Buddhists were 27'74 and 30'71 per thousand, respectively.

The death rates of male and female infants reckoned on the number born during the year, were 226'0 and 212'8 per thousand, respectively; and male children between one year and 5 years of age died at the rate of 59'97, while females died at the rate of 53'30. At all age periods the male death rates were the higher, the general death rate of males being 40'61 and of females 36'54 per thousand.

77. The experiment of testing the accuracy with which deaths are at Registration by a professional present registered in rural areas in Bengal was continued in the Galsi thana of the Burdwan district during the year ending the 31st July 1909. The population of the area, which was ascertained by a special census to be 53,277 at the beginning of the enquiry in August 1906, was found at a similar census taken on the 1st of August 1908 to have fallen to 50,973. The results obtained during the first and second years of the enquiry were given in Section V of these reports for 1906 and 1907, and those for the third year are set forth in the same form in the following statement.

in at the rates of again and agained five and property and against the consumer country	Cholera.	Small-pox.	Plague,	Fever.	Dysentery and diarrhosa	Respiratory diseases.	Injuries.	All other causes.	Total.
Number of deaths recorded in the thana register	138	8		995	59	27	10	264	1,501
Number of deaths according to the investigation	142	10	***	423	157	426	11	321	1,490
Ratio per thousand according to the results in the thana register.	2.71	-16		19.22	1.19	*53	*20	5.18	29'45
Ratio per thousand according to the results of the investigation.	278	120	"	8:30	3.08	8.31	*22	6.30	29.23

78. The cold weather rainfall was in defect in Assam and somewhat above the average in Eastern Bengal; the hot weather rainfall was in defect in both areas. The monsoon was weak and retreated early, and although the rainfall was approximately normal in Assam, it was seriously deficient in Eastern Bengal. Prices although lower than in 1907 were higher than normal; but it is stated that the high prices and scarcity produced no ill effect on the public health.

The population under registration, excluding certain hill tracts, numbered 29,812,735, and among them 1,226,602 births were registered. The birth rate was 41'14 per thousand, compared with 37'01 in the previous year and 38'56 the mean of the previous five years. No special explanation of the increase in the birth

rate is given in the provincial report, but details showing how defective is the registration of births, not only in rural areas but in areas where registration is intended to be compulsory, show that a possible explanation is improved registration. The birth rates in 1908 were higher than in 1907 in every district in the province, and in all except Bakarganj, Rajshahi, Pabna and Malda they were higher than the quinquennial mean. The highest district rates were 52'40 per thousand in Goalpara, 46'97 in Noakhali, and 45'77 in Bogra, and the lowest were 34'77, 33'94 and 31'29 in Lakhimpur, Pabna and Sibsagar, respectively. The mean rate in rural areas was 41'49 per thousand compared with 25'08 in the towns, the extreme rates in the latter being 51'40 in Barpeta and 2'29 in Jhalakati. The mean percentage of male to female births was 107; in the districts the percentages ranged from 109 in Bakarganj, Pabna and Lakhimpur to 104 in Rajshahi, Goalpara and Darrang.

The recorded deaths totalled 916,546, and the death rate was 30'74 per thousand, compared with 29'30 in 1907 and 31'60, the mean of the previous five years. The highest district death rates were recorded in Darrang, 51'40 per thousand, Sibsagar, 44'73 and Jalpaiguri 43'11; in these districts and in Lakhimpur (40'77) the numbers of deaths registered were larger than the numbers of births. Cholera was severe in Darrang, Sibsagar and Lakhimpur; in Jalpaiguri the high death rate was mainly due to fever, but cholera was unusually prevalent there also. The lowest district death rates were 24'10, 23'93 and 19'97 recorded, respectively, in Dacca, Tippara and Mymensingh. The rural death rate was 30'92 compared with 22'23 in the towns. In a few of the towns on or near the river the death rates were very high owing to the prevalence of cholera, notably in Tezpur (57'26), Golaghat (46'62), Sibsagar (43'06), and Dibrugarh (42'49).

Muhammadans and Hindus died at the rates of 30.53 and 29.85, respectively, and Christians and Buddhists at the rates of 26.21 and 24.26, while "other classes" died at the rate of 53.64. The rates among "other classes" were extraordinarily high in Cachar, Sylhet, Sibsagar and Lakhimpur.

Male and female infants died, respectively, at the rates of 1945 and 1752 per thousand born during the year; and boys and girls between one year and five years of age at the rates of 41.45 and 36.64 per thousand of the census population at these ages. In the age periods 15-20, 20-30 and 30-40 the death rates of females were higher than the death rates of males, but in all other age periods the rates of males were the higher, the general death rates being 31.75 among males and 29.69 among females.

79. The mean annual strength of the coolies employed on tea-gardens in Assam during the year ending the 30th June 1909, increased from 712,002 to 747,812. Of the total

labour force 36.76 per cent were employed in the Surma Valley and 63.24 per cent in the Assam Valley against 37.17 and 62.83 per cent in the previous year.

The birth rate for the year was 22'7 per thousand of the total population, and 75'1 per thousand of the adult female population compared with 27'6 and 90'0 per thousand respectively in 1907-08. The corresponding provincial ratios for the calendar year 1908 were 41'14 and 193'0 per thousand.

The registered death-rate increased from 29'2 to 34'3, the total number of deaths being 25,630. The provincial registered death rate for the year 1908 was 30'74 per mille.

The principal causes of deaths were dysentery (5,628), malarial fever (3,149), cholera (2,905), respiratory diseases (2,743), anchylostomiasis

(2,674), and diarrhœa (2,130). The death rate among coolies from all recruiting areas showed an increase.

Of a total of 733 gardens 63 were brought on the unhealthy list, (i.e., with a death-rate of over 70 per mille among the garden population as a whole, or among the act or non-act population taken separately, all number of deaths being not less than ten.) In the preceding year 28* of the 731* gardens were declared to be unhealthy.

There were 75 deaths, including 50 from cholera, among coolies journeying to the Assam Valley, against 713 in the previous year. No death was reported among coolies in transit to the Surma Valley.

80. In view of the extraordinary epidemic of malarial fever in these provinces in the autumn of 1908, details regarding the rainfall United Provinces. are of special interest, and it is unfortunate that a general sketch of the conditions must always fail to convey a correct idea of what took place in particular localities. In the second week of January there was favourable general rain throughout the province, and in the end of the month a good deal of rain fell in the districts in the north and west. Early in February there was again fairly general rain, but from then until the monsoon the rainfall was slight in amount and local in character, and the weather was hotter and drier than usual. The monsoon was not fully established until the 1st July in the west of the province and not until the middle of the month in the east. The rainfall in August was in defect in the east, and in excess in the west of the province. In the first week of September there was light or moderate rain in all districts, and this was the last rain that fell in the Agra and Meerut divisions. In the more easterly districts more rain was received in September, and there were a few falls in October. November and December were drier than usual.

The number of births registered during the year was 1,786,702, equal to a birth rate of 37'46 per thousand, which is 3'72 per thousand less than in 1907 and 5'63 per thousand less than the quinquennial mean. The cause of the decline, which, compared with the mean, was common to every district in the province, except Hamirpur, Banda, Jalaun and Jhansi in the south and Azamgarh in the east, is stated by the provincial Sanitary Commissioner to have been probably a result of scarcity and high prices. The highest district rates were 61'28, 59'99 and 48'78 per thousand, registered in Jhansi, Hamirpur and Jalaun, respectively, and the lowest were 27'36, 27'07 and 25'12 registered in Bara Banki, Bahraich and Dehra Dun. The recorded births were in excess of the deaths in only eight districts, Almora and Garhwal in the north, Hamirpur and Jhansi in the south, and Gorakhpur, Ghazipur, Ballia, and Benares in the east. In Dehra Dun the percentage of male to female births was 121'96, and in Garhwal it was 99'90; in the other districts the percentages ranged from 116'36 in Muzaffarnagar to 104'12 in Almora, the provincial mean being 109'11.

The number of deaths registered was 2,514,761 and the death rate reached the figure, unprecedented in these provinces, of 52'73, or 9'27 per thousand higher than in 1907, and 12'43 in excess of the quinquennial mean. Cholera and small-pox were unusually prevalent, but 78 per cent of the deaths were registered under the heading "fever," to which was due the death of one person in every 24 of the population. The death rates were over 70 per thousand in six of the districts, namely, Budaun 78'02 (fever death rate 68'63), Muttra 76'98 (70'31), Bareilly 76'85 (67'31), Hardoi 73'52 (59'31), Farrukhabad 71'45 (60'32), and Morada-

bad 70°01 (59°16). In only two districts, Dehra Dun 30°66, and Ballia 27°71, were the rates less than 31 per thousand. In rural areas the mean mortality was 53°0 per thousand against an urban mean of 49°20. In some of the towns extraordinarily high rates were recorded, e.g., Kairana 114°53 (cholera 7°35 and fever 104°69), Shikohabad 93°26 (fever 90°85), Atrauli 88°28 (fever 68°17), and Hathras 79°97 (plague 15°81 and fever 49°88). February and July were the healthiest months; in September the death rate was high and in October, November and December it was twice or more than twice as high as usual.

The Hindu death rate, 53'48, was considerably higher than the Muhammadan, 49'84; the death rates among the small populations of "other classes" and Christians were 11'32 and 10'46 per thousand, respectively.

Calculated upon the numbers born during the year, the death rates of male and female infants reached the high figure of 336 5 and 354.6. Boys and girls between the ages of one year and five years died at the very high rates of 115.96 and 117.78 per thousand of the census populations at those ages, respectively. Males and females over 60 years of age died at the rates of 130.22 and 117.13 per thousand. At all age periods, save 15.20 and 20.30, the death rates of males were the higher, but the general mean death rates of the sexes were 51.79 among males and 53.73 among females, an unusual relation due to the exceptional mortality among female infants and young girls.

Punjab.

Was unusually wet, but May was drier and June hotter than usual The monsoon was not established until the first week in July, but the rainfall in July and August was greater than the average. The first week of September was marked by unprecedentedly heavy rain in the west of the province, after which there was practically no rain during the rest of the year. In every district, except Simla and Ambala, the rainfall during the third quarter was in excess of the normal, and, owing to the extraordinary volume of the falls, floods were universal. Crops were destroyed, towns were inundated not only by the local heavy rain, but in many cases by torrents from the hills. Houses collapsed and many parts of the country were covered for weeks by sheets of water which maintained the atmospheric humidity above the average until December. These calamities aggravated the existing scarcity and caused almost the highest death rate the Punjab has ever known.

The number of births registered was 840,061; the birth rate was 41'8 per thousand which is 1 per thousand more than in 1907, but 0'8 per thousand less than the quinquennial mean. In the district of Lyallpur the recorded birth rate was 74'3 per thousand, but this rate is calculated from the census population which has been greatly augmented. The birth rate of Lyallpur, calculated on the estimated population, was, however, 59'3, which is considerably higher than any other district rate, the next highest being 50'5 in Shahpur and 48'2 in Multan. The lowest rates were 34'2 in Ambala, 32'2 in Kangra and 19'7 in Simla. The mean birth rate in the 43 large municipal towns was 40'7, which is 1'0 per thousand more than the five years' mean.

The deaths numbered 1,020,125, or 228,604 fever than in 1907, when there were 608,685 deaths from plague. The death rate of 1908 was 50'73 (including 1'53 from plague) per thousand compared with 62'1 in 1907, and 48'9, the mean of the previous five years. In all districts except seven, namely,

Gurdaspur, Attock and Mianwali, Lyallpur, Multan, Muzaffargarh and Dera-Ghazi Khan in the Multan Division, the numbers of deaths exceeded the numbers of births. Cholera was more prevalent than usual and so were small-pox and diseases of the bowels and respiratory organs, but the great cause of death was 'fever,' from which the recorded death rate was 34.66, compared with a mean of 20.60 in the previous five years.

The highest district death rates were 84'1 recorded in Gurgaon (where the fever death rate was 50'7 per thousand), 72'5 in Delhi and 63'8 in Amritsar; the lowest rates were 37'0 in Muzaffargarh, 31'8 in Dera Ghazi Khan and 25'1 in Simla.

In rural areas the mean rate was 50°19 compared with 55°58 in the towns, in four of which death rates in excess of 100 per thousand were recorded, namely, Palwal, 121°43, and Hodal, 107°10, in Gurgaon; Fazilka, 107°23, in Ferozepore, and Bhera, 102°09, in Shahpur, all comparatively small towns in which the inhabitants were exposed to great hardships on account of floods.

Hindus and Muhammadans died at the rates of 50'44 and 50'91, respectively, and Christians at the rate of 58'07. Death rates were fairly normal until August, and, owing to the decline in plague mortality, lower in the first part of the year than has recently been the case; but they began to rise in September and remained high until the end of the year, the October death rate being much the highest.

When all were attacked by fever, children and the aged, as was to be expected, suffered a heavy mortality. Calculated on the numbers born, infants died at the rate of 305 per thousand among males and 322 among females, and boys and girls between one year and five years of age died at the rates of 111.33 and 121.99 per thousand of the census population at those ages. Males over 60 died at the rate of 110.94 and females at the rate of 118.67 per thousand of the census populations. As usual in the Punjab, females died at a higher rate than males at all age periods, the general rate being 47.9 among males and 54.0 among females.

82. The number of births recorded in 1908 was 71,181, equal to a birth rate of 373, which is 48 and 15 per thousand higher than the rate recorded in 1907 and the five years' mean, respectively. In the districts the rates varied between 408 in Bannu and 351 in Peshawar. The registered percentage of male to female births ranged from 1366 in Peshawar to 1116 in Bannu, the provincial mean being 1236.

The autumn rainfall was excessive in Peshawar and Kohat, and there was a severe epidemic of malaria in the autumn, but it began later and ended earlier than the epidemic in the Punjab, and its effects were much less deadly.

The number of deaths from all causes registered was 68,361, and the death rate was 35'8 per thousand, compared with 35'1 in 1907 and 31'5, the quinquennial mean, the district rates varying between 37'7 in Hazara and 31'6 in Dera Ismail Khan. In rural areas the mean death rate was 35'85, compared with 35'59 in the towns, among which the highest death rates were 65'39 in

Nowashahr, where some form of fever was particularly fatal, 46.52 in Buffa, where there was an outbreak of cholera, and 40.88 in Peshawar.

Mortality in the province was comparatively low in the spring and summer months of the year except May, when there were 775 deaths from cholera, which continued to affect the rates until November. In October and November the fever mortality was high, particularly in Peshawar. Muhammadans died at the rate of 36'9 and Hindus at the rate of 24'7 per thousand.

Calculated on the recorded births the infantile death rates were 220°0 and 218°3 per thousand among males and females, respectively. Boys and girls between one year and five years of age died at the rates of 55°6 and 54°2 per thousand of the census populations at these ages. At all other age periods the death rates of females were higher than the death rates of males, the mean death rates being 35°2 among males and 36°5 among females.

83. The winter rains were in defect, but the monsoon broke about the middle

Central Provinces.

of June and gave good rain to every district. In

July and August the rainfall was heavy and continuous and the rains did not cease until near the end of September. There
was no rain in the last quarter. The price of food grains was high, but the year
generally was a healthy one.

The births numbered 633,575 and the birth rate was 52.84 per thousand, compared with 52.46 in 1907, and 51.26 the quinquennial mean. The birth rate was above the provincial average in ten districts, and in every district the births were more numerous than the deaths. The highest district birth rates were 65.41 per thousand in Damoh, 62.69 in Saugor, and 59.89 in Yeotmal, and the lowest was 46.08 in Balaghat.

In rural areas the mean birth rate was 54'21 compared with 40'93 in the towns. The mean percentage of male to female births was 104'03, the only wide departure from the mean being 112'92 in Burhanpur.

The deaths recorded numbered 457,081 and the death rate was 38.12 per thousand, compared with 41.70 in 1907, and 37.91, the mean of the previous five years. In the districts the rates ranged from 42.40 per thousand in Bilaspur to 22.42 in Bhandara. The rural death rate was 38.16 compared with 37.74 in the towns. Muhammadans died at the rate of 36.84 and Hindus at the rate of 32.67 per thousand, while "other classes," of which the population numbers nearly a million and a half, died at the rate of 76.0. It is probable that the death rate of Hindus is reduced and that of "other classes" increased by the deaths of members of castes included in the census population as Hindus being registered among "other classes."

The death rate among male infants was 279.88 and among female infants 252.11 per thousand born during the year.

84. The number of births registered during 1908 was 1,192,136, and the birth rate was 32'4 per thousand, which is the highest yet recorded, and is 1'6 and 1'3 higher than the rate registered in 1907 and the five years' mean, respectively. In 18 districts the rates were higher than in 1907, and they were lower in five including Guntur,

where, for some reason which the provincial Sanitary Commissioner failed to discover, the birth rate fell from 37'3 in 1907 to 21'6 in 1908. He attributes this and other variations in the birth rate to variations in the quality of registration. In the districts the birth rates ranged from 39'3 per thousand in the urban district of Madras, and 37'4 in Chingleput to 21'6 in Guntur. In urban areas the mean birth rate was 33'6, or 1'3 per thousand higher than the mean in rural areas. The mean percentage of male to female births was 104'9. In the towns the mean percentage was 106'8, or 2'2 per thousand higher than in rural areas.

The deaths registered in 1908, owing to the unusual prevalence of cholera, outnumbered the total of 1907 by 77,903, and the death rate was 26'2 per thousand, compared with 24'3 in 1907 and 23'6 the quinquennial mean.

The highest district rate was 44'1 per thousand in Madras town, and the lowest 15'6 (compared with 20'4 in 1907) in Guntur. In the other districts the rates ranged from 39'0 in Malabar to 19'3 in Madura. In rural areas the mean death rate was 25'3, compared with a mean of 32'3 in the towns, among which exceptionally high rates were registered in Calicut (70'8), where the death rate from cholera was 29'7 per thousand; in Badagara (66'3), another Malabar town, in which the cholera death rate reached the enormous figure of 49'5 per thousand; and in Razam (63'0), a small town in Vizagapatam, in which cholera caused 153 deaths, equal to a death rate of 30'0 per thousand.

Muhammadans died at the rate of 31.7 per thousand and Hindus at the rate of 25.9, while Native Christians and "other classes" died at the rates of 22.1 and 17.5, respectively.

The death rate of male infants was 193'8, and of female infants 173'1 per thousand born during the year, respectively. Boys and girls between one year and five years of age died at the rates of 34'0 and 32'3 per thousand of the census populations at these ages. At all age periods, save 15-20 and 20-30, the death rates of the males were the higher, the means for the sexes being 27'1 per thousand among males and 25'2 among females.

85. In the small province of Coorg the births numbered 4,365, and the birth rate was 24.17 compared with a five years' mean of 24.75 per thousand. In the districts the rates ranged from 37.04 in Padinalknad to 17.44 in Mercara, the mean percentage of male to female births being 101.43.

The recorded deaths totalled 6,311, equal to a death rate of 34'94, compared with a quinquennial mean of 29'74. Among the districts the highest death rate was registered in Padinalknad, 38'85, and the lowest in Mercara, 32'25.

Male and female infants died at the rates of 279'34 and 249'65 per thousand born during the year. Save in the age periods 10-15 and 20-30 the death rates of males were higher than those of females, the means for the sexes being 34'86 and 35'05 per thousand among males and females, respectively.

86. The number of births registered in the Bombay Presidency in 1908 was
660,201, or 49,668 more than in the preceding
year; and the birth rate was 35.72 per thousand,
the highest since 1899. The highest district birth rates were recorded in West

Khandesh (56.53), East Khandesh (51.12) and Ahmednagar (48.28), and the lowest in the Sind districts of Thar and Parkar (21.29), Upper Sind Frontier (17.70) and Hyderabad (16.72). The mean rural birth rate was 36.92 per thousand, compared with a mean of 26.32 in the towns.

During the year 1.56 per cent of the births were registered as still-born, a figure which the provincial Sanitary Commissioner thinks much understated, instancing in support of this view the great variation in the percentage in different places—9.04 in Bombay, 5.25 in Kanara, less than 1 per cent in half the districts, including .09 in Ahmednagar.

The mean percentage of male to female births was 107'92, ranging from 139'28 in Upper Sind Frontier to 101'92 in West Khandesh.

The number of deaths registered was 501,838, the lowest number since the appearance of plague, and the death rate was 27'15 per thousand, compared with 32'82 in 1907, and 37'0 the mean of the previous five years. Excluding the urban district of Bombay, where the death rate was 39'47 per thousand, the highest death rates were recorded in Ahmedabad (38'44), Broach (36'85), and Kanara (33'95); the lowest death rates were recorded in Thar and Parkar (18'40), Hyderabad (17'49) and Upper Sind Frontier (16'39). In rural circles the mean death rate was 25'10 compared with 37'50 in the towns, among which exceptionally high rates were registered in Dharwar, 59'29 (plague 30'10), Ahmedabad 56'54 (plague 2'80, fevers 24'26, respiratory diseases 11'52) and Karachi, 56'11 (plague 24'59).

Of the different sects by far the highest death rate was registered among "other classes," 58.50 per thousand, but the details of the figures show that in some districts these deaths were erroneously classified. Hindus died at the rate of 28.67 per thousand, Muhammadans at the rate of 21.32, and Christians, Parsees and Jains at the rates of 23.39, 23.94 and 20.42, respectively.

Calculated upon the numbers born during the year, the death rate of male infants was 191'85 per thousand and of female infants 178'70. Special enquiries into the mortality among infants were made in Bombay City, where 12,797 births out of 20,166 registered were verified by nurses. It was found that 53'5 per cent of the children were born in a healthy condition; 10'9 per cent were still-born; 15'2 per cent died within thirty days of birth, mostly of "debility." The chief causes of death of infants who survived 30 days were respiratory affections, diseases of the nervous system, bowel complaints, measles and small-pox. The remedies suggested by the Health Officer to the Municipality are the provision of lying-in-hospitals, the education and licensing of midwives, and the establishment of municipal milk depots where pure milk would be sold at a low price.

Boys and girls between the ages of one year and five years died at the rates of 49'01 and 46'53 per thousand of the census populations at these ages, respectively. In the age periods 5-10, 10-15, 15-20, and 20-30 the death rates of females were higher than those of males, but at the more advanced age periods males died at higher rates than females. The general death rate of males was 2756 and of females 26'83 per thousand.

87. The number of births registered in 1908 was 189,667, and the birth rate was 34'06 per thousand compared with Lower Burma. 32.65 in the previous year and 33.12 the quinquennial mean. In the districts the rates ranged from 42'63 in Thayetmyo to 27'17 in Bassein. The mean rural birth rate was 35'20 compared with 26'28 in the towns. The percentages of male to female births varied between 115 in Akyab and 101 in Kyaukpyu, Tharrawaddy and Tavoy, the provincial mean being 107.

The recorded deaths numbered 156,259, and the death rate was 28'06 per thousand, 1'22 per thousand higher than that of the previous year and 3 per thousand higher than the quinquennial mean, the excess being due to cholera, bowel complaints and plague. Among the districts the highest rates were registered in Rangoon, an urban district, (41.59), Prome (34.29) and Tharrawaddy (33.45), and the lowest in Maubin (20.71) and Akyab (20.69). In rural circles the mean death rate was 25'94, compared with 42'56 in the towns, among which death rates over 70 per thousand were registered in Zigon (75'90), Prome (72'77) and Toungoo (71'23), a large proportion in each case being due to plague.

The highest death rate occurred among "other classes", but there were evidently errors in classification. Hindus died at the rate of 30'99 per thousand, Buddhists at the rate of 27'95, Muhammadans at the rate of 23'13, and Christians at the rate of 21.85.

Male infants died at the rate of 222'8 and female infants at the rate of 178'o per thousand born during the year. Boys and girls between the ages of one year and five years died at the rates of 32.84 and 29.23 per thousand of the census populations at those ages, respectively. At all age periods the male death rates were the higher, the mean death rates of the sexes being 29:54 among males and 26'39 among females.

88. In Upper Burma the number of births recorded rose from 96,699 in 1907 to 105,960 in 1908, and the birth rate from Upper Berma. 33'14 per thousand to 36'32. In the districts the rates ranged from 45.72 in Shwebo to 28.21 in Sagaing. In rural circles the mean birth rate was 36 75 compared with 32 91 in the towns, among which the highest rate, 61'31, was registered in the little town of Yenangyaung in the neighbourhood of the oil fields, and the lowest rate, 13.88, at Maymyo, the hill station, in which the proportion of females is small. The percentage of male to female births was 1c6.

The number of deaths recorded was 83,200, and the death rate was 28'52 per thousand compared with 26.13 in 1907 and 23.09 the mean of the previous five years. The district death rates ranged from 43'26 per thousand in Kyaukse to 18.76 in Sagaing. In rural circles the mean death rate was 27.21, and in the towns, in some of which cholera or plague was severe, the mean was 38.80. Muhammadans, Hindus and Buddhists died at the rates of 32'05, 31'02 and 28'44 per thousand, respectively, "other classes" and Christians at the rates of 43.81 and 19'40.

Male infants died at the rate of 237.83 and females at the rate of 205.53 per thousand born during the year; and boys and girls between the ages of one year and five years at the rates of 35°30 and 33°70 per thousand of the census populations at these ages.

At all age periods, except 20-30 and 30-40, the death rates of males were the higher, the general death rate of males being 30'26 per thousand and of females 26'95.

89. In Ajmer-Merwara the number of births registered was 20,261, and the
birth rate was 42'48 per thousand compared with
31'20 in 1907 and a quinquennial mean of 32'09.

In Merwara the birth rate was 54'13 and in Ajmer 39'02, the percentages of male and female births being 113'05 and 115'35, respectively.

The deaths recorded totalled 19,093, and the death rate was 40.03 per thousand, compared with 29.63 in the previous year and a mean of 30.49 in the previous five years, the increase in the death rate being mainly due to the great prevalence of fever. In Ajmer the death rate was 41.15 and in Merwara 36.26, the rural death rate being 35.34 compared with a mean of 52.60 in the towns, among which by far the highest death rate was registered in Ajmer suburb, where small-pox was epidemic, fever was exceedingly prevalent and dysentery and diarrhœa caused an exceptionally high death rate (12.96).

Male infants died at the rate of 260'28 and 'female infants at the rate of 267'22 per thousand born during the year; and boys and girls between the ages of one year and five years at the exceptional rates of 166'53 and 169'80 per thousand of the census populations at those ages, respectively. In the age period 5-10 and from the age of 40 onwards the male death rates were the higher, but owing to the great excess of female mortality at the earlier ages the general death rate of females (41'50) was considerably higher than that of males (38'72).

SECTION VI.

GENERAL POPULATION.

HISTORY OF THE CHIEF DISEASES.

90. The accompanying table shows at a glance the number of deaths, and

	Years.	Cholera.	Small-pex.	Fevers.	Dysentery and Diarrhoea.	Plague.	All causes.
1904	{	192,835	55,232	4,093,981	240,655	940,609	7,436,472 32'86
1905	-{	441,786 1°96	70,952	4417,655	264,124	940,821	8,117,771 35'96
1906	{	690,519 3'05	109,583	4,452,842	298,117	300,355	7,852,330 34'73
1907	{	408,102	103,988	4,464,881	282,191	1,166,223 5'16	8,399,623
1908	{	591,725	170,694	5,424,372 23'96	285,921	113,888	8,653,007 38*22

the death rates per thousand of population, recorded in British territory in India during each of the five years from 1904 to 1908. On comparing the figures for the year under review with those for the previous year it will be seen that in 1908 there was a considerable increase in the number of deaths

attributed to cholera and small-pox, a small increase in the number under dysentery and diarrhœa, and an increase of nearly one million in the number attributed to fevers. Fortunately the number of deaths from plague decreased very greatly, but from all causes taken together there were recorded in British territory 253,384 more deaths than in 1907. As a result of the great decline in plague the deaths until the end of May were less by more than half a million than during the corresponding period of the previous year, but in June the increase of cholera and small-pox more than counterbalanced this advantage and after a temporary decline of mortality during August the terrible epidemic of malaria in the United Provinces and the Punjab caused the mortality for the last quarter of the year to exceed that for the last quarter of 1907 by néarly 700,000.

Cholera in India in 1908.
Appendix A to Section VI.

The rate has been exceeded only five times during the last 32 years. If the deaths recorded in the native states from which returns were received are added (Statement I), the total amounts to 600,578. In the previous year 408,102 deaths from cholera were recorded in British territory, giving a ratio of 1'81 per thousand of population. The widespread nature of the epidemic is indicated by the fact that the Bombay Presidency, Eastern Bengal and Assam and Coorg were the only provinces in which there was a decrease in cholera mortality during 1908. The greatest numbers of deaths and the highest death rates from the disease were recorded in Bengal, the Madras Presidency, the United Provinces of Agra and Oudh and Eastern Bengal and Assam.

As in 1907 cholera was prevalent throughout the year in all provinces except the Punjab, the North-West Frontier Province, Ajmer-Merwara and Coorg, but

as usual, the seasonal prevalence of the disease did not correspond in the different provinces: in Lower Burma and Eastern Bengal and Assam the greatest number of deaths occurred in April, in Upper Burma in October, in Bengal in June, in the United Provinces in September, in the Punjab, the Central Provinces and Madras in August, in the North-West Frontier Province in May, and in Bombay in July; and fewest deaths occurred in December in Lower Burma, Bengal and the North-West Province, in January in Upper Burma and the Central Provinces and Berar, in October in Eastern Bengal and Assam and Bombay, in March in the Punjab, in February in Coorg, and in November in Madras.

Some remarks upon recent investigations in connection with cholera will be found in section IX.

92. In Bengal in 1908 the total number of deaths recorded as due to cholera was 268,908—which with the exception of the number in 1900 was the highest ever recorded—or 5'32 per thousand of population, as compared with 205,702 or 4'07 per thousand in 1907, and 157, 413 or 3'11 per thousand, the average for the five years 1903—1907. Every district in the province was affected, and 523 out of 529 registering circles against 500 in the preceding year. The highest mortality was recorded in the Balasore district of the Orissa division where 28,070 persons, or 26'20 per thousand of the population, died from this cause; next in order came Puri with 14.656 (14'41), Palamau with 7,228 (11'66), Gaya with 22,216 (10'78) and Birbhum with 9,183 (10'17). Ranchi which was the least affected of all the districts last year now occupies the ninth place. In only one district, Darjeeling, was the rate ('38) below 1 per thousand. The disinfection of wells with permanganate of potash was carried on in about 19 districts where cholera prevailed.

The months of greatest prevalence were June, May and April and the months of least prevalence December and November.

The towns in which the highest death rates from cholera were recorded were Dumka in the Sonthal Parganas district (36'42), Asansol in Burdwan (23'88), Tikari in Gaya (16'46), Samastipur in Darbhanga (15'05), Dainhat in Burdwan (12'99), Suri in Birbhum (12'77), Garulia in 24-Parganas (12'16), and Nadia (11'21). In rural areas the highest death rate (52'35 per thousand) was recorded in Soro (Balasore).

Among the European seamen of the port of Calcutta there were four deaths from cholera, and there were 131 among the native floating population.

93. The number of deaths attributed to cholera in Eastern Bengal and Assam

Cholera in Eastern Bengal and during 1908 was 59,329, equal to a ratio of 1'99

per thousand of the census population, as compared with 77,181 deaths or a ratio of 2'58 in 1907. April and May were the months of greatest prevalence and the fewest number of deaths occurred in October. The highest death rates were recorded in the districts of Darrang (9'05), Sibsagar (8'85), Nowgong (6'52), and Cachar in the Surma Valley (5'23); and among the Eastern Bengal districts Bakarganj recorded the highest ratio (3'58). The provincial Sanitary Commissioner reports that the outbreak in the two first named districts was due to the repeated importation of new sources of infection

both by steamer and railway between the months of January and June. The District Board of Rungpur have introduced the practice of keeping phials of permanganate of potash at every thana, for free distribution, to disinfect the water in case of an outbreak of cholera, and the salt is reported to be in great demand.

In towns the highest death rates were recorded in Tezpur (23:18) and Golaghat (13'14), and in rural areas in the Gohpur Circle of Darrang (31'98) and in the Sonari circle of Sibsagar (22'19).

The death rate from cholera among the tea garden population in Assam was 5'34 per thousand. It is said that during the first half of the year an unusually large number of labourers were imported into the tea districts from areas where scarcity prevailed and that since many of these labourers suffered from cholera the infection was spread broadcast.

94. The total number of deaths from cholera recorded in the United Provinces was 83,544, equal to a ratio of 1.75 per thousand Cholera in the United Provinces. of population, as compared with 22,438 and a ratio of '47 in 1907. The average death rate of the preceding quinquennium was 1'46. The greatest number of deaths occurred in September and the smallest number in February. All districts were affected, but in Ihansi, Dehra Dun, and Etawah the numbers of deaths returned were only 7, 21 and 37, respectively. The districts with the highest death rates were Kheri (7:54), Garhwal (6:80), Pilibhit (5'96), Mirzapur (5'30), Shahjahanpur (4'66), Bahraich (4'62) and Bareilly (4'16). The highest death rates from this disease recorded in towns were 12'45 in Nanpara (Bahraich), 11'24 in Basti, 8'60 in Ghaziabad, 8'02 in Bahraich and 7:35 in Kairana. Of the 105 towns with a population of 10,000 or more, no death from cholera was reported in 21, while in 32 of the remainder the number did not exceed ten. Both the urban and rural mortality were considerably higher than in the previous year, the rates being 1'27 and 1'79 against '41 and '47, respectively.

95. In the Punjab the total number of deaths recorded as due to cholera was 12,207 (0.61 per thousand of the population) Cholera in the Punjab. against 437 ('02) in the previous year and 0'22 the mean of the quinquennial period ending with 1907. With the exception of the district of Simla, where only one imported fatal case occurred, every district in the province was affected, and deaths were recorded in 76 towns and 1,085 villages. No deaths were reported to have occurred during January, February and December, and only one was reported in March. August was the month of maximum prevalence when 2,520 deaths were registered. The largest number of deaths occurred in the Lahore district (1,556), Gurgaon coming next (1,251), and the lowest in Simla (one death only), and Montgomery (32 deaths). The highest death rates were registered in Jhelum (2'21 per thousand of the population), Rawalpindi (1'94), Mianwali (1 78), and Gurgaon (1'68) and the lowest '03 in Simla, 0'07 in Montgomery and 0'14 in Muzaffargarh. Of the 143 municipal towns in the province, those in which the highest death rates were recorded were Lieah (19'48 per thousand of population), Kasur (12'03), Fazilka (8'70), Narowal (8.59), Rewari (8.46) and Rupar (8.33).

96. In 1907 there were 266 deaths from cholera recorded in the North-West Cholera in the North-West Frontier Frontier Province, but in 1908 the number rose to 2,845, the highest since 1901. The first case Province.

was reported in April in Peshawar city, the patient being a man from Hurdwar, who had been attending on a friend suffering from the disease; shortly afterwards several more cases occurred and the whole district was soon affected. Bannu was the next district attacked and in this district, except in one or two villages where waterborne epidemics were reported, the disease continued in sporadic form from May till November. In May, owing to importation from outside, the districts of Hazara, Kohat and Dera Ismail Khan were affected.

97. In the Central Provinces and Berar the total number of deaths recorded as due to cholera was 9,048 or '76 per thousand of the Cholera in the Central Provinces population, as compared with 4,291 or '36 per thousand in 1907. Of the total number in the year under review, 8,790 deaths (equal to a ratio of '95 per thousand of the population) were recorded in the Central Provinces, and 258 ('09 per thousand of the population) in Berar. Of the 20 districts in the Central Provinces, four only, vis .- Saugor, Damoh, Burhanpur and Betul, were free from the disease; of the sixteen affected districts, Raipur with 1,899 deaths, Bilaspur with 1,712, Drug with 1,450 and Nagpur with 1,212 suffered most. In Berar all four districts were affected. In the province as a whole the months of greatest prevalence were August, September and October, and those of least prevalence January (in which only nine deaths were reported), February and March. The provincial Sanitary Commissioner considered that in many instances the spread of infection was favoured by the gathering together of large parties at fairs and during the marriage season and the harvest.

Que to cholera, giving a ratio of 3'9 per thousand of the population, as compared with a total of 81,565 and a ratio of 2'2 per thousand in 1907. All the districts in the Presidency were affected and the disease was present throughout the year in 18 of the 23 districts. The highest death rates recorded in districts were 9'9 in Malabar, 8'5 in Anantapur, 7'4 in Kurnool, 5'7 in Ganjam, 5'1 in Cuddapah, 4'3 in Tinnevelly and 4'0 each in Kistna and South Arcot. In the Nilgiris district only 25 deaths were recorded, the Madras district coming next with 1,172 deaths. The months of greatest prevalence were August and July in which no fewer than 25,685 and 19,956 deaths, respectively, occurred, and the lowest numbers of deaths (6,079 and 7,036) were recorded in November and October.

The highest death rates from cholera recorded in towns were 29.7 in Calicut 23.7 in Tellicherry, 18.5 in Nandyal and 16.4 in Cannanore; while Kodaikanal, Coonoor and Ootacamund were practically free from the disease. Out of 43,133 towns and villages in the Presidency, deaths from cholera were reported from 11,286 as against 6,430 in 1907.

Favourable reports were received in regard to the use of permanganate of potash for the purification of contaminated sources of water-supply.

cholera in the Bombay Presidency. deaths, equal to a ratio of '09 per thousand of the population, as compared with 7,656 deaths or a ratio of '41 per thousand in 1907. During the last twenty years the mortality from this disease has never been lower. Of the 26 districts, twelve were entirely

free from the disease, and seven others were only slightly affected. The highest death rates were recorded in the districts of Kanara (1'10 per thousand of population) and Karachi (1'09). More than half the deaths occurred during June, July, and August.

Choleralin Burma.

9,336 deaths, equal to a ratio of 1.68 per thousand of population, as compared with 7,964 deaths or 1.43 per thousand from the same cause in 1907. Deaths from cholera were recorded during each month of the year, the highest number occurring in April and the lowest number in December. The districts with the highest death rates were Kyaukpyu (5.83), Toungoo (3.93), Sandoway (3.17), Tharrawaddy (3.10) and Myaungmya (3.02); in towns the highest death rates were 16.08 in Zigon, 15.60 in Toungoo, 13.86 in Myanaung, 12.88 in Paungde and 12.83 in Pyapon.

In Upper Burma the total number of deaths recorded as due to cholera during 1908 was 2,575, equal to a ratio of '88 per thousand of population, as compared with 414 or '14 per thousand from the same cause in 1907. Two out of the 11 districts were entirely free from the disease and in one (Mandalay) there were only 47 deaths. Deaths from cholera were reported during each month of the year; the highest number occurred in July and the lowest number in January. In districts the highest death rates per thousand of population recorded were 3.19 (786 deaths) in Magwe, 2.98 (721 deaths) in Yamethin, and 2.64 (515 deaths) in Minbu; in towns the highest death rates were 28.11 in Taungdwingyi, 9.73 in Pyinmana, 7.96 in Minbu and 6.80 in Meiktila.

The prevalence of the disease in all cases was attributed to the contamination and pollution of the sources of the water supply.

- Cholera in Ajmer-Merwara.

 Cholera in Ajmer-Merwara.

 Cholera in Ajmer-Merwara.

 as compared with one death in 1907 and 284 deaths in 1906. During the years 1903 to 1905 no deaths from this disease were recorded.
- Cholera in Coorg.

 a ratio of 63 per thousand of population, as compared with a total of 187 deaths and a ratio of 104 per thousand in 1907. This small province had been entirely free from the disease in the four years prior to 1906.

Small pox. Table I of Appendix be seen that in British territory in India the death B to Section VI.

Table I of Appendix be seen that in British territory in India the death rate per thousand of population from small-pox rose from '46 in 1907 to '75 in 1908. The mean ratio for the quinquennial period from 1903 to 1907 was 0'37. The total number of deaths recorded from this disease during 1908 was 170,694 against 103,988 in 1907 and 109,583 in 1906. The death rates during 1908 were higher than in 1907 in all provinces except Lower and Upper Burma, the North-West Frontier Province and Coorg, the increase being greatest in the Punjab, the United Provinces of Agra and Oudh, Ajmer-Merwara, and the Central Provinces and Berar, while in the Madras Presidency the rate remained unchanged. The small-pox mortality recorded in towns (0'76) was almost the same as that in the rural areas (0'75); and the

deaths of children under ten years of age amounted to 70°61 per cent. of the total number of deaths from this cause.

In Bengal the number of deaths from small-pox rose from 29,066 ('57 per thousand) to 35,966 ('71 per thousand) in 1908; the mean death rate during the quinquennial period ending with 1907 was '37 per thousand. Among the districts with the highest mortality, Gaya stood first with a death rate of 3'24 per thousand of population, followed by Patna with a ratio of 3'11, while Puri which stood first last year (with a ratio of 2'95) now occupies third place with a ratio of 1'45 only. The provincial Sanitary Commissioner states that the smaller mortality in Puri is evidently the result of the special measures adopted for pushing vaccination there. The districts of Purnea, Nadia, Jessore, Khulna and Darjeeling remained practically free, the death rates in them being below '1 per thousand. In towns 2,903 deaths and in rural areas 33,063 deaths from small-pox were registered as compared with 3,366 and 25,700, respectively during the previous year. Among children under one year and from one to ten years of age the mortality was higher than in 1907.

In Eastern Bengal and Assam during 1908, small-pox caused 9,373 deaths, equal to a death rate per thousand of '31 against 8,693 deaths and a ratio of '29 in 1907. The highest rates per thousand of population in districts were reported from Darrang (3'89), Kamrup (2'87) and Nowgong (2'04) in the Assam Valley. In the remaining 19 districts the rate recorded was lower than 1'0 per thousand of population. In towns the highest death rate (2'96) was recorded in Golaghat, and for the first time on record, in the town of Barpeta, which is said to be the focus of small-pox in the Assam Valley, the mortality fell to '09. This is said to have been due to the vaccination of nearly all the susceptible children. In Cachar, the best vaccinated district in the province, only 4 deaths were reported.

In the United Provinces in 1908, there were 59,996 deaths from small-pox against 22,645 in 1907 and 13,202 in 1906, the corresponding rates being 1.26, .47 and .28 per thousand of population, respectively. The average rate for the quinquennial period was .29. The highest number of deaths occurred in May and the lowest in October. The highest death rate in districts was again recorded in Partabgarh (5.79), followed by Sultanpur with 5.32, Gonda (3.88), Hardoi (2.86) and Moradabad (2.78). Two districts, Jhansi and Jalaun, were practically free from the disease, and in Garhwal and Dehra Dun the number of deaths did not exceed ten. No death from small-pox was recorded in 27 of the 105 towns with a population of 10,000 and upwards, while in 34 the number did not exceed ten.

In the Punjab 28,652 deaths from small-pox, equal to a ratio of 1'42 per thousand, were registered during the year, as compared with 11,082 deaths and a ratio of '55 in 1907, and 0'54 the mean ratio during the preceding quinquennium. The highest rates in districts were 5'04 in Lyallpur, 3'24 in Lahore, 2'58 in Ferozepore, 2'52 in Sialkot and 2'12 in Montgomery. The highest mortality was registered in June (5,227 deaths), May coming next with 5,057 and the lowest was in December, when only 399 deaths occurred. The death rates in the four largest towns were 3'00 in Lahore, 2'84 in Multan, 2'60 in Amritsar, and 0'37 in Delhi. The death rate in towns in which vaccination is compulsory was 1'71 compared with 2'44 in those in which it is optional.

In the North-West Frontier Province the number of deaths recorded as due to small-pox fell from 769 ('40 per thousand) in 1907, to 734 ('38 per thousand). By far the largest number of deaths (586) occurred in the Peshawar district, in which, as also in the Hazara district, the disease prevailed during every month of the year. The Bannu district was practically free from the disease (2 deaths only), while the Kohat and Dehra Ismail Khan districts were affected to a very slight extent (13 and 29 deaths, respectively). The months of greatest prevalence in the province as a whole were January and February.

In the Central Provinces and Berar there were 9,044 deaths from small-pox, equal to a ratio of '75 per thousand of population, as compared with 3,826 deaths and a ratio of '32 in 1907. April and May were the months in which the disease was most prevalent. Of the total number of deaths, 6,663 occurred among children under ten years of age. The largest numbers of deaths were reported in the Raipur (2,506), Bilaspur (2,377) and Drug (1,221) districts, all of which are in the Mahanadi division.

In Burma there was a considerable decrease in the mortality from small-pox during the year, the total number of deaths being 1,298 against 2,882 in 1907, and 8,540 in 1906. The highest mortality occurred in April and May and the lowest in November. The highest death rates were recorded in the Kyaukpyu and Pyapon districts in Lower Burma and the Pokokku and Myingyan districts in Upper Burma. During the year, two important Vaccination Acts were introduced by the local Government. The first has for its object the prohibition of inoculation in rural areas and the second is for the improvement of the facilities for enforcing compulsory vaccination among the occupants of lodging houses and among immigrant coolies in Rangoon.

In the Madras Presidency small-pox accounted for 22,204 deaths (6 per thousand of population) against 22,455 (6 per thousand) in 1907. All the 23 districts were more or less affected, the highest death rates recorded per thousand being in Vizagapatam (1.8), South Arcot (1.6), North Arcot (1.4) and Malabar (1.3); in the other districts the rate was below 1 per thousand. Of the 61 municipal towns, 18 were free from the disease and in the remaining 43 a total of 928 deaths was registered. The highest rates recorded were 6.8 in Palghat, 3.2 in Ellore, 2.3 in Rajahmundry and 2.2 each in Guntur and Tiruvannamalai. The death rate in towns was 3 and in rural areas 6. The months of greatest prevalence were March and April.

In the Bombay Presidency the number of deaths from small-pox recorded during 1908 was 2,526 (.14 per thousand) against 1,862 (.10 per thousand of population) in 1907. Three only out of the 26 districts were entirely free from the disease. Deaths were reported from 145 of the 289 registration circles in the Presidency, but the incidence of the disease was heaviest in Bombay City, the Western, Central and Southern Registration districts, and in two Collectorates of Sind, while Gujarat and the greater part of Sind remained practically free. The months of greatest prevalence were, as usual, March and April. Of the total number of deaths, 666 occurred among children under one year of age.

In Ajmer-Merwara 863 deaths (1.81 per thousand) from small-pox were recorded during 1908 as compared with 497 (1.04 per thousand) in 1907.

In Coorg the number of deaths reported as due to this disease was 38 against 211 in the previous year.

104. The absence of the usual winter rise in plague mortality during 1907

Plague.

enabled the prediction to be made that a great
decline in the prevalence of the disease would
occur in 1908. This prediction has been abundantly fulfilled, for the number
of deaths recorded throughout the country fell from 1,315,707 to 156,480, the
smallest total since 1900.

In the British Provinces the number of plague deaths registered was 113,888, which is less than half the number recorded under respiratory diseases and less by about 172,000 than the number recorded as due to dysentery and diarrhea. The course of the epidemic differed from that of the last four years in that the maximum prevalence was attained in March instead of in April. The decline from April to July, when fewest deaths were recorded (only 1,630), was very rapid and the autumnal rise slight. As in 1905 and 1907 the disease, instead of increasing greatly in prevalence during November and December, remained at a low level, which indicated that the year 1909 would again experience only a comparatively mild epidemic. In the Native States the number of deaths aggregated 42,592, which is considerably less than one-third the mortality recorded in 1907, the decrease being especially marked in the monthly totals from February to May.

The mean death rate from plague in the British Provinces was '50 per thousand compared with 5:16 in 1907, the decrease being common to all provinces except Madras, in which the rise was very slight, and the small areas of Ajmer-Merwara and Coorg in which the numbers of deaths were considerably below 100 in both years. It was greatest in the Punjab where the rate fell from 30:57 per thousand in 1907 to only 1'53 and in the United Provinces where the rate tell from 6'90 to '48.

In the city of Calcutta the mortality fell from 3,591 to 1,779, in Bombay from 6,379 to 5,348 and in Madras from 3 to 2.

105. Among the subjects investigated since the last issue of this report one of the most important concerns the factors upon which the annual reappearance of the disease in epidemic form depends. The researches of the Plague Commission, a summary of which was given in this report for 1906, led to the conclusion that during the non-epidemic season a few cases of acute plague in rats and human beings still continue to occur in certain towns and villages of the Punjab, and that when the seasonal conditions favourable to an epizootic and epidemic again come round the prevalence of the disease rapidly increases in those centres which then become foci from which infection is conveyed in rat fleas to other places. It appears that so far as this statement goes it is agreed to be correct by all observers, but that if it is put forward as affording a complete explanation of the annual epidemic there will be a number of dissentients. That the view affords a complete explanation of the annual epidemic in the Punjab has been called in question especially by Major Browning Smith, I.M.S.,* chief plague medical officer in that province. He agrees that in a very few localities cases of acute plague

^{*} Transactions of the Bombay Medical Congress, 1909, page 136.

continue to occur during the inter-epidemic period and that the spread of infection from those places is one factor concerned in the annual widespread epidemic, but he considers that this is a quite insufficient explanation of the yearly sudden, almost simultaneous, reappearance of the disease in a large number of localities which have been completely free for many months from any discovered sign of acute plague in either rats or man. In a number of these places no evidence that the disease has been reintroduced by importation can be obtained, and Major Smith considers therefore that its reappearance must be due to a renewed activity or "recrudescence" from causes which are as yet unknown but are inherent in a locality that has once been infected. The investigation upon the results of which his view is based related to 277 localities. Evidence of the persistence of cases of plague in animals or man throughout the inter-epidemic period was obtained in only eleven of these and evidence that the reappearance of the disease was, or might have been, due to fresh importation in 140. In the remaining 126 localities it appeared to Major Smith that the reappearance of the disease could be accounted for only on the view of recrudescence in the absence of fresh importation. Evidence of a similar nature has been brought forward by Dr. Colvin* with the object of showing that of three small outbreaks of plague in Glasgow and of two in Liverpool between 1900 and 1908 only the first in each city respectively was due to importation, the others having arisen, according to Dr. Colvin, from renewed activity of an infection which, in spite of the great efforts made to destroy it, had remained latent in an undiscovered (and presumably not easily discoverable) form since the first outbreak. The subject is of considerable importance in connexion with prophylaxis. If the yearly widespread epidemic results from the new lighting up in a large number of villages of the embers of infection remaining from a previous epidemic it is exceedingly difficult to devise measures that will promise an effective extirpation of the disease, but if in the great majority of places the annual outbreak is due to fresh importation from an insignificant number of localities which, on account of the continued occurrence of cases of plague in rats or man can be identified without difficulty, the measures by which the disease might be successfully stamped out are sufficiently obvious. The problem has been studied in detail by the Plague Commission but until the publication of their report, which is now in the hands of the Advisory Committee for plague investigation in India, it is necessary to suspend judgement upon it.

The number gives a ratio of '31 per thousand of population, against 1'65 in 1907. Thirteen out of the 33 districts were entirely free from the disease, in two the death rate was higher, in 25 it was lower and in six it was the same as in the preceding year. The district in which the highest death rate was recorded was Calcutta (2'09), and Patna, which headed the list last year, came second, (1'25 against 13'45), followed by Monghyr (1'22) Shahabad (1'03) and Saran ('97). As regards towns, the highest rates were 21'47 per thousand in Roserah, 18'67 in Monghyr, 12'61 in Hajipur, 11'87 in Jagadispur, 8'92 in Bhagalpur and 8'12 in Jamalpur. In none of the rural areas did the disease prevail in epidemic form. The months of greatest prevalence were March (6,001 deaths) and February (3,351) and fewest deaths occurred in August (70) and September (99).

^{*} Lancet, December 5th, 1908, page 1707.

Plague in Eastern Bengal and Eastern Bengal and Assam, and in the year under review it enjoyed complete freedom from the disease.

108. The number of plague deaths registered in the United Provinces fell from 328,862 in 1907 to 22,878,-the lowest yet re-Plague in the United Provinces. corded-and the death rate fell from 6'90 to '48. The month of greatest prevalence was March (7,895 deaths) and fewest deaths occurred in August (39). Females, as in previous years, suffered more than males, the death rates among the two sexes being '55 and '41, respectively-The highest district death rates were recorded in Muttra (3'26 per thousand), Ballia (2'34), Unao and Ghazipur (1'31 each), Mainpuri (1'10) and Cawnpore (1'07). Five (Almora, Garhwal, Sitapur, Banda and Jhansi) out of the 48 districts were entirely free from this disease. In 65 of the 105 towns with a population of and over 10,000, no death was recorded, and in 27 others the number did not exceed ten. Death rates of over 10 per thousand were recorded in Hathras (Aligarh) (15.81), Gonda (15.05), Bansodih (Ballia) (13.47) and Barhaj (Gorakhpur) (11'90). In rural areas the death rate was '46 compared with '70 in the towns.

against 608,685 in 1907, when the disease prevailed with unprecedented severity. The death rate was 1.53 per thousand of population compared with 30.27 in 1907 and 16.25 the mean of the previous five years. Five (Simla, Kangra, Multan, Muzaffargarh and Dera Ghazi Khan) out of the 29 districts were entirely free, and in 13 others the death rate was below 1 per thousand of the population. The highest district death rates were recorded in Ludhiana (7.02), Gurgaon (6.75), Ferozepore (3.41), and Lahore (3.06). In towns the highest rates were recorded in Balabgarh in Delhi (26.85), Khudian in Lahore (17.94), Maini in Hoshiarpur (13.73) and Rewari in Gurgaon (13.41). The months in which the greatest mortality occurred were April and March and fewest deaths were reported in August and July. Males suffered less than females the ratios per thousand being 1.39 and 1.69, respectively.

Plague in the North-West Frontier
Province. 1908 against 1,547 in the previous year. Of the five districts, only two—Peshawar (423 deaths) and Dera Ismail Khan (140 deaths)—were affected. The largest number of deaths occurred in May (260). No death was reported during February and only two occurred in July, after which month the disease entirely disappeared.

which 1,984 were in the Central Provinces and 4,252 in Berar. The total figure gives a ratio of 52 per thousand of population, as compared a ratio of 3'18 per thousand (37,774 deaths) in 1907. Of the 24 districts four, vis.—Damoh, Nimar, Seoni and Drug, were entirely free from the disease, and in ten others the number of deaths in each did not exceed ten. The districts of Betul (death rate 1'87), Nagpur (1'40), Amraoti (2'89) and Buldana (2'28) suffered most. No deaths from plague were reported in June, only nine occurred in July and the

highest number (1,160) was registered in October. In towns the highest rates were recorded in Karajgaon (37'42), Amraoti (29'69), Dattapur (22'94), Khamgaon (22'68) and Badnera (20'35). The death rates among males and females were 0'54 and 0'50, respectively.

Plague in Madras.

Plague in Madras.

Out of the 23 districts reported no death, and in four others the total number of deaths did not exceed ten. In the remaining eight districts, the highest death rates were recorded in the Nilgiris (1'3), Bellary (0'6) and Coimbatore (0'5). The disease was prevalent throughout the year in the districts of the Nilgiris, Salem, and South Kanara. The largest number of deaths (491) was recorded in August and the smallest (114) in June. In towns the highest mortality occurred in Cannanore (303), Mangalore (208) and Calicut (203).

Plague in Bombay.

Was 27,345 (1'48 per thousand of population)

against 93,609 in 1907, (5'06 per thousand),
the number being the lowest on record since the present epidemic became
established. The highest ratios recorded in districts were 6'40 in Karachi,
5'57 in Bombay, 5'18 in Poona and 4'35 in Belgaum. The district of
Thar and Parkar was entirely free from the disease and in three others

—Panch Mahals, Sukkar and the Upper Sind Frontier the number of deaths reported were 9, 3 and 2, respectively. Among towns Dharwar (30'10), Kirkee
Cantonment (28'62), Karachi (24'59) and Nasirabad (14'45) suffered severely.

The month of greatest prevalence was March (3,776 deaths) and fewest
deaths (457) were recorded in June. Males suffered more than females, the death
rates among them being 1'55 and 1'40 respectively.

114. The total number of plague deaths recorded in Burma fell from 9,249 in 1907 to 6,752. Of the total, 5,169 occurred in Plague in Burma. Lower Burma and 1,582 in Upper Burma. The districts chiefly affected were Rangoon (4'17 per thousand), Amherst (2'22), Prome (2'14) in Lower Burma and Mandalay (3'45) in Upper Burma. In Lower Burma the highest mortality occurred in February (1,056 deaths) and the lowest in November (57 deaths). In Upper Burma the heaviest incidence also occurred in February and only six deaths were recorded in each of the months of May and August. Of the 19 districts in Lower Burma, the three in the Arakan Division, as usual, remained free, and no deaths were reported from Tavoy, Mergui and Thayetmyo. In Upper Burma, five out of the 11 districts were entirely free, and in a fourth five deaths only were recorded. In towns in Lower Burma the highest death rates were recorded in Thonza (23.72), Prome (23.60), Zigon (21.75) and Myanaung (16:53), and in Upper Burma in Pyinmana (12:30), Mandalay (6:54) and Yamethin (5.18). In rural areas in Lower Burma 646 deaths only were reported, equal to a death rate of '13 compared with 6'37 in towns. In Upper Burma the rural death rate was 'os compared with 4'38 in towns.

Plague in Coorg and in Ajmer.

Plague in Coorg and in Ajmer.

Plague in Coorg and in Ajmer.

Merwara.

1907. Fourteen of the deaths occurred in the town of Virajendrapet. The mortality was equally divided amongst males and females. In Ajmer-Merwara the number of deaths attributed to plague was 74 as compared with 13 in 1907.

116. The wave of epidemic malaria which in the autumn of the year swept over certain provinces of India was the chief distinguishing feature of 1908. The total number of deaths registered under the heading "fever" is usually remarkably constant from year to year being a little short of 42 millions and the mean death rate rather less than 19'5 per thousand, but in 1908 the number was no less than 5,424,372 and the death rate 23'96 per thousand. In many parts of India the heading includes nearly all the deaths that are registered, and in by far the greater part of the country the only diseases not recorded under it are those which, like cholera and small-pox, are unmistakeable by the people themselves. The crude figures are therefore of no value as an indication of the actual mortality from malaria but when the seasonal incidence of the chief epidemic diseases is known the figures enable an estimate to be made of the increase or decrease of malaria that has occurred in any particular year. Thus a comparison of the monthly fever mortality for 1908 and 1907 gives the following results. The figures for January 1908 exceeded those for January 1907 by about 15,000 and since the increase was confined to the United Provinces and the Punjab in which during that month cholera, smallpox, and plague were not prevalent we may assume that the increased mortality was due directly or indirectly to malaria contracted in the autumn of 1907. During February and March the fever mortality showed a considerable decline on that for the same months of 1907, but there was an increase of over 1,00,000 deaths during April, May and June. This increase was almost entirely in Bengal, Eastern Bengal and Assam, and Madras, and must be ascribed chiefly to cholera which during those months was prevalent to an unusually severe degree in those provinces. In July there was again a decline in the fever mortality as compared with the same month of the previous year but from August onwards an increase in each month, the greatest being in October and November when the fever deaths exceeded those for the same months of 1907 by 322,413 and 313,983, respectively. This great increase, which amounted during the last four months of the year to as many as 835,617. was chiefly confined to the United Provinces and the Punjab and must be ascribed almost entirely to the epidemic of malaria which raged in those parts of India. Some details of the results of the epidemic will be found in the paragraphs below, but before dealing with them the opportunity may be taken to state briefly a point of view from which the subject of the mitigation of malaria among the civil population of India may be approached.

Prevention and mitigation.

India may be formed from a study of the effects of the disease in the Native Army and in jails, but, of course, in any comparison of the statistics referring to soldiers and prisoners with those of the general population, we must not omit to make allowance for the age and sex constitution of the populations compared, and for the peculiarly favourable conditions in which preventive measures act among bodies of men under skilled control. The Native Army consists of picked men who, when they are with their regiments, are looked after carefully in health and skilfully tended when sick. The admission and death rates ascribed to malaria have declined in recent years, but during each of the ten years ending with 1907 it may be said that three men in every 2,000 died from its effects. Prisoners are greatly inferior to soldiers in physique and they are subject to the depressing effects and monotonous routine of jail life. Moreover, there is

a continuous flow into and through the prisons of individuals, many of them infected with malaria, taken from the lowest and poorest ranks of society. Still, far more stringent measures of prevention are possible in jails than in regimental lines, and the results are consequently better, so far as malaria is concerned. In each year of the decennium, on an average, four prisoners in each 3,000 died from malarial fever. When the deaths ascribed to malaria in the jails are closely investigated, it is found that in a considerable proportion of the cases death was due to a cause other than malaria, so that the mean death rate of the ten years, which on paper is 1'30 per thousand, is in fact only about 1 per thousand. That is to say, the death rate among prisoners from malarial fevers is about one-fifth of what it is among the general population. A comparison of a death rate among prisoners with that among the general population is misleading owing to the numbers of children and old people among the latter, but preventive measures are by no means perfect in the prisons, and perhaps we may say that if we could place all the people in fairly good hygienic conditions, give them prophylactic doses of quinine during the fever season and provide them with suitable food and skilled attendance when they are attacked, we should prevent three-fourths of the deaths from fever that now occur. This is perhaps rather speculative but our experience in prisons does show this, malarial fever properly treated is by no means a fatal disease among adults. In 1908 malarial fevers were extraordinarily prevalent and fatal in north-western India. During the year there were 20,030 cases of fever admitted into the jail hospitals throughout the country, and only 105 of those cases terminated fatally. Assuming that all the 105 died from malaria, which the post-mortem records show was by no means the case, this means that only one in 191 cases of fever ended in death, and this in a year when the fever was peculiarly deadly. Contrast this with the state of affairs among the general population in the United Provinces in 1908, when one person in every 24 died of fever-in that year mostly malarial. Why is it that a disease which is so rarely fatal to a prisoner should be so often fatal to a free man?

A very large fraction of the total mortality from fever among the general population occurs among children and the aged, and in epidemic years they suffer disproportionately, because in such years, for reasons which we shall presently mention, they have to suffer from privations which loosen their feeble hold on life. In the Punjab in 1908 the infantile death rate from fever was doubled and the fever death rates among children between the ages of 1 year and 10 years of age were more than doubled. While due allowance must always be made for the share of the total mortality occasioned by malaria among the very young, it seems that, in normal years at any rate, there is sometimes a danger of exaggerating it, for it is not uncommon to find practically all the deaths occurring in infancy attributed to malarial fevers. Now we know that, in temperate climates, where there is no malaria, the mortality in infancy even in favourable circumstances is high; and in a tropical or sub-tropical country with a very high birth rate, we cannot expect children to escape the effects of mal-nutrition, bowel complaints, parental ignorance and other special dangers of childhood. Again in normal years many of the deaths which result from malarial fevers are directly due to the treatment, or rather want of treatment of the cases. I do not refer to the neglect of medicinal remedies, but to the withholding of food. In this country and in some others it is an article of popular superstition that a fever should be starved, and the sufferer and his friends believe that the taking of food brings on the attack of fever. Too often it is the sufferer that is starved and not the fever.

In any place in which malaria exists meteorological conditions may determine a severe epidemic of fever, when the disease becomes not only much more common, but enormously more fatal than in ordinary years. When heavy rains precede a severe outbreak of fever, they cause floods, when large tracts of country are submerged, houses collapse, harvests are destroyed and the poorer classes of the peasantry are not only thrown out of employment, but are exposed to great privation and hardship. It is then that the mortality among children and the aged is so high—malaria, owing to the simultaneous occurrence of exposure and privation, has become a very fatal disease. These are obvious considerations, but there are others which have not yet been fully elucidated. The floods, of course, produce lasting pools of water in which mosquitoes breed, but a feature of these autumn epidemics is the suddenness of their onset, which it seems can be accounted for only by large numbers of mosquitoes being very rapidly infected.

In the towns, in India as in other countries, there are numbers of people who lead a hand to mouth existence; ill-housed, ill-clad and ill-fed, they pick up a precarious livelihood in the unskilled labour market. Such people have unsuitable food at the best of times, and they have no savings, so that when anything occurs to check the demand for such work as they can do, the scanty coarse food becomes scantier and coarser and they and those dependent on them offer little resistance to malarial infection and readily succumb to its effects. Analogous conditions, as pointed out by Christophers and Bentley, may be artificially produced in any area in which anopheles mosquitoes can breed, when large numbers of labourers are collected in it under bad hygienic conditions. The majority of such labourers are free from infection, but are highly susceptible to it, a few are infected, and all are dependent on their daily labour for their daily bread. Infection spreads and with it the inability to earn money to pay for sufficient food, privation added to malaria determines a severe attack, attacks are repeated and here again the disease is a very fatal one.

The cause of malaria is a sporozoan parasite of which there are three species generally recognized. These parasites pass the sexual phase of their lives in certain mosquitoes and the asexual phase in the blood of man. The important fact in respect of the prevention of malaria is that in nature the parasites occur in both hosts and, so far as is known, nowhere else. Preventive measures are founded on this fact and have for their object the destruction of the insect host, the prevention of the transference of the parasites from one host to the other, or the destruction of the parasites in the blood of man. It is unnecessary to enumerate in detail the devices, which have been used to effect these objects, they may all, I think, be classified under three heads.

- (1) The extermination of mosquitoes.
- (2) The prevention of bites.
- (3) The administration of quinine.

The prevention of bites is useful as a supplement to more radical measures but, so far as this is effected by wire gauze screens and mosquito curtains, which are expensive and require careful handling, the use of the measure must be limited to the wealthier classes.

Much I believe could be effected by improving the design of living rooms and dormitories. It seems obvious that a well ventilated white-washed room will

afford less shelter during the day to mosquitoes than a dark dingy room. Anointing the body with substances offensive to mosquitoes is useful on occasion.

Of the two radical measures, one aims at the extirpation of mosquitoes by abolishing their breeding places or destroying the eggs, larvæ or mature insects, the other aims at destroying the sporozoon by the administration of quinine, and there has been much controversy regarding the merits of the two measures. It has always seemed to me to be unfortunate that so many of the writers who contribute their views on this controversy to the public press have not been at the pains to study the original accounts of the experiments on which any opinion of value must be based. The consequence of so much wild writing has been to confuse the issue, and not only the intelligent layman, but even medical men have been led astray. It is obvious, if malaria is due solely to the bites of anopheles mosquitoes, that the extirpation of these mosquitoes will abolish malaria. It will be admitted by everybody that the continuous use of quinine, even for a short time during the year, is inconvenient and unpleasant to the individual and difficult to carry out among a community. It is therefore evident that the best way to get rid of malaria is to destroy the mosquitoes. The only questions are, Can it be done? and, if it can, at what cost? It has been successfully done at Ismailia, but in conditions which were extraordinarily favourable, such as, I fear, occur very rarely, if they occur at all, in India. Ismailia was built about 35 years ago by the Suez Canal Company as a model town. It is situated on the shore of the bitter lake Timsah, with the desert behind it. The water supply is derived from the fresh water canal. In his report to the Liverpool School of Tropical Medicine, published in January 1903, Major Ross pointed out that "almost the whole of the irrigation system of Ismailia is free from larvæ and is unfavourable to their propagation," and that "the waters which really occasion malaria are the most shallow and insignificant surface pools, which could be filled up and drained away without difficulty and without detriment to cultivation or irrigation," indeed, he remarked, "mosquitoes can be extirpated with great facility at Ismailia, in fact with much greater facility than in any other town I have seen." Fever is said to have appeared in Ismailia in 1877, but it was never severe, and only three or four pernicious attacks had occurred from the commencement of the epidemic until 1902. Major Ross says "The illness does not appear to be of such a severe type as I have met with in parts of India and Africa; and no deaths have been reported." The population of the town is 7 or 8,000; the Canal Company is the controlling force everywhere; there are no prejudices to overcome; there is no lack of money; the soil is sandy and the rainfall averages less than two inches in the year. Compare these conditions with those of any malarious town in India. The Ismailia experiment proves that the extirpation of mosquitoes to a degree sufficient to abolish malaria is possible, and so far it is a valuable lesson to Indian administrators, but surely it is futile to say that because success was achieved at Ismailia it should be achieved in the same manner in Indian towns. I have said nothing of the expense.

We may now turn to a place where operations against mosquitoes were less successful—Mian Mir. This cantonment was deliberately chosen by the Royal Society's Commissioners, to whom Captain James was attached as a representative of the Government of India, (1) because malaria was prevalent in it, and (2), because it was thought that the conditions for the destruction of mosquitoes

were favourable. The Royal Society's Commissioners' experience in Africa had led them to doubt the practical value of operations against mosquitoes in the moister regions of the world, but they thought that such operations would be successful in the semi-desert conditions of Northern India. Mian Mir differs from Ismailia in most particulars, two of which are of special importance-the soil is impervious and the rainfall averages about 22 inches. The first year's (1902) operations were carried out by Captain James. His conclusion was that "mosquito destruction if it can be carried out successfully, will effectually banish malaria," and "the chief drawback to mosquito destruction is its difficulty and expense". The second year's (1903) operations were carried on by Lieutenant Christophers. His conclusions were "The destruction of anopheles within an area by attacking their breeding places is extremely difficult. Although large numbers of pools were filled up and drained, and millions of larvæ destroyed by oil, adult anopheles were still abundant."....." The mere obliteration of local breeding-places is useless. In Mian Mir almost complete absence of breeding was ensured to a distance of over half a mile, but adults still appeared in large and increasing numbers in the area." 'A distinct effect was produced upon the malaria of troops and on the endemic index of the bazars. This was, however, only evident in the beginning of the fever season, and could not be maintained." "The failure of the operations appeared to be due to the passage of adult anopheles into the area from without."

A great deal was learned from the operations in Mian Mir. Before they were undertaken it was thought that fever carrying mosquitoes bred in still pools of water, and could fly at most for a few hundred yards. It was discovered at Mian Mir that fever carrying mosquitoes breed not only in pools, but in running water and that they can fly for half a mile; consequently such operations as can be carried out by a mosquito brigade were of very little use in Mian Mir. The critics of the operations did not, however, pause to consider matters of this kind, "Why," they said, "did you limit your operations to an area of four miles?," "What," they continued, "is the use of filling up and oiling puddles when there are channels of running water in which anopheles breed?" It seems to me that this was hardly fair.

The second phase of the Mian Mir experiment began with the extensive works undertaken by the military authorities; the results obtained are being fully examined elsewhere. Before leaving Mian Mir there is one matter to which reference must be made. It has been said that the failure of the operations at Mian Mir has led to the neglect of anti-mosquito work in India. I do not think this is the case. All the Mian Mir experiment showed was that success in operations against mosquitoes is not so easily gained as some people say, and no one who reads the excellent reports by Major Ross on the work at Ismailia and by Captain James and Lieutenant Christophers on the work at Mian Mir will deny that this is correct. During the last ten years the energies of local Governments and municipalities have been very fully occupied in dealing with plague, and less money has been available for the prevention of malaria than might otherwise have been the case. But a great deal has been attempted. If we have erred in giving too much attention to quinine prophylaxis and too little attention to mosquito destruction, we have erred in the best company. Professor Angelo Celli of Rome, whose experience is greater than that of anyone else, at any rate in Europe, finds that, although the destruction of mosquitoes is possible in the laboratory and in small areas the difficulties in extensive areas are generally insuperable.

Important information regarding malaria in villages was obtained by the Drainage Committee appointed by the Government of Bengal in 1906 to enquire into the conditions of the drainage of the Presidency Division and their connection with malaria. Captain Stewart and Lieutenant Proctor of the Indian Medical Service were the experts appointed to assist the Committee. In the districts of Jessore, Nadia and Murshidabad, they found that malaria as estimated from the spleen rates of children under 12 years of age, was, on an average, much less prevalent in villages situated on the banks of live rivers and on dry land than in villages situated on the banks of dead rivers or bheels, while in villages surrounded by thick jungle the spleen rate (68.8) was more than twice as high as that (26.2) in villages with little jungle around them.

The success or failure of minor operations against mosquitoes appears to me to depend upon the state of the drainage. Where drainage is perfect, as in the case of Ismailia, the inhabitants can exterminate mosquitoes with little trouble; but where drainage is non-existent or bad, as at Mian Mir, it is practically impossible, by any means at present within their reach, for the inhabitants to destroy the mosquitoes. In any scheme, then, which has for its object the removal of malaria from an area, the first step is to ascertain the condition of the drainage and, if it is imperfect, how it can be improved so as to prevent water-logging of the soil, not only in ordinary seasons, but in seasons of extraordinary rainfall. In the drier parts of India it seems it is abnormally heavy rainfall that is the danger. Last year in the west of the United Provinces the monsoon rainfall was about normal, but all the rain fell in two months, and fever was severely epidemic; in Berar the monsoon rainfall was 24 per cent in excess, but it took nearly four months to fall, and fever was less prevalent than usual. Drainage schemes are costly and they require a long time to carry out even when the funds are available, and in the meantime the choice must often be made between measures against mosquitoes and the administration of quinine-unless, as may often be the case, it appears to be advantageous to use both these measures. In making the choice all the circumstances of the case must be taken into consideration. To take extreme examples. If we have a town containing a few pools which are the only sources of the anopheles mosquitoes infecting the inhabitants, it is obvious that the remedy is to drain or fill up the pools. If we have a small village surrounded by a swamp in which anopheles breed, it is evident that quinine prophylaxis is the best remedy. In India we have all the gradations between these two extremes, but those approximating to the village in the swamp are in the enormous majority.

An obstacle that has stood in the way of quinine prophylaxis is the doubt entertained by the general public and some members of the medical profession of its efficacy. This doubt is in most cases founded upon experience—medical men have found persons who have apparently been regularly taking quinine get fever, and most practitioners have come across cases in which quinine seemed to fail to cure malarial fever, while instances are not uncommon in which the results of quinine prophylaxis in a community have been exceedingly unsatisfactory. Sometimes the cause of failure is not far to seek—the drug has not been taken at all, the dose has been too small or it has been taken irregularly. There are other instances, however, that are by no means easy to explain, and whoever has studied the recent researches into the fate of quinine in the animal body will recognize how thickly beset with

difficulties the subject is and how great is the necessity for further research, particularly in this country which differs so widely from Europe in respect of the food of the people, metabolic changes and conditions of climate. It is possible that a race of malarial parasites that is immune to quinine may be developed. Fresh water amoebae may be gradually habituated to salt water, the infusorian Stentor kept in a weak solution of corrosive sublimate becomes tolerant of a solution containing four times the quantity of the poison that is fatal to stentors taken from pure water. Trypanosomes frequently develope, in an animal being dosed with atoxyl, a race of trypanosomes that is immune to that drug, and they produce descendants in a new animal host which retain this immunity. Giemsa and v. Prowazek succeeded in obtaining races of Colpidia that could live in fairly strong solutions of quinine. The parasite of malaria is far more closely adapted to its normal surroundings than the protozoa I have mentioned, but it seems possible that quinine-fast plasmodia may be produced, and we may speculate regarding the nature of such an immunity and whether it would be retained after sexual reproduction and passage into a new human host. Persons infected with a quinine-fast parasite would be in an unhappy position. It appears, however, that the prejudice against the use of quinine as a prophylactic entertained by a few medical men is hardly logical. If it is admitted that quinine is the remedy for malarial fever and that it acts by killing the malarial organisms-propositions which few medical men will be found to deny-it is surely reasonable to believe that it will be as useful as a preventive as it is as a cure. When it is realized that it is fatal to the vegetative form of the parasite, but may be ineffectual against the sexual forms, it will be admitted that it is even more useful as a preventive than as a cure. There is much evidence accumulated in this country to show that quinine swallowed regularly in sufficient doses is very nearly a complete preventive of malarial infection, or at any rate of the clinical manifestations of malarial fever. The most striking evidence of the kind is afforded by Colonel Braide's experiment in the Punjab in the autumn of 1908. The results of this experiment have already been detailed in Section IV of this report and the success attained justifies a very critical examination of any reported failure.

I have laid stress upon the danger of comparing the statistics respecting the inmates of our prisons with the statistics of the general population, and I think it would be just as unsafe to believe that because quinine prophylaxis may, with considerable difficulty, be made a complete success in prisons it will be equally successful among the people. The prisoners are under great advantages, their lives are regularly ordered, they are well housed, well fed, protected against the vicissitudes of the weather, and rarely undergo any exceptional bodily exertion. Quinine is given to them systematically in sufficient doses under supervision, and when they are attacked by fever every means is used to ensure the quinine acting at an advantage. Among the general public many know that quinine is a remedy for malarial fever and are eager to get it when they are suffering, but many are prejudiced against it, and probably the majority have never heard of it. We shall therefore have to take means to bring the advantages of quinine before all those who live in malarious places, and not only eradicate prejudices, but educate the people to use the quinine in sufficient quantity and at the right time. The best preparations for the use of adults and children will have to be selected; and probably much will depend upon the way in which the drug is dispensed. The correct dose must be determined, and I

think it would be of advantage to issue the drug in tabloids or powders equal to the minimum dose sufficient for prophylactic purposes, with directions that the single dose should be repeated a certain number of times at specified intervals as a cure. It is essential, I think, that it should be recognized that the distribution of quinine cannot be made self-supporting, and in view of economy, if for no other reason, very careful enquiries will be necessary regarding the needs of different localities. In many places no quinine is necessary at all; in others it is required only for a short time in certain years; in others it is required every year, but only at a certain season, and in yet others there is need for its continuous use.

Although our knowledge of the etiology of malaria and its treatment is fairly extensive, it is still wanting in continuity and completeness, and the scientific study of its epidemiology is only beginning. Some of the gaps in our knowledge regarding the possibilities in the life cycle of the parasite must be filled before we can hope to master the epidemiology of the disease to which it gives rise, and we cannot devise the simplest and best preventive measures until the epidemiology is thoroughly understood. As I have endeavoured to indicate, we have little exact knowledge of the distribution of malaria in the country, of the local conditions which favour it, and of the best means to render these causes inoperative. It will be evident that the defects in our knowledge may be classified as follows:—

- (a) Questions of administration, e.g., the best agency for the distribution of quinine.
- (b) Questions that can be solved by experts on the spot, e.g., the causes of disease and death and the distribution of malaria in a district; and
- (c) Questions that can be solved only by highly trained experts with the resources of a well appointed laboratory at their disposal.

There is reason to hope that a permanent organisation for dealing with these and other matters relating to malaria in India will shortly be established.

revers in Bengal.

Was 23'44 per thousand as compared with 23'18 in 1907 there is reason to believe that on the whole malaria was considerably less prevalent than in that year. From October to December the recorded mortality from fever was less by 114,682 than during the same months of 1907 and the highest figure for any month was recorded in June when the severe epidemic of cholera was at its height. It is noteworthy also that the districts of Palamau, Birbhum, and Gaya which stood first, third, and fifth, respectively on the list of districts with the highest fever rates for the year were among the five districts with the highest cholera rates and that in these districts the seasonal incidence of the recorded fever mortality corresponded more nearly to the seasonal incidence of cholera than to the usual incidence of malaria. The provincial Sanitary Commissioner states that in comparison with previous years there was no serious outbreak of malaria anywhere in the province.

Fevers in Eastern Bengal and Assam 667,146 deaths from fever were recorded with 631,197 deaths (21'17 per thousand) in 1907. In comparison with that year a disproportionately large number of fever deaths were recorded during March, April and May when cholera was severely prevalent and as in Bengal it is not improbable that to this cause must be ascribed

the increased death rate recorded as due to "fever". The provincial Sanitary Commissioner has reported that no serious outbreak of malaria occurred in any district and the Civil Surgeon of the Dinajpur district reports that in spite of the high death rate recorded (36.75 per thousand) malaria was less prevalent than usual and that the admissions to the dispensaries decreased by nearly 7,000. The deaths recorded as due to kala-azar numbered only 1,786 as compared with 2,227 in the previous year. Deaths were reported from all districts but the mortality from the disease has steadily declined since 1902, in which year there were 6,319 deaths.

120. The unusually severe epidemic of malaria that visited the United Provinces in the autumn of 1908 and the climatic and Fevers in the United Provinces. other conditions associated with it have already been referred to in preceding sections of this report. The total number of deaths ascribed to fevers during the year was 1,970,319 and the death-rate was 41'31 per thousand as compared with a total of 1,350,405 and a death-rate of 28.31 in 1907. Until August the figures compared not unfavourably with those of the previous year, but after that month they rose quickly to double or more of the usual number so that in the last four months more than a million deaths were ascribed to fever as compared with about half a million in the last quarter of 1907. The disease attacked rich and poor and every class alike, but the mortality occurred chiefly among the very young, the very old, and those whose food supply had been limited owing to the high prices prevailing during the two preceding years. The districts most severely affected were, Muttra, Budaun, Bareilly and Bulandshahr in all of which the fever death-rate was over 65 per thousand, and as regards towns with a population above 10,000 the highest rates were recorded in Kairana (105 per thousand) and Shikohabad (91 per thousand). About 7,000 lbs. of quinine were distributed gratuitously in the affected districts. Since October 1908 a selected officer has been on special duty for the investigation of malaria in these provinces.

121. The Punjab was the other great area of British India most severely affected by the malaria epidemic of 1908 and the record. Fevers in the Punjab. ed deaths from fever numbered 697,058 as compared with 405,481 in 1907. The deaths under this heading until the end of August were less by 8,000 than in the corresponding period of 1907, but during the remaining four months the figures exceeded those for the last quarter of that year by nearly 300,000. The fever death rate for the year was 34'66 per thousand against 20'16 in 1907. According to Captain Christophers, I.M.S., who was deputed to enquire into the conditions associated with the extraordinary prevalence of the disease, there were two chief epidemic areas, one in the north involving Gujrat, Gujranwala, and Shahpur, the other in the south-east involving Gurgaon, Delhi, and parts of Rohtak. Smaller epidemic areas occurred round Ludhiana and Jullundur. Since 1868 there have been nine years in which epidemics of a similar character, but sometimes more and sometimes less severe and widespread, have occurred in this province. The chief feature of these epidemics is the occurrence at certain central portions of the epidemic areas of foci in which the disease is so prevalent and severe that the mortality figures can scarcely be credited. Such foci Captain Christophers has termed "fulminant areas" and in the epidemic of 1908 they existed in the north over Gujrat, Amritsar, and Bhera, and in the south over Gurgaon. The fever death rates for the districts in which these places are

situated (the only figures by months which are available) convey a very inadequate idea of the mortality caused in different thanas and small towns, but it may be noted that the following were the annual fever death rates for the month of October in the districts referred to: Gujrat 169 per thousand, Amritsar 171 per thousand, Shahpur (in which Bhera is situated) 140 per thousand, and Gurgaon 212 per thousand. The heavy floods which accompanied the epidemic in all districts rendered any attempt to deal with breeding places of mosquitoes impracticable, but measures were promptly taken for the distribution of quinine gratuitously on a large scale and eight moveable hospitals worked continuously in the areas most severely affected. The central agency recently established in this province for controlling the distribution of quinine alone disposed of 6,000 lbs. of the drug and in addition large quantities were distributed by local bodies and organisations.

122. In the North-West Frontier Province 50,795 deaths from fevers were recorded during 1908, as compared with 52,361 in 1907, the ratios per thousand of population being 26.62 and 27.44, respectively. The autumn was, however, more malarious than that of 1907 and during October and November the fever deaths exceeded those for the same months of that year by 3,746. In the town of Peshawar the death rate from fevers was 22 per thousand as compared with 18 in 1907.

Provinces and Berar during 1908 have been noticed in Section IV of this report. Among the civil population the number of deaths recorded as due to fever was 217,773 and the death rate 18:16 per thousand as compared with a total of 213,908 and a rate of 18 in 1907. The highest mortality was recorded during September, October and November, but the rise in comparison with the figures of other months was not great, which supports the opinion of the provincial Sanitary Commissioner that no outbreak of malaria sufficiently serious to require unusual measures occurred during the year. It is stated that in most towns attention has been paid to the general improvement of drainage and to filling up borrow pits and other hollows, depressions, small pools, and puddles.

124. In the Madras Presidency the death rate recorded from fevers was, as

Bevers in Madras.

usual, much lower than in any of the other chief provinces. The total number of deaths recorded under the heading was 295,834 against 284,430 in 1907, giving ratios of 8.0 and 7.8 per thousand, respectively. The rates for districts varied from 19.9 per thousand in Vizagapatam and 19.8 in Ganjam to 1.5 in Bellary and 1.4 in Anantapur. The mortality from this cause varies very little from month to month in this presidency, but as usual the largest number of deaths were recorded in December.

125. In the Bombay Presidency the number of deaths recorded as due to fevers

was 243,372 (13'17 per thousand of population)
as compared with 260,329 (14'09 per thousand)
in 1907. The number is the lowest recorded since 1899. The districts with the
highest mortality were, as usual, Ahmedabad (25'73), Broach (23'26) and Sukkur
(20'72) and a comparatively high ratio was also recorded in the district of the
Panch Mahals in which it is said outsiders are deterred from settling on account

of its bad reputation for malaria. The community engaged in the manganese mining industry in Halol Mahal is said to have suffered greatly from the disease during 1908.

126. In Lower Burma the death rate from fevers in 1908 was 9.63 per thousand as compared with 10.28 in 1907 and in Upper Burma it was 8.23 as compared with 7.53. In some of the districts which are reputed to be most malarious such as the Pyapon, Myitkyina, Katha, Ruby Mines, Salween and Upper Chindwin districts the registration of vital statistics is not in force.

to fevers as compared with 11,117 (23.31 per thousand) the rates were respectively, 5,028 and 27.85 as compared with 4,868 and 26.95.

128. In Bengal there was, as in the two preceding years, a reduction in the sale of pice packets of quinine.

amount of quinine sold, 13,307 parcels (each parcel containing 102 seven-grain pice packets) having been sold as compared with 22,497 parcels in 1907 and 32,189 parcels in 1906. The largest quantity of the drug was sold during the last five months of the year, when fevers were prevalent. Measures have been taken since the close of the year for further extending and popularising the sale by cheapening the price and issuing the drug, not only in the form of powder as at present, but also, and chiefly, in small tablets.

In Eastern Bengal and Assam the total number of parcels sold was 33,608 against 18,993 in 1907. In the district of Bakerganj over 19,000 parcels, which represents more than two million powders, were sold. Various plans for pushing the sale of the drug have recently been adopted in this province, among them being the enlistment of village school-masters as agents.

In the United Provinces, in addition to the gratuitous distribution of about 7,000 lbs. of quinine, 2,300,230 pice packets were sold during 1908 against 722,377 in 1907. The number is little greater than was sold in one district of Eastern Bengal and Assam during the same year and the provincial Sanitary Commissioner considers that the form in which the drug is distributed is unsatisfactory and that the agency for its distribution is not sufficiently far-reaching.

In the Punjab quinine was distributed gratuitously on a large scale by numerous agencies but no details regarding the sale of pice packets are given in the provincial report.

In the Central Provinces and Berar 3,312 parcels, each containing 102 seven grain pice packets, were sold during the year as compared with 3,361 parcels in 1907. Of the total number 3,141 parcels were sold by post-masters and 171 by patwaris. The supply of 643 parcels to post-masters, stampvendors, schoolmasters, and patwaris, as an advance, has not been taken into account, as the sales from this supply are not known.

In Burma 908,092 pice packets of quinine in powder were sold in 1908 through the agency of district officers and vaccinators but this number does not include the sales at post offices, of which the account had not been received when the provincial Sanitary Report was written,

Dysentery and diarrhora Table III population were, possibly on account of the prevalence of cholera, of little value even as an indication of the increase or decrease of these

diseases in different years; for despite the existence of every condition that it might reasonably be supposed would increase their prevalence and in the face of the indication afforded by the jail statistics that dysentery was prevalent among the general population in an unusually widespread and fatal form, the number of deaths recorded under this heading was only 285,921 as compared with 282,191 in 1907, a year during which, at any rate in the jails, dysentery was less common and less fatal than in any previous year. It is noteworthy also that in certain provinces, such as the United Provinces and the Central Provinces, where from the great rise in the mortality from dysentery in the jails we should have expected an even greater rise in the mortality among the free populations the statistics relating to those populations show decreases, in the United Provinces from 22,368 deaths in 1907 to 19,388 in 1908 and in the Central Provinces from 46,820 to 40,760. In the Madras Presidency, also, where the death rate from dysentery among the jail population rose from 2'85 per thousand in 1907 to 7'05 in 1908 the recorded death rate from dysentery and diarrheea among the free population remained the same in the two years, namely, 1'7 per thousand. The recorded death rate per thousand of population for British India as a whole was 1'26 as compared with 1'25 in 1907 and 1'20 the rate for the quinquennium.

In Bengal 64,899 deaths from dysentery and diarrhoea were recorded in 1908 as compared with 51,670 in 1907, the death rates for the two years being 1.28 and 1.02 per thousand respectively. The highest death rate recorded in districts was 9.41 in Puri, in regard to which it was reported that as a result of the prevailing scarcity the poorer classes had been obliged to use roots, sag, and similar articles as food.

In Eastern Bengal and Assam 24,853 deaths were attributed to dysentery and diarrheea in 1908 against 20,463 in the previous year, the death rate per thousand of population being '83 as compared with '68. The mortality on tea a states is said to have been especially severe owing to an increased importation of labour from famine stricken districts.

The death rate recorded from dysentery and diarrhœa in the United Provinces was only '41 per thousand of population, being lower than in any other Province except the North-West Frontier. In the jails the diseases were most prevalent in the autumn but among the general population most deaths were recorded in May and June. The highest death rate registered in districts was 8.38 per thousand in Garhwal.

In the Punjab the deaths of 21,103 persons were ascribed to dysentery and diarrhea during 1908 as compared with 15,091 during 1907, the death rate being 105 per thousand as compared with 75. The seasonal incidence of the diseases corresponded with that of malaria, the greatest numbers of deaths being recorded in October and November when the malarial epidemic was at its height.

In the North-West Frontier Province only 320 deaths were attributed to dysentery and diarrhœa ('17 per thousand) as compared with 554 ('29 per thousand) in 1907.

In the Central Provinces and Berar the number of deaths from these diseases fell from 46,820 (3'94 per thousand) to 40,760 (3'40 per thousand). The ratio per thousand of population in the Central Provinces was only 2'24 as compared with a ratio of 7'28 in Berar. Several Civil Surgeons have reported that the relatively high mortality from this cause in Berar is due chiefly to the consumption of grain that has been stored for a long time in under-ground pits.

In the Madras Presidency 60,874 deaths from dysentery and diarrhea were recorded as compared with 60,326 in 1907, the death rate, 1.7 per thousand, having remained the same during the last three years. The greatest numbers of deaths were recorded in January and August when cholera was severely prevalent.

In the Bombay Presidency 40,781 deaths were recorded from dysentery and diarrhœa, giving a ratio of 2'21 per thousand as compared with a total of 53,708 and a ratio of 2'91 in 1907.

In Lower Burma in 1908 the recorded death rate from dysentery and diarrhoea was 1'77 per thousand (9,833 deaths) as compared with 1'61 in 1907, and in Upper Burma it was '68 as compared with '47. The urban death rate in Lower Burma was 4'54 per thousand against a rate of 1'36 in rural areas the difference being attributed to less defective diagnosis in the towns.

In Ajmer-Merwara 727 deaths were attributed to dysentery and diarrhœa as compared with 494 in 1907 and in Coorg 408 deaths as compared with 375.

SECTION VII.

GENERAL HISTORY OF VACCINATION.

130. The total number of vaccination operations performed during the year 1908-09 was 9,123,362 a decrease compared with Vaccination in India. 1907-08 of 46,511, but an increase compared with 1906-07 of 43,059. Decreases occurred in the United Provinces (245,354), the Punjab (38,785), Burma (10,120), Ajmer-Merwara (1,774) and Coorg (668), particulars of which will be found in the paragraphs relating to individual provinces. The primary cases numbered 8,161,297 against 8,351,530 in the preceding year, and revaccinations 962,065 against 818,343-a decrease of 190,233 in the former and an increase of 143,722 in the latter. Decreases in both classes of work were recorded in the United Provinces, Burma, Ajmer-Merwara and Coorg, while in Bengal, the Punjab and Madras the decrease was in primary cases only, and in the North-West Frontier Province in revaccinations only. Taking all provinces together, primary cases succeeded at the rate of 97'47 per cent. compared with 97'65 per cent. in 1907-08, and ranged from 99'34 per cent, in Bengal to 92'41 in Coorg: in revaccinations the rate was 73'44 per cent. against 75'45 per cent. the year before and the range between 92'11 in Ajmer-Merwara and 59'99 in Burma. The mean number of operations performed by each vaccinator was 1,507 compared with 1,480 in 1907-08, there being the usual differences between provinces, the means varying between 2,591 in the North-West Frontier Province and 2,531 in the Punjab, and 1,077 in Bengal and 853 in Ajmer-Merwara.

There was again a fall in the amount of vaccination work performed at dispensaries, the total declining from 199,245 operations in 1907-08 to 191,242 in 1908-09. In four provinces there was an increase, of which the largest was 11,834 in Bengal followed by 1,551 in the Central Provinces, and in six there was a decrease, of which the greatest occurred in Eastern Bengal and Assam (15,547) and Bengal (5,044).

The mean proportion of population successfully vaccinated was 35'93 per thousand of the census population, compared with 36'07 in 1907-08, the highest ratio being again recorded in Coorg, 50'68, while the lowest was recorded in Ajmer-Merwara, 26'13. On an estimated birth rate of 40 per thousand of the census population, 43'87 per cent. of the infants were successfully vaccinated, which though lower than the rate of 44'36 in 1907-08 is higher than that in any of the three preceding years. There were great differences in the provincial rates, the highest, 76'98 per cent. was recorded in the Central Provinces and the lowest, 12'15 per cent. in Coorg.

The total cost of the department was Rs. 15,10,536 to which it rose from Rs. 13,90,087 in the previous year, every province, except Ajmer-Merwara, contributing to the rise. The mean cost of each successful case was two annas and 10 pies or three pies more than in the year before. The highest rate was eight annas and five pies in Bombay and the lowest one anna and three pies in Eastern Bengal and Assam.

vaccine lymph.

Succeeding paragraphs. The more important changes were the closing of the lymph depôt at Lucknow where it is no longer required, the opening of the vaccine lymph depôt at Belgaum whence preserved lymph will be distributed throughout the Bombay Presidency including Sind, and the introduction of payment for all vaccine lymph issued by the Punjab vaccine depôt to prevent undue waste by demands in excess of requirements.

132. The vaccination operations in Bengal in 1908-09 totalled 2,241,576 compared with 2,058,371 in 1907-08, an increase of 183,205 against an increase of 21,008 in the previous year. The increase is the more satisfactory because it occurred in both primary cases and revaccinations. There are 34 districts in the province, in 25 of which the totals were larger than in the previous year. The most noticeable increase was of 90,628 operations in the Tributary States of Orissa, for which, however, no explanation has been furnished. The other more important increases were recorded in the districts of Cuttack (17,224), Palamau (14.300), Midnapore (13,688) and Burdwan (11,614). The increase in Cuttack is a result of the employment of a larger number of vaccinators, of the better organization of work and of the efforts of the special inspector of vaccinaton for Orissa, whose appointment has been justified. Elsewhere the greatest prevalence of small-pox was the principal cause of more vaccination work being done. In four only of the nine districts in which decreases occurred were the figures considerable, vis., Darbhanga (14,156), Ranchi (7,886), Hazaribagh (7,657) and Bhagalpore (5,248). In the three first the prevailing scarcity compelled the labouring classes to leave their homes in search of employment, while in Bhagalpore the larger number of vaccinations in the preceding year and a lower small-pox mortality explain the decrease. In primary cases the quality of work was practically the same as in 1907-08, the percentage of success in the two years being 99'34 and 99'32, respectively, but in revaccination the rate fell to 61.78 from 72.96 the year before. Paid vaccinators performed on the average a larger number of operations than the licensed operators, but except in the case of revaccinations by District Board vaccinators, the licensed vaccinators returned a higher successful rate. The work of the vaccinators attached to municipalities. dispensaries, etc., showed an improvement, the primary cases increasing from 88,481 to 90,874 and revaccinations from 42,466 to 51,907. In the former the percentage of success was 98.60 and in the latter 60.39, against percentages of 98.65 and 68.70, respectively, in 1907-08. There was a fall in the number of primary operations on tea gardens and at factories, from 4,279 to 2,945, and a remarkable fall in revaccinations from 11,421 to 1,403, which is not explained. The ratios of success which had been 95'02 and 78'92 per cent., respectively, were 98'91 and 42'05. The steady progress in the protection of infants continued, 43'91 per cent. on an estimated birth rate of 40 per mille compared with 42'39 per cent. in 1907-08, being successfully vaccinated. There was a satisfactory improvement in Puri which had been most backward in vaccination especially in respect of infants under one year of age, but the hearty co-operation of the District Magistrate and the Civil Surgeon, combined with the efforts of the special inspector of vaccination for Orissa, induced parents to offer their children for vaccination even in places in which they have hitherto always resisted it.

Primary operations during the year were conducted with lymph direct from the calf, with lanoline lymph and by the arm-to-arm process. The percentages of success by each method were—(the ratios in brackets are for the preceding year), 99'49 (99'01), 98'09 (98'59) and 98'77 (98'99), respectively. In revaccinations the corresponding rates were 76'83 (74'70), 59'59 (64'77) and 83'41 (75'73).

The department cost Rs. 2,17,721 against Rs. 2,03,667 in 1907-08, and each successful case one anna and seven pies or one pie less than in the previous year.

The quantities of lymph manufactured at the Calcutta and Darjeeling Vaccine Depôts were 420,945 and 69,073 grains, respectively, compared with 318,447 and 69,009 grains, respectively, the year before, which may be regarded as evidence that the arm-to-arm process is being steadily replaced by the use of prepared lymph.

The Nepal Darbar and the Sikkim State obtained 250 and 1,130 grains of lanoline vaccine paste, respectively, against 110 and 770 grains in the previous year.

133. The improvement in the work of the Vaccination Department in the province in 1907-08 when there was an in-Eastern Bengal and Assam. crease of 40,612 operations, continued in 1908-09 when with an increase of 91,014 the total number was 1,449,658. Of the total, 1,349,379 were primary cases and 100,279 revaccinations, showing increases of 65,030 and 25,984, respectively, on the results of the previous year. Of the 28 districts, an increase on the previous year's work occurred in ten, being most marked in Mymensingh, Faridpur, Bakarganj, Dinajpur and Rangpur, in each of which there were upwards of 11,000 operations more than in the preceding year. The increase in these districts was due mainly to greater activity of the staff in consequence of the prevalence of small-pox in the last quarter of the year 1908, and in one district the people themselves sought vaccination. The principal decreases occurred in Noakhali, the Naga Hills and Tippera. No explanation is given of the decrease in the first and last named, but in the Naga Hills it was due to the substitution of Angami Nagas, specially trained as vaccinators, for Assamese vaccinators, a change not acceptable to the people. It is satisfactory to note that in the Kamrup district further progress was made in overcoming the opposition of the Mahapurushyas and in the Lakhimpur district of extending vaccination among the Muttocks and also among the Miri tribes, 1,289 of the latter having been vaccinated for the first time. The quality of work was better in 1908-09 than in the preceding year in both classes of operations-in primary cases 98.76 per cent. successful against 98.23 per cent. and in revaccination, 74'26 against 70'21 per cent.

The amount of vaccination work at dispensaries fell from 20,168 cases in 1907-08 to 4,587 in 1908-09, the decrease is explained by the transfer to the regular vaccination staff of areas around hospitals in the Cachar and Sylhet districts and at most of the dispensaries in the Assam Valley districts in which vaccination used to be performed by Hospital Assistants on the staff of the hospitals. Vaccination at dispensaries has not, however, ceased altogether as a small stock of vaccine is maintained in order that the Hospital Assistant and Compounder may be able to vaccinate people who apply to the dispensary for the

operation. The quality of the work was not as good as in the preceding year, vis., 96.6s per cent against 98.40 per cent. successful in primary cases, and 74.96 against 81.34 in revaccinations. Of the total of 19,858 operations on tea gardens 19,051 were primary and 807 revaccinations, which succeeded at the rates of 96.56 and 95.04 per cent., respectively, the figures showing an improvement on the results of the previous year.

On an estimated birth rate of 40 per thousand, infants under one year of age were successfully vaccinated at the rate of 30.65 per cent. against a rate of 30.76 in 1907-08. In towns 66.8 per cent. of the available children were successfully vaccinated against 52.15 per cent. in 1907-08, to which the rate had fallen from 68.70 in 1906-07. In some places there are objections on the part of parents to have their children vaccinated during the first year of life.

The quality of vaccine manufactured at the Shillong depôt was on the whole reported to be excellent; the number of tubes loaded increased by 283,335 to 1,866,457, and the cost per tube was 2'1 pies against 2'4 pies in 1907-08.

The cost of the department which had been Rs. 1,02,096 in 1907-08, increased to Rs. 1,10,614, the average cost of each successful case being the same as in the previous year, vis., one anna and three pies.

134. The work of the Vaccination Department in the United Provinces was seriously affected by the widespread prevalence of United Provinces. malaria and of famine conditions. The total number of operations performed fell from 1,702,139 in 1907-08 to 1,456,785 in 1908-09. The decrease was more marked in the First Circle than in the Second Circle, except in the case of revaccinations, owing to the districts which suffered most from malaria being almost all situated in the First Circle. Of the 50 districts, decreases occurred in no less than 40. Of the total operations 1,325,443 were primary cases and 131,342 revaccinations, compared with 1,562,231 and 139,908, respectively, in the preceding year; the percentage of success in the former was 96.49 against 97.85, and in the latter 80.84 against 83.92. At dispensaries only 765 operations were performed compared with 1,442 in 1907-08, but although the general unfavourable conditions affected the vaccination work at dispensaries, but little such work is done at any time because children are either vaccinated at their homes or at vaccination stations.

Estimating the birth rate at 40 per thousand, 41'39 per cent. of the infants were successfully vaccinated. The fall from the rate of 49'94 per cent. in the previous year is explained by a smaller number of children being available owing to malaria, which not only caused a heavy mortality, but rendered the majority of the survivors unfit for vaccination, while famine conditions, and to a certain extent small-pox, measles and a low birth rate, contributed to reduce the number of children available for the operation. In towns a larger number of children were successfully vaccinated than were calculated to be available, but this is explained by children born outside being brought in and vaccinated, and to the ages of children being often incorrectly stated.

The Bovine Lymph Depôt at Patwa Dangar now supplies the whole province and the local depôt at Lucknow was therefore closed. The working of the Patwa Dangar depôt was very successful during the year; not only was the quantity of lymph issued greater than in any previous year, but the income also showed a satisfactory increase. Endeavours are being made to replace arm-to-arm vaccination by the use of calf lymph, but this is to be effected gradually.

The cost of the department was Rs. 1,77,625 against Rs. 1,62,530 in the previous year, the increase being due to necessary expenditure at the Bovine Lymph Depôt and to there having been two full-time Deputy Sanitary Commissioners for about 10½ months of the year. The average cost of each successful case was two annas and one pie against one anna and seven pies the year before.

135. The effects of the epidemic of malaria fever in the Punjab in the autumn of 1908 is shown in the vaccination statistics of the province for the year 1908-09; when compared with the preceding year there was a decrease of 38,785 vaccination operations. The primary cases were 59,368 fewer, but revaccinations were 20,583 more than in 1907-08. The decrease in the primary work is said to be due to the effects of the epidemic of malaria and not to laxity on the part of the vaccinating staff, as although the number of children available for vaccination was 10'43 per cent. less, the ratio of successful primary vaccinations was 4'76 greater. It is explained that while the people generally appreciate vaccination, particularly the first operation, the majority object to revaccination regarding it as unnecessary or a hinderance to work; moreover there is a lack of interest on the part of persons who should oo-operate with the vaccinators, indeed, in one district the Civil Surgeon considers that with the co-operation of the people the work of vaccination could be performed with half the present staff. In order to popularize the operation, it is proposed to introduce house-to-house vaccination which will save time as vaccinators will proceed to houses where there are children to be vaccinated, and this will save people the exertion and annoyance of taking children to a distance. With the decrease in the number of primary cases, there was also a fall in the percentage of success from 99'03 in 1907-08 to 98'43 in 1908-09, but in revaccinations the rate rose from 75'91 to 76'93 per cent.

On an estimated birth rate of 40 per thousand, 51'49 per cent. of the infants were successfully vaccinated against 56'51 per cent. in 1907-08 and 60'05 per cent. in 1906-07. In towns in which the Vaccination Act is in force 82 per cent. of the available children were protected, and in the towns to which the Act does not apply 64 per cent.; the corresponding rates in the previous year were 77 and 62 per cent. respectively.

According to the proposal made last year, vaccine lymph was issued on payment throughout the province in order to check demands in excess of requirements.

The case and insertion success of the vaccine supplied was, in primary cases, 97 and 96 per cent. respectively, and in revaccinations, 77 and 73 per cent. all slightly higher rates than in 1907-08, except as regards revaccination insertions in which the rate was lower.

The cost of the department again showed an increase, rising from Rs. 1,04,112 in 1907-08 to Rs. 1,14,761 in 1908-09, and the cost of each successful case from two annas and seven pies to three annas and one pie.

In the large native states in the province there was also a decrease in the total number of vaccinations performed which, as in the province proper, is attributed to the autumn epidemic of malaria. The following are the particulars by states—the figures in brackets relate to the preceding year. Patiala, primary cases 42,500 (45,776), revaccinations 24,106 (22,455); Bhawalpur, 8,344 (19,665) and 119 (322); Kapurthala, 3,651 (3,796) and 49 (766); Nabha, 1,607 (1,578), Jhind 6,168 (6,208), no revaccinations; and Faridkot 3,485 (3,720) and 52 (36).

136. It is satisfactory to record that after two successive years in which the total number of vaccination operations declined, North-West Frontier Province. there was in 1908-09 an increase of 513 operations compared with the previous year. Of the total of 91,368 operations, 81,181 were primary cases and 10,187 revaccinations, the former showing an increase of 4,832, and the latter a decrease of 4,319. The increase in the total is all the more satisfactory as work was considerably hampered during the early part of the vaccinating season by the prevalence of cholera which necessitated the employment of several vaccinators on cholera duty. Vaccination is becoming more popular with the people as a result of the use of glycerinated chloroform lymph, and the discontinuance of the use of animal lymph has played an important part in lessening friction between vaccinators and villagers in connection with the provision of animal vaccinifers. The percentage of success was not so high as in the previous year, the rate for primary cases being 98:38 against 99'22 and for revaccinations 82'14 against 88'18. No reason has been given for the fall in the percentages.

As regards dispensaries, in 1907-08, 170 primary operations, all of which were successful, were performed at the Mardan dispensary only. In 1908-09 no vaccination work was done at the Mardan dispensary, but 72 primary operations were performed at the Chakdara dispensary and 609 at the Mastuj dispensary in the Chitral Sub-Agency, the percentage of success being 94'20 and 95'19, respectively.

In the Political Agencies of Kurram and the Tochi there was a marked falling off in vaccination work which is attributed to political unrest on the Kurram border and to the suspicions of the trans-border tribes of Government measures to prevent the spread of cholera. In spite of these suspicions, however, the people of certain villages across the Kurram border sought later the aid of Government vaccinators on the appearance of an epidemic of small-pox. Vaccination was introduced into the Chitral Sub-Agency in supersession of inoculation through the efforts of the Civil Surgeon who trained as vaccinators, two Chitralis who performed 3,276 operations of which 2,949 were primary. In the Shirani country the number of operations increased from 2,605 in 1907-08 to 4,972 in 1908-09, of which 3,106 were performed with glycerine lymph, indicating that the arm-to-arm method is not now in much demand. Excluding the operations at the Chakdara dispensary, no vaccination was done in the Swat Valley; the attempts to secure local recruits as vaccinators were not successful, and efforts are to be renewed.

On an estimated birth rate of 40 per thousand, 60.49 per cent. of the children under one year of age were successfully vaccinated, which is 3.45 per cent. in excess of the rate in the previous year. As regards municipal towns, in some

the number of children successfully vaccinated exceeded the number available, and in others a large proportion of those available were not protected. The Vaccination Act has not yet been applied to the towns of Peshawar and Lakki.

Glycerinated chloroform lymph was used for the vast majority of the vaccinations, but owing to the limited supply from the Punjab vaccine depot, it was necessary to resort in the cases of a small number of persons in the Dera Ismail Khan and Kohat districts to the use of animal lymph, and to human lymph for a large number of the Chuhar Khel tribe who unexpectedly presented themselves for vaccination.

No inoculation was reported in the settled districts, and it is satisfactory to find that gradual instruction and the breaking down of long established prejudices is eliminating the inoculator and soon the practice of inoculation should cease altogether in the province.

The cost of the department was Rs. 12,575 or Rs. 375 more than in the previous year, and the cost of each successful case two annas and five pies, or two pies more than in 1907-08.

Central Provinces.

Centra

Taking the three agencies—Khalsa, Dispensaries and Feudatory States separately, the details were as follow—

Khalsa—Of the total of 537,941 operations, 462,134 were primary vaccinations and 75,807 revaccinations, compared with a total of 511,603, and 444,773 and 66,830 primary operations and revaccinations, respectively, in the preceding year. In primary cases the ratio of success was 99'10 against 98'75 per cent. and in revaccinations 74'99 against 76'12 per cent. Of the 22 districts no less than 16 contributed towards the increase, among them were Mandla (6,029), Jubbulpore (4,399), Akola (4,336), Buldana (4,046) and Yeotmal (3,767). Of the six districts in which a decrease occurred, the largest fall was in Bilaspur (4,383), followed by Nagpur (3,099) and Wardha (2,666). The cause of the decrease is attributed mainly to bad work by vaccinators.

Dispensaries.—Including the institutions in the Feudatory States the vaccination operations at dispensaries consisted of 22,199 primary cases and 3,376 revaccinations, compared with 20,964 and 3,060, respectively, in 1907-08, and the percentages of success in the two classes of work were 97.40 and 59.09, respectively, in 1908-09 against 95.77 and 69.98 in 1907-08.

Feudatory States.—There was a total of 76,131 operations made up of 69,105 primary cases and 7,026 revaccinations, against a total of 63,620 in 1907-08,

of which 58,862 were primary cases and 4,758 revaccinations. The increase is due to the submission of returns from three States from which they were not received in the preceding year. The percentage of success in primary work was 94.08 and in revaccinations 89.20, against rates of 96.78 and 83.07, respectively, in 1907-08.

On an estimated birth rate of 40 per thousand for the whole province, including States, 76.98 per cent. of the children were successfully vaccinated compared with 73.46 per cent. in the preceding year. In the municipal towns of the province 91.70 per cent. of the children calculated to be available were protected, against 91.88 per cent, the year before.

Glycerinated lymph was used in the vast majority of the vaccination operations; landlinated lymph and fresh calf lymph were also used, but to a limited extent. The percentages of success by the three methods were 93'11, 76'41 and 99'36, respectively. The arm-to-arm method is still occasionally practised in the Chanda, Raipur, Drug and Buldana districts, but the hope is expressed that it will be possible to discontinue it.

The total cost of the department was Rs. 72,482, of which Rs. 65,994 were spent in British territory and Rs. 6,488 in the States, as compared with Rs. 62,925 and Rs. 5,005, respectively, in the previous year, while the cost of each successful case was two annas in British territory in both years and in the States one anna and four pies in 1908-09 and one anna and five pies in 1907-08.

138. The total number of vaccination operations in the Presidency rose from 1,627,848 in 1907-08 to 1,649,405 in 1908-09, showing an increase of 21,557 cases. increase was neither so great nor as satisfactory as in the previous year when it occurred in both classes of work. Of the total operations in 1908-09, primary cases numbered 1,478,771 or 24,597 less than in 1907-08, and revaccinations 170,634 or 46,154 more, giving a net increase of 21,557. Among the districts the largest increase occurred in Vizagapatam (30,604), followed by Chingleput (9,632), Godavari (8,047) and Salem (5,283), attributed mainly to the prevalence of small-pox. The largest decreases occurred in Madura (5,806), Kistna (5,328), Trichinopoly (4,675), Kurnool (3,890) and Ganjam (3.653), in all of which, except Trichinopoly, the decline is ascribed wholly or in part to the absence of vaccinators on leave without substitutes being provided, and in Trichinopoly to the reduction of the vaccinators' minimum outturn of work and to there being less small-pox. The percentage of success in primary cases was practically the same in both 1908-09 and 1907-08, vis., 95'5 and 95'6, respectively, but in revaccinations the rate was 81'4 to which it rose from 76'6 the year before. There was again a decline in the number of vaccinations performed in municipalities, the number falling to 143,267 from 150,906 in 1907-08; among the towns showing a decrease was Madras (4,194), Calicut (2,453), Cannanore (1,563) and Madura (1,086). In Madras the fall was due to a smaller number of vaccinations having been performed at the Natal and Mauritius emigration depots and at the Penitentiary, and elsewhere to one or more of the following causes-prevalence of plague and cholera, decreased birth rate and the non-entertainment of temporary vaccinators. The steady fall in dispensary vaccination explained in the preceding reports, continued, the number of operations falling from 158 in 1907-08 to 55 in 1908-09.

On an estimated birth rate of 40 per thousand, 40'98 per cent. of the children against 36'98 per cent. in the previous year, were successfully vaccinated, and in municipalities the rate was 68'7 per cent. in 1908-09 compared with 67'3 per cent. the year before.

Lanoline lymph supplied by the King Institute was chiefly employed; in Local Fund areas it was employed exclusively with a percentage of success of 95.3; in municipalities the rate of success was 96.6 per cent. with lanoline lymph, while with glycerine lymph it was 99.7 per cent. and with calf lymph, prepared locally, the rate of success was as high as 99.9 per cent.

Lymph was issued throughout the year from the King Institute and unless glycerine lymph was asked for, lanoline lymph was supplied. The Superintendent of the Institute points out that the glycerine lymph is much more sensitive to high temperatures than lanoline lymph and should therefore be used as soon as possible after receipt. The Superintendent also mentions that, as it has now been abundantly proved that vaccine kept at approximately freezing point will retain its potency for at least six months, advantage will be taken of the fact to prepare vaccine only under the most favourable climatic conditions. The Superintendent's warning as to the necessity, owing to the risk of deterioration, of vaccinators using vaccine within a fortnight of the date of its issue from the Institute, has been impressed on the local authorities.

The cost of the department increased from Rs. 2,99,200 in 1907-08 to Rs. 3,21,757 in 1908-09, and the cost of each successful case from three annas and three pies to three annas and five pies.

139. In this small province the total vaccination operations fell from 11,150 in 1907-08 to 10,482 in 1908-09. The primary cases numbered 8,509 and revaccinations 1,973, or 31 and 637 fewer, respectively, than in the year before. Included in these figures are 232 operations performed at dispensaries compared with 246 in 1907-08. The decrease is attributed to the prevalence of small-pox in the previous year in the Mercara municipality and the Padilknad and Yedilknad taluks when more vaccination work was the result. The percentage of success was lower in 1908-09 than in 1907-08, the respective rates being 92'41 and 93'52 in primary cases, and 75'05 and 79'19 in revaccinations.

On an estimated birth rate of 40 per thousand, 12'15 per cent of the children were successfully vaccinated against 10'44 per cent. the year before. In municipalities 172 children were calculated to be available, but 193 were successfully vaccinated, which suggests that children from outside were brought in and vaccinated.

The cost of the department rose from Rs. 2,773 in 1907-08 to Rs. 2,809 and the cost of each successful case from four annas and eight pies to five annas.

bered 673.347 against 596,663 in 1907-08, and the revaccinations 52,425 against 40,985, showing a total increase of 88,124 operations. This is satisfactory when compared with the

results of 1905-06 and 1906-07 in both of which years there was a fall, and in 1907-08 when the recovery was to the extent of a total increase of 7,653 operations only. All the districts contributed to the increase in primary cases and in two only, the Southern and Sind Registration districts, were the revaccinations less numerous than in the preceding year. The percentage of success in primary operations was 96.02 or a little below the rate of 96.78 in 1907-08, but the rate in revaccinations fell to 70.65 from 76.86. In the above is included the work done at dispensaries. At these institutions 624 primary operations were performed compared with 730 the year before, the ratios of success being 95.65 and 96.71 per cent., respectively, while revaccinations numbered 1,073 against 850 with ratios of success of 78.94 and 19.10 per cent.

On an estimated birth rate of 40 per thousand, 54 86 per cent. of the children were successfully vaccinated, or 4'66 per cent. more than in the previous year. As in previous years, the number of children successfully vaccinated in certain municipal towns exceede the number available owing to the former number being augmented by the influx of children from outside who are necessarily not reckoned among the births.

The buildings for the vaccine depot at Belgaum under construction at the close of the year, were expected to be completed by the commencement of the next vaccinating season when the use of preserved lymph will be extended to the whole Presidency including Sind. With the lymph issued to vaccinators the case and insertion success were at the rates of 97'72 and 94'78 per cent. respectively; excluding the operations in the hot months of April and May the rate of success approached 100 per cent. The introduction of cold storage is expected to overcome the climatic disadvantage which is experienced at present.

Glycerinated lymph was chiefly used, but in all registration districts except the Presidency. Human lymph was also employed, to the largest extent in the Sind Registration district. Animal lymph was used in four of the six registration districts, but in one of the four, the Central district, only to a small extent.

The cost of the department rose from Rs. 2,93,941 in 1907-08 to Rs. 3,27,370, the explanation being the increased pay of Deputy Sanitary Commissioners, the grant of grain compensation allowance to staff, and to the entertainment of additional vaccinators. The cost of the Belgaum Vaccine depot increased from Rs. 14,490 to Rs. 23,024 and this is stated to be due to the inclusion of expenditure of the previous year, to certain capital expenditure on apparatus and to a severe and fatal epidemic among the calves. The cost of each successful case was eight annas and five pies or one pie less than in the year before.

pared with the preceding year, and in 1908-09, with a total of 396,413 there was a further fall of 10,120 operations. Of this total, 342,977, or 7,998 fewer than in 1907-08, were primary cases and 53,436, or 2,122 fewer, were revaccinations. Primary work was successful at the rate of 93 59 per cent., showing an improvement on the rate of 91.86 per cent. in the previous year, and in revaccinations also there was an improvement, the rates being 59.99 and 58.97 per cent., respectively, in the two years. Although, then, in the past two years the amount of vaccination work has declined,

its quality has improved. Excluding the vaccinations at dispensaries, 14 districts show an increase in the number of operations, the largest increases being in the Southern Shan States (8,353), Kyaukpyu (3,461) and Shwebo (2,000). In four other districts there was an increase of over 1,000 cases. In 26 districts there was a decrease, the largest being 3,933 in Akyab, 3,101 in Upper Chindwin, 2,571 in Meiktila and 2,198 in Myingyan. Various reasons are assigned for the falling off that occurred, such as epidemics of plague and cholera in some districts, the absence of small-pox in others, emigration of the people from tracts affected by scarcity, inefficiency among or absence of the vaccinating staff, and passive opposition to vaccination on the part of people who favour inoculation. The provincial Sanitary Commissioner agrees that the explanations are reasonable in some, but not in all cases, for instance, severe plague and cholera epidemics in Tharrawaddy did not prevent the increase of vaccination work in that district. In the work done at dispensaries there was a falling off of 5,044 operations and also in the percentage of success in primary cases, from 95'32 in 1907-08 to 94'24 in 1908-09, though in revaccinations the rate rose from 60'18 to 64'25 per cent. It is assumed that the reasons for the falling off in vaccination work in the districts apply also to the work at dispensaries, though this is the first check in the steady increase hitherto recorded at the latter.

On an estimated birth rate of 40 per thousand, 21'07 per cent, of the children were successfully vaccinated compared with 19'71 per cent. in 1907-08. In towns it was again the case that a larger number of children were successfully vaccinated than were estimated to be available; evidently children not included in the births of the town were brought in and vaccinated.

The vaccine depot at Meiktila continued to supply vaccine to the entire province, excepting the Rangoon municipality, the greater part of the issues being of glycerinated lymph; lanoline and quinated vaccine were also issued, but the latter only to a limited extent. The Superintendent of the depot complained that there had been an unnecessary wastage of vaccine for which, however, in some instances there is a reasonable excuse owing to subjects for vaccination not being readily available; in other cases it is said that the backward state of vaccination is the reason for the wasteful use of vaccine. The best results were obtained with glycerinated lymph. The provincial Sanitary Commissioner pays a high tribute of praise to the late Superintendent of the depot, Major Entrican, I.M.S., for the perfection to which he brought the manufacture of vaccine during his incumbency of the appointment of Superintendent.

The vaccine supplied by the Rangoon Municipal vaccine depot was of excellent quality throughout the year; the percentage of success obtained with it in primary cases was 98.95. The new buildings for the depot are now ready for occupation.

Inoculation is still practised in some districts, especially of the Arakan, Irrawaddy and Pegu divisions, and it is in those districts that vaccination is backward, the people maintaining a hostile attitude towards it. Under an Act passed during the year inoculation becomes a criminal offence in places where the new law is applied, and this is to be done as a commencement in the Hanthawaddy and Pegu districts. An Act to make compulsory the vaccination of labourers arriving at Rangoon who are unprotected from small-pox has also recently been passed; under this law the Municipal Committee of Rangoon is

given additional powers to secure the vaccination of the occupants of lodging houses and factories.

The cost of the department rose from Rs. 1,38,604 in 1907-08 to Rs. 1,49,847 in 1908-09, the increase being due to the entertainment of additional establishment and greater expenditure on account of travelling. The cost of each successful case was seven annas and five pies or six pies more than in the previous year.

142. The total number of vaccination operations in Ajmer-Merwara during
1908-09 was 12,801 of which 12,497 were primary
cases and 304 revaccinations. Compared with
the preceding year there was a decrease of 1,774 in the total—1,383 fewer
primary cases and 391 fewer revaccinations. The percentage of success
in primary operations was 97.48 which is slightly below the rate of 97.94 in the
previous year, but in revaccinations the rate was 92.11 per cent, to which it
rose from 67.19 in 1907-08. No vaccination was done at dispensaries.

On an estimated birth rate of 40 per thousand of the population, 52'90 per cent. of the infants were successfully vaccinated as compared with 54'81 per cent. during 1907-08.

The cost of the department which had risen to Rs. 3,034 in 1907-08, fell to Rs. 2,975 in 1908-09, but each successful case cost three annas and ten pies against three annas and five pies the year before.

Vaccination among troops.

III of the Appendices to this Section. The form of the statement has been amplified in order to give more information than hitherto.

SECTION VIII.

SANITARY WORKS.

144. Excluding Calcutta, the number of municipalities in Bengal in 1907-08 was 127, the municipality of Uluberia having been abolished during the year. The aggregate income, including the opening balances, was Rs. 67,96,298, of which 39'51 per cent. was spent on original or recurring sanitary works (against 43'15 per cent. in the previous year), 918 per cent. on roads (against 724), 436 per cent. on the public safety (against 5'04), and 27'11 per cent. on other requirements (against 27'59). The actual sums expended under the main heads were Rs. 13,40,302 on conservancy, including the pay of establishments, road watering, etc.; Rs. 3,39,609 on water supply; and Rs. 2,68,822 on drainage. An increase of about Rs. 95,000 on conservancy as compared with the previous year seems to have been generally distributed, while a decrease of about Rs. 78,000 on drainage was due to a reduction in the exceptional expenditure at Howrah. The provincial Sanitary Commissioner states that the results of the efforts of past years to improve the health conditions of the towns is very perceptible; but the local Government points out that the rate of progress is slow in comparison with what there is to be done. Delays are due largely to want of funds, but time and money also are wasted by defective preliminary work on projects and the Sanitary Board have been instructed to examine this question with a view to ensuring efficient supervision and, if necessary, affording expert assistance at the early stages of schemes.

Much attention was paid to the working of septic tanks, particularly the important ones installed by the mills on the banks of the Hooghly, and an Inspector was appointed for the purpose of ensuring their efficient working.

Sanitary Board met five times during the year. The principal subjects of discussion at these meetings were (1) the improvement of sanitary administration; (2) the supervision of the preparation of municipal drainage schemes in the Presidency Division; (3) the construction of a drainage scheme for the Baranagar Municipality; and (4) the pay and emoluments of the office of Assistant Sanitary Engineer.

Preliminary estimates were prepared for (1) water supply works for Hooghly-Chinsurah, where it is proposed to lift water from the Hooghly into settling tanks, thence it is to pass through filters into a clear water reservoir from which it will be pumped into two service reservoirs. The scheme which is to supply eight gallons a head daily to a population of 25,000, is estimated to cost Rs. 3,70,000; (2) Daltongunge water works—this is a reconstruction scheme rendered necessary owing to the failure of the existing well to furnish the increased supply of water necessary.

A detailed estimate was prepared for water works at Gaya (town population 71,416), where it is proposed to sink three wells from which water will be pumped to two service reservoirs for the supply of the town. The estimated supply is 13 gallons a head and the cost Rs. 6,52,680.

The following schemes were considered:-

- (1) Burdwan drainage scheme.
- (2) Khulna drainage project.
- (3) Serampore drainage scheme.
- (4) Arrah drainage scheme.
- (5) The Northern and Southern foreshore sections of the Howrah drainage system.
- (6) The Darjeeling sewage scheme.
- (7) Puri water works. The water is to be pumped from five wells in the vicinity of the railway station to a service reservoir on the Markunda road. Initial cost Rs. 2,97,186. Work on one well had been begun.
- (8) Murshidabad water works. Supply 120,000 gallons filtered water a day; initial cost Rs. 1,50,000; cost of maintenance Rs. 7,000 a year.

During the year a B. E. student satisfactorily completed his practical training in sanitary engineering and obtained a certificate. Three other B. E. students have availed themselves of the scholarships this year and are working under the Sanitary Engineer of the province.

By a notification, dated the 6th May 1908, the local Government ordered the reconstitution of the Sanitary Board as follows:—

A member of the Board of Revenue ... President.

The Chief Engineer, Irrigation Department ...

Buildings and Roads Branch
Public Works Department ...

The Sanitary Commissioner ...

Secretary.

146. The total income of the 44 municipalities, two stations and four unions in 1908, including opening balances, was Rs. 19,31,207, of which 47'94 per cent. was spent on sanitation, compared with 47'04 per cent. of Rs. 18,78,711 in 1907. Under the main heads of expenditure, Rs. 5,42,035 were spent on conservancy, including establishment, road watering, etc., Rs. 1,55,142 on water supply, and Rs. 39,060 on drainage.

The principal schemes in progress are the following :-

At Dacca the conservancy scheme for the removal of night soil from central depots by means of tramways to a trenching ground at a distance of five miles from the city has been practically completed at a cost of about Rs. 3,00,000.

Schemes for improving the water supply of the station at a cost of Rs. 5,00,000 and for the surface drainage of the civil station at a cost of Rs. 1,81,270 are being considered.

A large reclamation, drainage, and also a sewage scheme, to cost from Rs. 20 to 25 lakhs are being considered.

At Chittagong artesian borings having proved successful, two 6" wells are being sunk from which it is hoped a water supply will be obtained.

At Narayanganj the water supply works were completed and are giving satisfaction.

At Mymensingh improvements in the water supply and a drainage scheme are under consideration.

At Rampur Boalia and Nator experimental borings for water have been made.

At Rangpur a drainage scheme is under consideration; and at English Bazar work on a scheme has been begun.

At Imphal, the capital of Manipur, and at Haflong, in the North Cachar Hills, water supply schemes are being carried out; and at Shillong and Gauhati improvements in the water supply are contemplated.

Drainage schemes are being drawn up for Gauhati, Dibrugarh, Golaghat, and Silchar, and schemes for the water supply and drainage of Barisal, Nator, Faridpur and Chandpur are under consideration.

Expenditure to the extent of Rs. 1,72,470 was incurred by district and local boards, Rs 1,11,202 was spent by private individuals, and Rs. 59,000 was given as grants-in-aid by the Sanitary Board—most of this money was devoted to improving rural water supplies.

Sanitary Board.

Sanitary Service, the revision of the constitution, functions and powers of the Sanitary Board, and an increase in the number of Deputy Sanitary Commissioners.

A scheme was drawn up for the purpose of effecting the improvement of the supplies of water in the Gauhati sub-division of the Kamrup district, which were seriously injured by the earthquake of 1897. The scheme is estimated to cost Rs. 30,000 annually for five years. A similar scheme on a smaller scale has been drawn up by the Barpeta Local Board.

The Board were given authority to relax, in cases of necessity, the conditions in respect of local contributions under which grants-in-aid for the improvement of water supplies are distributed, and demands for money have consequently increased.

148. "Activity in sanitary matters," it is noted by the provincial Sanitary

Commissioner, "was a prominent feature of the

year;" but this, so far as concerns the municipalities, was almost limited to the extension of

existing works and progress with those already in course of construction, for the total cost of the projects approved by the Sanitary Board was only Rs. 1,66,815. During 1907-08 the municipalities spent 54 per cent. of their income on conservancy, plague measures, water supply and drainage, but this includes capital charges which were very high in Mussoorie and Almora. The expenditure on water supply in the eight towns with large installations was Rs. 10,73,591; on drainage works the total expenditure was Rs. 6,03,516.

Improvements were effected in the water supply at Benares, and progress was made with the Mussoorie hydro-electric scheme. A scheme for improving the pumping plant at Cawnpore at a cost of Rs. 6,00,000 was under consideration. At Allahabad a scheme for an unfiltered water supply to cost Rs. 3,83,292 was submitted. Extension of the Agra water works was discussed; and means to improve the Naini Tal supply were investigated.

The Moradabad drainage project to cost Rs 4,81,457 was completed and sanctioned and work was started in January 1909. The drainage of Hathras (Rs. 1,84,050) was completed. The revised project for Jaunpur (Rs. 4,66,007) was completed and sanctioned, and work was commenced on a portion of the project, to cost Rs. 1,50,000, which is all the municipality could finance.

Six other projects, costing in the aggregate Rs. 11,25,026, were sanctioned and several others still await sanction. Four projects, including the Allahabad drainage works (Rs. 17,00,000), to cost in all Rs. 29,16,716 were prepared by Mr. Lane Brown, but it is stated that these require revision.

Thirteen other municipalities have applied for drainage schemes.

The sullage farm at Agra was reported on by a special committee, which found that it was not injurious to the health of those residing in its neighbourhood and that, if properly worked, it should cause no nuisance.

Sanitary Board met three times during the year. The most important matter considered by them was a letter from the Government of India regarding a scheme for improving the sanitary services.

Punjab.

Punjab.

Rs. 29,49,278, or 48'54 per cent., was spent on public health and convenience, including Rs. 5,16,196 on water supplies, Rs. 2,50,701 on drainage, and Rs. 7,36,071 on conservancy, road cleaning, watering, and latrines.

The following notes refer to the principal works of sanitary improvement undertaken or about to be undertaken in the province. At Lahore the twelve new wells in extension of the existing trench wells at the head works of the Lahore water supply were almost completed at a cost of Rs. 78,000. At Simla the hydro-electric scheme to utilise the water power of the Sutlej at Nauti Khud to increase the water supply and light the station was approved by the Government of India, and near the end of the year a special rublic Works Division was opened for the purpose of preparing a fair project and carrying out the work. At

Ludhiana the water works scheme (Rs. 4,30,468) was nearly completed, and the works were handed over to the municipality. At Amritsar the work of intramural drainage was begun. At Delhi the intramural drainage works were finished and handed over to the Municipal Committee; and the suburban drainage project, to cost Rs. 3,79,000, was begun. Five minor works, including drainage at Jhelum and Hazro, and water supply to the Remount Depot at Sargodha were completed during the year. There were in progress of construction nine schemes including water supply and drainage of Campbellpur and Pind Dadan Khan, and drainage of Bahlwal (Rs. 50,110), Sangla (Rs. 37,737) and Majitha (Rs. 7,923). A number of other estimates, the most important of which was for the drainage of Chiniot (Rs. 59,000, sanctioned) were prepared.

- Sanitary Board met three times during the year and discussed the various schemes of municipal improvement brought before them. They allotted from the lakh of rupees placed at their disposal by Government, sums to various towns in aid of drainage schemes. They considered the proposals of the Government of India for improving the sanitary services, and offered certain suggestions to the local Government.
- North-West Frontier Province.

 North-West Frontier Province.

 North-West Frontier Province.

 North-West Frontier Province.

 Year; but owing to handsome grants received from Government, the municipalities of Peshawar and Dera Ismail Khan were able to entertain an Assistant Surgeon each as assistant health officer, whose supervision has effected considerable improvement in the sanitation of those towns. The administrative medical officer has a special word of praise for the management of sanitary matters at Kohat which has been fortunate in securing as honorary secretary an Indian gentleman who understands and takes a lively interest in sanitary administration.
- Central Provinces and Berar.

 Department during the year. The extension of the catchment area of the Kalapani tank at Amraoti at a cost of Rs. 1,28,000. In connection with the Jubbulpore water works extension, the dam of the reservoir was raised by three feet nine inches, a length of five miles of 24" main was laid and the distribution system was extended. At Khandwa the flood escape and regulator on the Ajanti feeder channel were completed. At Badnera the drains are completed, and at Jubbulpore the construction of side drains from the Nanhai Phatak to the main outfall drain commenced in 1907 was completed. Excluding opening balances etc., the income of the head-quarters' municipalities rose from Rs. 13,50,593 in the previous year to Rs. 14,09,904, and the percentage spent on sanitation from 42.72 to 59.47.

The provisions of the Village Sanitation Act were applied to two villages in the Chanda district. They were not withdrawn from any village.

Sanitary Board.

Sanitary Board.

Sanitary Board.

Sanitary Board.

Sanitary Board.

Sanitary Board.

The work done under their auspices was mainly in connection with the improvement of village sites and water supplies.

155. In the absence of information as to the income and expenditure, the following has been extracted from the General Municipal Review of District Municipalities in the Presidency for 1907-08. Excluding the opening balance of Rs. 11,78,091, the total income of the year amounted to Rs. 40,52,060, against Rs. 39,04,647 in the previous year. Under the head "Public Health and Convenience" the expenditure on water supply was-the figures in brackets are for the previous year, capital outlay Rs. 1,58,169 (1,09,998), establishment, etc., Rs. 1,81,430 (1,84,096); Drainage, capital outlay Rs. 35,865 (67,147), establishment, etc., Rs. 38,375; conservancy, including roads and plague, Rs. 9,18,246 (9,37,904). The allotment for sanitation by District Boards was Rs. 10,35,567 against Rs. 8,25,374 in the previous year.

The provincial Sanitary Commissioner points out that sanitary progress in most mofassal municipalities is rather slow; in many cases this is due to want of money, but in others the councils do not display any great ability in the management of their affairs and do not receive anything like the full value of the money expended. Lack of interest on the part of the municipal councils leads to neglect of their work by sanitary inspectors, while the practice of employing those officials to carry out duties other than those proper to their office, although contrary to the orders of Government, is in force in many municicipalities and greatly detracts from the quality of the sanitary work done.

The number of districts administered under the Madras Local Boards Act was 23, and Rs. 10,35,567 were allotted for sanitary purposes, but less than half was spent during the first nine months of the year.

The following major works were being carried out by the Public Works Department during the year: Berhampur water supply (cost, Rs. 3,11,000), Bezwada water supply (Rs. 3,11,750), Salem water supply (Rs. 8,10,535), Periyakulam water supply (Rs. 1,62,670), Gudiyattam water supply extension (Rs. 22,000), the building of a service reservoir at Trichinopoly (Rs. 63,300). The execution of the Ootacamund drainage works (Rs. 3,85,610) and of the Cocanada water works improvements (Rs 43,760) were transferred to the Public Works Department.

The Sanitary Engineer carried out the following: Cuddapah water works improvements-the new gallery was excavated, but owing to slips, work was stopped pending further investigations. At Kumbakonum boring was carried to a depth of 311 feet, and the yield of water proving satisfactory, arrangements were made to obtain a temporary supply for the Mahamakam festival. At Kodambakkam an experimental well, ten feet in diameter, was completed, but the supply of water was unsatisfactory. At Saidapet arrangements were made to acquire land outside cantonment limits for the head works of the water supply.

The investigation of fifteen schemes was approved by Government, namely, water supplies for Vaniyambadi, Rajahmundry, Mangalore, Palamcottah, Ellore, Ongole and Negapatam, and the drainage of Mangalore, Negapatam, Anakapalle, Calicut, Vellore, Rajahmundry, Srirangam and Nellore.

156. During the year the Board examined schemes estimated to cost in the aggregate Rs. 7,28,944, the most important being Sanitary Board. the following :- the water supply of Masulipatam at

a cost of Rs. 3,11,900, and the extension of the Ootacamund drainage works at a cost of Rs. 48,000.

157. Excluding Bombay City, there were in 1908 in the presidency 158 municipal towns, of which the aggregate net income was Rs. 79,92,502. The amount spent on improving water supply, on drainage and on conservancy within municipal limits was Rs. 17,35,772. There were 25 District Local Boards and 211 taluka Local Boards, with a total income of Rs. 64,06,055, of which Rs. 3,75,426 were expended upon water supplies and drainage.

The Bombay Village Sanitation Act was in force in 265 villages. The success of the Act appears to vary in different parts of the province; in the Western and Central Registration Districts some good has resulted, but in Gujarat and Sind the Deputy Sanitary Commissioners do not think villages in which the Act is in force show any improvement over other villages.

The following were the more important works in progress during the year-

Pandharpur water supply. A project to pump water from wells in the bed of the river Bhima, a mile above the town into a service reservoir whence the water will be distributed by gravitation, was sanctioned by Government who provided Rs. 2,00,000; work was begun at the end of the year. The drainage works were continued. At Dhulia the filter beds were completed at a cost of Rs. 31,923. At Ahmedabad it has been found necessary to provide for new wells and additional machinery at the head-works of the water supply. Progress was made during the year in connecting the densely populated portion of the city with the sewerage system. At Karachi the water supply distribution was improved, and the Shone sewerage system extended. At Hyderabad a scheme was prepared by the municipality for connecting the two outfalls and the disposal of the sewage and Rs. 50,000 was allotted, but, pending some changes in the scheme, work was not begun. Land was purchased for a sewage farm. At Surat Rs. 38,520 were expended on the installation of new engines for the water works.

Water supply works for Dharwar and Hubli were sanctioned, but work was not commenced; and the following projects were in preparation, water supplies for Nasik, Ahmednagar, Hyderabad (improvement), Sukkur, Bijapur, Broach, Bulsar, Dholka, Godhra, Thana and Viramgaon and a complete project for the drainage of Bhusaval.

158. The Board held three meetings during the year at which they dealt, among other matters, with schemes for improve-Sanitary Board. ments to the Pandharpur water supply and for providing water supplies to Dharwar, Nasik and Hubli, and also considered questions in connection with water supplies for certain towns.

159. Excluding Rangoon, the income of the municipal towns in Burma amounted in 1908 to Rs. 33,33,574 and the total expenditure on sanitary works was Rs. 12,84,343, or 38.53 per cent. of the income. The income of the non-municipal towns is not stated, but they spent 45'18per cent. of it on sanitary works. The proportion of District Funds and District Cess Funds devoted to sanitation was 7'88 per cent. The local Government made considerable contributions to certain schemes, including a grant of Rs. 52,000 to Mandalay for the purpose of regrading the channel of the Shwetachaung Canal, Rs. 50,000 to Mandalay and a like sum to Prome for the improvement of congested areas. A number of projects were either in process of completion or completed and awaiting sanction, including water supply schemes for Mandalay, Bassein, Monywa, Minbu and Tavoy, conservancy schemes for Minbu, Danubyu, Kyaiklat, Pyapon and Wakema, and a sewage scheme for Rangoon Cantonment. The water supply scheme for Pegu and the drainage scheme for Moulmein were examined and reports upon them submitted.

160. The Sanitary Board met once during the year and considered the drainage and conservancy schemes for Kyaiklat. Sanitary Board. They also considered letters from the local Government regarding the improvement of the sanitary services in India and the functions of the provincial Sanitary Board, and furnished the local Government with their opinions regarding the constitution and functions of the provincial Sanitary Board.

161. During the year 1908-09 the expenditure on ordinary military works was Rs. 86,43,506 against Rs. 83,26,534 during the Military Works. year preceding; on reorganisation Rs. 25,76,727 against Rs. 46,82,296; and under special demands Rs. 12,71,870 against Rs. 14,71,934.

Details regarding new works and improvements in some of the more unhealthy cantonments, will be found in the statements appended to Tables V and XXX at the end of the volume.

stated, but they spent ac's cor cent, of it on similary works. The properties of Dig-

SECTION IX.

GENERAL REMARKS.

162. The orders promulgated by the Government of India at the end of

Red Sea Pilgrim Traffic.

September 1906, which were detailed in paragraph

175 of this report for 1905, have annually been
notified as the terms on which pilgrimage to the Haj is permitted. In a notification dated the 13th July 1908, the orders were repeated with the intimation that they will continue in force till further notice.

For the pilgrim season 1907-08, all pilgrim ships were thoroughly cleansed and freed from rats by the Clayton process under the personal direction of the Port Health Officer, Bombay, and the pilgrims themselves were subjected to medical inspection, their clothing and bedding being thoroughly disinfected before embarkation. In the reports of the Port Health Officer, of the Protector of Pilgrims, Bombay, and the report on the Camaran Lazaret, it is stated that 25 ships conveyed the pilgrims from Bombay, but the three reports differ as to the actual number of pilgrims who undertook the Haj, the numbers being 21,867, 21,766 (including 219 infants) and 21,813, respectively. It is said that some of the 21,813 pilgrims mentioned in the Camaran report were embarked at Aden. All the ships were medically inspected at Perim, but it was not found necessary to land any pilgrims for detention at the observation camp. During the voyage 87 deaths occurred among the Indian pilgrims, the increase being attributed to a greater number than usual of poor, old and debilitated persons undertaking the Haj. During the period of detention at Camaran, 63 out of 102 deaths occurred among pilgrims from India. Cholera appeared at Camaran among the pilgrims carried by the "Islami" which left Bombay on the 31st October and arrived at Camaran on the 12th November 1907, and also among those carried by the "Zamania," which left Bombay on the 18th and arrived at Camaran on the 27th November 1907. These outbreaks and their bearing on cholera in the Hejaz are described in a subsequent paragraph.

The accommodation for the segregation of pilgrims at Camaran is said to have been inadequate and its extension at an early date is recommended. The period of quarantine for pilgrims from the east has been reduced from five to three days, but for Indian pilgrims it has been reduced only from ten to eight days, including one day for disinfection, debarkation, etc.

The Haj report for 1907-08 records that cholera was present in Mecca before pilgrims from the cholera stricken steamer "Islami" were landed at Jeddah, and that both towns were in a deplorably dirty condition at the time of the pilgrimage; that no steps were taken to protect the water supply of "Ain-Zubeida" from contamination; and that the hospital arrangements at Mina, Mecca and Jeddah were inadequate for cholera patients. It is estimated that of a total of 140,000 pilgrims, 21,000 died of cholera in the Hejaz in a period of four months. It is said that great hostility is being shown by the Bedouins to the Hejaz railway and that the roads were unsafe owing to their depredations. Camel hire has risen enormously, from Rs. 50 to Rs. 150 for a camel in the last fifteen years. About 700 destitute pilgrims were repatriated from Jeddah by charity.

The Indian pilgrims returned to Bombay in 24 ships which brought in all 18,351 pilgrims. On the homeward voyage 340 deaths occurred, due chiefly to old age, general debility, privation, pneumonia, dysentery and diarrhœa. Eighteen ships had among them during the voyage, 7 cases of plague, two of cholera, 156 of small-pox, two of chicken-pox and one of measles. Of the small-pox patients, 50 were landed at Aden, one at Muculla, 13 died on the voyage and 92 were landed at Bombay and sent to hospital. Vaccination was offered to the pilgrims among whom small-pox occurred, but was refused by all. One patient suffering from plague and two patients suffering from cholera were landed at Aden; and the ships on which cases of plague occurred were thoroughly fumigated by means of the Clayton process. The clothing and bedding of 14,599 pilgrims among whom infectious diseases occurred were disinfected, after which those pilgrims were taken over by the Protector of Pilgrims for despatch to their homes. The effects of 1,660 crew of the infected ships were also disinfected.

Cholera in the Hejaz.

pilgrim ships from Bombay; and towards the end of the year the Hejaz was infected with cholera and a severe outbreak attended by a heavy mortality ensued.

The occurrence of cholera at Camaran and in the Hejaz in 1907 is of peculiar interest, because the circumstances of the cases at Camaran appear to throw additional light upon the epidemiology of cholera, and because it has been stated on the one hand, that the Hejaz was infected in 1907 by Indian pilgrims, and on the other, that the freedom from cholera in recent years of Camaran and the Hejaz has been due to the detention of Indian pilgrims in the plague observation camp at Bombay. The several accounts of the infection of the Hejaz do not agree with each other, and it is not easy to get at the facts; but the narrative of events at Camaran is fairly clear, although there is room for difference of opinion regarding their interpretation.

The pilgrim ship "Islami" with 826 pilgrims on board sailed from Bombay on the 31st October and arrived at Camaran on the 12th November. Between the 15th and 20th November three cases of cholera occurred among her pilgrims in the lazaretto.

The pilgrim ship "Zamania" left Bombay with 1,221 pilgrims on the 18th November and arrived at Camaran on the 27th. The pilgrims were disembarked and placed in the lazaretto apart from the "Islami's" pilgrims. Between the 29th November and the 12th December four cases of cholera occurred among the "Zamania's" pilgrims.

In the case of the "Islami," then, the first case of cholera occurred at least fifteen days after the vessel left Bombay, and in the case of the "Zamania," eleven days elapsed between the departure from Bombay and the occurrence of the first case of cholera.*

Dr. Delpino, the Director of the quarantine station at Camaran, suggests that it is possible that one or two cases of cholera occurred on board the "Islami" during the voyage from Bombay to Camaran, but he is sure that no case of cholera occurred on board the "Zamania," and that the "Zamania's "pilgrims were not infected by the "Islami's "pilgrims.

An account of similar outbreaks will be found in this Report for 1895, p. 182, para. 202,

Both vessels were apparently healthy when inspected at Aden and Perim, and the evidence seems to be against the occurrence of cholera on either of

The water-supplies of both vessels were examined bacteriologically at Camaran. A harmless vibrio was isolated from the water of the "Islami," but no vibrio was found in the water of the "Zamania" which was repeatedly examined. The diagnosis of cholera in those attacked was established bacteriologically and the problem was "where did they become infected." Excluding the ships and Camaran, Dr. Delpino believed that the germs of cholera were brought from India in the intestines of the pilgrims themselves, and he attributed the cholera at Camaran to a microbisme latent. Everyone is familiar with the fact, first pointed out in 1893,* and now a commonplace of the text books, that in times of cholera epidemics a considerable proportion of the people exposed to infection carry in their intestines the germs of cholera without manifesting any sign of the disease. These people are temporarily or permanently immune, and it is a generally accepted belief that when the germs carried by them reach a susceptible host they give rise to cholera which then spreads from the second host in the ordinary way. Dr. Delpino appears to be of the opinion that the vibrios carried by the Indian pilgrims were not virulent, and that for some reason they became virulent at Camaran and caused attacks of cholera in the carriers themselves. Apart from the circumstances of the cases among the "Zamania's" pilgrims especially, he was supported in the belief by the discovery of the true vibrios of cholera in the stools of two Bokharan pilgrims from the "Islami" who were in hospital on account of intestinal catarrh and dysentery, respectively, and in the stools of an Indian pilgrim from the "Zamania," who was in hospital suffering from slight catarrhal dysentery. None of these three pilgrims showed any sign of cholera. It is true that cholera vibrios were not found in the stools of those attacked before their attack, but such a discovery has been made elsewhere. Professor W. Kolle found cholera vibrios in the apparently normal dejections of two members of a family, in which a case of cholera had occurred. The two cholera carriers were removed to a hospital where infection was out of the question, and several days afterwards developed a fairly severe and slight attack of cholera, respectively.†

Immunity and virulence are, of course, relative terms, but it would appear that "cholera carriers" range between two extreme conditions, those whose escape is due to immunity owing to an idiosyncrasy that protects them against a virulent microbe, and those who, although susceptible, escape because the microbes harboured by them are not virulent. The first class are a danger to the community in which they live so long as they continue to excrete virulent microbes, the second class do not become dangerous until some cause-whether specific or not-confers virulency on the microbes they are carrying.

The "Islami" was detained at Camaran until the 19th December, after which she left for Abou Saad where fresh cases of cholera are said to have appeared. Her pilgrims landed at Jeddah on the 21st December and the "Zamania's" pilgrims landed there the same day.

^{*}Professor Günther in his Einführung, 6th edition, page 649, quotes papers by Canon, Lazarus, and Pielicke, Bert. klin. Wochenschrift, 1892, page 1216; and by Rumpel, Deutsche med. Wochenschrift, 1893, No. 7. See also R. Koch, Zeitschrift f. Hyg. Bd. 14, 1893, page 321.

[†] Zeitschrift fur Hygiene und Infektionskrankheiten, Band 18, page 43.

The accounts regarding the infection of the Haj are conflicting. Mr. Consul Monahan states that a case of illness suspected to be cholera occurred in Mecca in the person of an African pilgrim on the 14th December, and that the presence of the disease, at first confined to African pilgrims, was confirmed a few days later. Dr. Delpino states that infection came from the north; and Dr. Bruce Low in the narrative compiled for the Report of the Medical Officer to the Local Government Board, ascribes the infection to Russian vessels. Whatever the facts may be, it seems certain that the Hejaz was not first infected by Indian pilgrims.

It has been pointed out that Camaran and the Hejaz were free from cholera during the period when Indian pilgrims were either prevented from going there (1897) or were detained in an observation camp in Bombay prior to their departure (1898-1905), that in the six years before this period cholera appeared at Camaran on eleven occasions, and that it appeared again after the abolition of the observation camp, and it has been argued therefore that the detention of pilgrims in the observation camps at Bombay prevented the outbreak of cholera at Camaran. In 1906 there was no camp, and although the number of pilgrims from Bombay attending the Haj of 1906-07 was the greatest on record, no case of cholera occurred at Camaran. In 1907 there were, as we have seen, a few cases of cholera among Indian pilgrims at Camaran, and the general health of the pilgrims, as evidenced by the mortality that occurred among them on the voyage, was much worse than usual. The higher mortality among the Indian pilgrims was ascribed by Dr. Delpino to the larger proportion of poor, old and cachectic persons among them; among the Javanese and other Malay pilgrims a considerably greater increase in the mortality was ascribed to the warmer weather in which part of the voyage to the holy places was made. It is not impossible that the change of season, owing to the recession of the Haj, had to do not only with the deterioration of the pilgrims' health in 1907-08, but with the occurrence of cholera.

In the eleven years 1897—1907, when the Hejaz was free from cholera, the Haj fell between the 13th May and the 25th January. To get similar dates we have to go back to the ten years 1865—1874, when the Haj fell between the 7th May and the 29th January. Cholera was present in Europe during those ten years, but no importation by ship from India was alleged, indeed there is no reason to suppose that cholera was imported into Europe from India between 1865 and 1882.

If we accept Dr. Delpino's view that latent cholera was carried from Bombay by pilgrims to Camaran and there became manifest, possibly, as suggested by Mr. Vice-Consul Richardson, owing to the pilgrims partaking of unsuitable food, it is clear that a detention of five days at Bombay would not have prevented the outbreak, and that detention in an observation camp would be no safeguard against similar outbreaks in the future, and would be of no advantage in that respect except in so far as additional time would be afforded for some chance cause to transform the latent into active cholera. It seems clear also that the more hygienic the conditions of detention the less chance there would be of the latency being transformed.

164. The following is a brief summary of the work done at the Central.

Research Institute, Kasauli, during the year under report.

The enquiry in connection with the etiology and mode of spread of enteric fever was brought to a close in the early part of the year, and the conclusions were published in No. 32 of the Scientific Memoirs (new series). In May an investigation of dysentery was taken in hand and is still in progress, the subject, after preliminary enquiries at Kasauli, being studied at Bombay by two of the officers attached to the Central Institute. In June experiments were commenced in connection with the investigation of lathyrism. The preparation and keeping properties of bacterial vaccines were also investigated and definite conclusions, based on a large number of experiments, were arrived at, which may be summarized as follows. (1) Heat is a harmful agent to use in the sterilization of bacterial vaccines and should therefore be avoided. (2) Carbolic acid to the extent of '5 or '6 per cent. is sufficient to render a bacterial vaccine sterile in 24 hours or less, and is the least harmful agent that can be used. (3) Bacterial vaccines prepared by this method give rise to a higher immunising response than when heat is used, and they also retain their original properties unimpaired for a prolonged period. The examination of 1,006 specimens of a miscellaneous character was conducted, a diagnosis and report being given in each case. Advice and assistance was afforded in 114 instances, many of them involving the despatch of cultures and directions. The standardisation of curative sera and bacterial vaccines occupied considerable attention, and the following descriptions of sera were issued, all, except anti-tetanic serum, which is imported from Europe, being prepared at the Institute.

(1) Anti-venomous s	erum	1,159	doses.
(2) Anti-diphtheritic	serum	1,222	"
(3) Anti-tetanic seru	m	860	"
(4) Anti-typhoid vac	cine	4,035	,,
(5) Anti-staphylococ	cus vaccine	300	,,

In addition, 109 bottles of bile medium were prepared and forwarded to applicants in order that cultivations from the blood of persons suspected to be suffering from enteric fever might be made.

The Bombay Bacteriological Laboratory was, as usual, conducted as (a) the Plague Laboratory for the whole of India and (b) the provincial Bacteriological Laboratory. As regards the work of the former, in spite of the fact that the plague epidemic of 1908 was one of the mildest since the advent of the disease, 533,315 doses of anti-plague vaccine were issued during the year, compared with 620,923 doses issued in 1907, and 176,651, 315,905 and 115,161, respectively, in the years 1906, 1905, and 1904. The number of doses issued during 1908, when plague was not severe, points to the increasing popularity of the prophylactic. It is unfortunately not possible to obtain accurate statistical information as to the results obtained from the use of anti-plague vaccine, but the report contains selections from a large number of replies received to a circular letter issued by the Director, which afford ample evidence in favour of the measure.

In the previous year experiments had been conducted with the Clayton gas apparatus for destroying rats in houses, which failed mainly because the structure of Indian houses freely allows the gas to escape from innumerable apertures, especially in the roof, the concentration of the gas near the roof being so low as not to be lethal to rats. During the year under report experiments were conducted with a small type of Leybold's apparatus specially

designed for the destruction of rats in houses. The machine generates a poisonous gas (carbon monoxide), and while effective in killing rats had little or no effect on rat-fleas. As a rat-killing gas it has the advantage that the rats were not frightened away and did not attempt to escape from the treated rooms. The fact that the presence of the gas in quantities fatal to human beings cannot be detected, renders it unsuitable for the disinfection of houses. The Clayton and Leybold's disinfecting gas machines fail to generate and deliver into a room of the ordinary Indian dwelling a large quantity of a fairly concentrated gas in a comparatively short space of time. Experiments, which afford some promise of success, are being undertaken with a view to obtain some gaseous substance which is poisonous to rats and fleas and can be easily generated and delivered into an average Indian dwelling in sufficient quantity to fill a room with an effective gas in a few minutes.

Experiments were also conducted with certain substances and plants to obtain an effective insecticide or insectifuge which could be easily applied and readily and cheaply obtained, and while not being injurious to man or to clothing, would kill fleas. A final conclusion has not yet been arrived at. Experiments with disinfectants on the plague bacillus and on rat-fleas did not yield fruitful results. Some experiments were also made to test the efficiency of various kinds of rat traps. On behalf of the Health Officer, Bombay City, 110,512 rats were subjected to post mortem examination and 13,489 were found infected with plague. During the year second editions, of 5,000 copies, were published of the pamphlets by the Director entitled "The preparation and use of anti-plague vaccine" and "The cause and prevention of the spread of plague in India".

The work done at the provincial laboratory included the examination of 766 pathological fluids and discharges, the examination of 90 specimens of morbid growths and the brains of 37 rabid animals. For the manufacture of antivenene which is carried out at the Central Research Institute, Kasauli, venom was extracted from 106 snakes. Experiments were conducted with a reputed remedy for snake bite, called "Surucuina" and the preparation was found to be of no value. The research work conducted at the laboratory included an enquiry into malarial fevers in Bombay City, the results being so important that it was considered advisable to entrust the work to a selected officer who could devote his whole time to it. The preliminary enquiries had shown that Anopheles stephensi is a malaria carrier in nature, a fact not previously known. An enquiry into relapsing fever was also conducted, but in the absence of the services of a special officer a thorough investigation was not possible. Assistance and advice were afforded to medical practitioners and others. Bacteriological material and equipment were supplied to medical officers in various parts of India, as also certain sera which are stocked for issue, and certain vaccines prepared at the laboratory. Two courses of instruction were given to hospital assistants and many applications to attend the class were received from medical practitioners not in Government service.

The year under report was one of transition at the King Institute of Preventive Medicine, Madras, and the work done is therefore not comparable with that of the previous year. An important change made was the transfer, in July, of the pathological part of the work undertaken by the Institute to the Pathological

Department of the Madras Medical College, and for it was substituted investigation more closely connected with the sanitation of the Presidency. A chemical laboratory was established at the Institute during the year and proved very useful. In spite of these changes the number of specimens examined during 1908 numbered 2,907, compared with 1,893 in the previous year. The Director refers to the notable feature that in the examination of specimens for malaria, 85 per cent. yielded negative results, and suggests that this was due to the practice of administering quinine before obtaining films of the blood. The chief work done was connected with the investigations instituted by Major W. W. Clemesha, I.M.S., Acting Sanitary Commissioner for Madras, on town water supplies of the Madras Presidency, which absorbed almost all the resources of the laboratory as regards both staff and material. Major Clemesha's investigations are of great importance as an attempt to determine bacteriological standards of purity for potable waters in India. The results of the investigations have been published as Appendix I to the Annual Report of the Institute for 1908 under the title, " A Study of the bacteriology of drinking water supplies in tropical climates".

The usual courses in Minor Sanitary Engineering and in Vaccination were held during the year, and attracted 43 and 25 students, respectively.

The work of the Vaccine Section of the Institute has been noticed in Section VII of this report.

At the Pasteur Institute, Kasauli, the number of patients afforded antirabic treatment during 1908 attained the record figure of 1,389 compared with 1,349 in 1907. This is the more remarkable as there is now a Pasteur Institute for Southern India at Coonoor in the Madras Presidency. The total number of patients treated excludes 95 persons who applied for advice but whom it was considered unnecessary to treat. Of the total patients 342 were Europeans compared with 433 the year before, and 1,047 were natives compared with 916. From the British Army there were 131 patients against 181 in 1907, and from the Native Army (including British officers, their wives and children) 99 against 151, while European civilians numbered 159 against 186, and Native civilians 1,000 against 831. Patients came from all provinces and from the Native States of Rajputana and Kashmir-two patients even came from Madras although there is now an Institute nearer at hand. The percentage of failures to the total number treated fell from 0'44 in 1907 to 0'36 which is the lowest rate on record at the Institute. There were 169 cases of bites from jackals, most of which were very severe and multiple.

The work of the Institute as the provincial Bacteriological Laboratory for the Punjab included the examination of 50 tumours and of 372 specimens in connection with the diagnosis of typhoid and paratyphoid fevers, malaria, and tuberculosis.

At the Pasteur Institute of Southern India, Coonoor, 180 persons were treated during the eleven months ending the 29th February 1908 and 340 during the year ending the 28th February 1909. In the first period there was no failure and in the second there were two failures, the percentage being 58. In one of the cases of failure a month had elapsed between the date of being bitten and the date when treatment was begun. The persons treated during

1908-09 included 27 from the British and Indian armies, (among the number being 4 British officers, 11 European soldiers, and 7 Native soldiers) and 34 European and 39 Eurasian members of the civil population. With the exception of one Eurasian and eight natives from Bengal, all the patients were from British or Foreign territory or from Native States in Southern India, and it may be mentioned that 23 patients were from Ceylon, one from Goa and 14 from French India.

165. Plague.-The Plague Research Commission with its head-quarters at the Bombay Bacteriological Laboratory, continued Special enquiries. their investigations into the etiology of plague. The Commission was able to collect further evidence in support of the view that the rat-flea is the chief disseminator of the disease, and was able to show that the differences in the seasonal prevalence of plague in places like Poona and Belgaum, as compared with Bombay and places in the Punjab, can be explained by the difference in the seasonal prevalence of rat-fleas. The Commission was also able to show that the deductions drawn from certain experimental epidemics among guinea-pigs in godowns are also permissible from similar experiments in which wild rats were substituted for guinea-pigs. A large amount of evidence relating to past epidemics in certain districts of the Punjab and the United Provinces tended to prove that the disease is spread in those districts chiefly by the importation of infection from infected to uninfected areas. The Commission was also engaged in an extensive trial of the efficiency of anti-plague serum. Reports of the work done by the Commission will, in due course, be published by the Advisory Committee for Piague Investigation in India.

Dysentery.—The enquiry which is being carried out by officers of the Central Research Institute, Kasauli, was continued at Bombay, and it is now intended to investigate the disease in jails, etc., in Bengal.

Jail dietaries.—The investigations entrusted in January 1908 to Captain D. McCay, I.M.S., Professor of Physiology, Medical College, Calcutta, regarding the suitability of jail dietaries in Bengal, were continued during the year. The results obtained were of great interest and utility, and it was accordingly arranged that the enquiries made in the Bengal jails should be extended to the jails of the United Provinces and Eastern Bengal and Assam. A report of Captain McCay's investigations in Bengal is in the press for publication.

Malaria.—In July 1908 Captain W. H. C. Forster, I.M.S., began an enquiry into the prevalence of malaria in certain thanas of the Purnea and Murshidabad districts of Bengal, and in January 1909, Captain S. R. Christophers, I.M.S., Assistant to the Director, Central Research Institute, Kasauli, was placed on special duty to conduct an investigation of the epidemiology of malaria in the Punjab. An enquiry upon malaria is also being conducted by Major J. C. Robertson, I.M.S., in the United Provinces, and Dr. C. A. Bentley, who relieved Captain A. G. McKendrick, I.M.S., is employed on an investigation of the disease in Bombay City.

At the instance of the Secretary of State a Committee was appointed by the Government of India to enquire into the results of the extensive antimosquito operations that have been carried out for some years in Lahore Cantonment. Mr. R. Nathan, C.I.E., I.C.S., was the President of the Committee and Lieutenant-Colonel H. B. Thornhill, C.I.E., I.A., and Major Leonard Rogers

I.M.S., were the members. The enquiry was commenced at Lahore Cantonment on the 21st October 1909.

166. In August 1909 the Government of India addressed the several local Governments and Administrations Imperial Malaria Conference. on the subject of a proposal by the Sanitary Commissioner with the Government of India that a permanent organization should be formed to enquire systematically into problems, both practical and scientific, connected with malaria in India. They pointed out that because it is essential that the people should be induced to adopt the measures that may be most suitable to the areas in which they live, any scheme for an organised attempt to deal with the malaria problem throughout India should be framed in consultation with administrative officers intimately acquainted with local conditions in the various provinces; and they stated that for this reason the Governor-General in Council had decided to convene a Conference to examine the whole question and to draw up a plan of campaign for the consideration of the Government of India and of local Governments. The attendance of certain selected officers was arranged by the Government of India and each local Government and Administration was invited to nominate as delegates (a) an administrative officer of experience, (b) a medical officer, and (c) an Indian gentleman. The Conference was opened at Simla on the 12th of October 1909, by His Excellency the Viceroy and Governor-General, and meetings were held daily until the 18th. The complete report of the Proceedings is now in the press for publication, but it may not be out of place to insert here a copy of the resolutions and recommendations which were passed and upon which action is now being taken.

I .- SCIENTIFIC INVESTIGATIONS.

- 1. That the Conference is much impressed with the need of further knowledge of the following subjects and recommends that steps be taken without delay for their systematic investigation:—
 - (1) The distribution of malaria.
 - (2) The epidemiology and endemiology of malaria including (a) meteorological and physiographical conditions, and (b) the life history of malaria bearing mosquitoes.
 - (3) The physiological and therapeutical action of quinine and other remedies for malaria.
- 2. A critical examination of the vital statistics of each province should be undertaken with the object of ascertaining the different degrees of prevalence of malaria and the areas which may be regarded as typical for the purpose of further test and investigation. In this connection the Conference invites attention to the researches conducted by Captain Christophers in the Punjab.
- 3. Vital statistics are now collected by villages and are compiled by areas such as thanas and taluks which are often so large as to obscure the true distribution of malaria. The Conference are of opinion that local Governments should provide for compilation by some smaller units such as, villages, village unions, sails, patwari's circles, etc.

The figures thus compiled need not be published but should be kept on record at convenient centres.

- 4. The Conference considers that the existing vital statistics of provinces will throw much light on the distribution and relative prevalence of malaria if the figures for fever are corrected by the results of test enquiries in selected typical areas. Such test enquiries should be carried out in every province by a special staff under careful supervision.
- 5. Where investigations into epidemiology and endemiology are undertaken, special attention should be paid to tracts in which malaria is not endemic with the object of discovering the reasons why such localities are free from the disease.

II-AGENCY BY WHICH INVESTIGATIONS SHOULD BE MADE.

- 1. The Conference having learnt that the Government of India will appoint a Central Scientific Committee to direct and co-ordinate investigations, and that they will also appoint at the request of local Governments or on the recommendation of the Central Committee officers to carry out investigations, recommends that a local organization to work in consultation with this Central Committee be constituted in each province. The nature of such organization should be settled by the local Government and may take the form of the Sanitary Board.
- 2. A Conference consisting of the members of the Central Committee and a delegate from each local organization should be held annually at such place as may be convenient for the purpose of reviewing the work done and preparing a programme of future work.

III .- PRACTICAL MEASURES.

A .- Extirpation of mosquitoes.

- 1. As the extirpation of the anopheles mosquito is obviously the most complete and satisfactory solution of the malaria problem, the Conference recommends that investigations be continuously carried on with the object of ascertaining by what methods this can best be done at a cost which is not prohibitive.
- 2. The Conference makes the following recommendations regarding the measures for extirpation or reduction of mosquitoes which have been placed before them:—

1. Drainage.

- (a) In urban areas where the existing surface drains are found to be the chief breeding place of anopheles mosquitoes, a properly graded surface drainage is a most important anti-malarial measure.
- (b) Though in rural areas the construction of any system of masonry drains is impracticable on account of the cost, yet it is advisable to improve the surface drainage in malarious localities by removing obstructions and filling up depressions in which water stands and anopheles mosquitoes are known to breed.

(c) Both in villages and towns the lowering of a high sub-soil water level when practicable is an anti-malarial measure of primary importance.

The deliberations of the Conference have shown that it will not be possible to protect rural areas by any scheme of drainage which is financially practicable, but it has been found that in some highly malarious tracts the level of sub-soil water has been materially lowered with great permanent benefit by drainage operations the cost of which was not prohibitive. Similar schemes should be investigated in each province for highly malarious localities.

(d) The Conference is unable to make any general recommendatior regarding the prohibition of wet cultivation in close proximity to dwelling houses, for while there is evidence of good results having been obtained by that measure in some localities, there is also clear evidence that malaria is in no way a necessary consequence of irrigating land near towns and villages. Every case of the kind requires separate investigation.

When it is established that malaria in a town is due to anopheles mosquitoes breeding in wet cultivation in the immediate vicinity, such cultivation should be prohibited or restricted whenever possible.

- (e) In Italy some success has been attained in filling up marshes by turning rivers on to them and thus reclaiming them by successive deposits of silt, and the Conference draws attention to this method.
- (f) The clearance of jungle and the thinning of over dense tree growth are desirable in all places in the neighbourhood of habitations where these conditions impede drainage and shelter mosquitoes.
- Oiling.—Treatment with petroleum should be restricted to small collections of water which contain the larvæ of anopheles mosquitoes and cannot be filled up, or drained.
- 3. Fish.—It should be ascertained by enquiry and experiment whether the breeding of anopheles mosquitoes is greatly checked by the presence of fish in tanks and other collections of water; and if this is found to be the case, endeavours should be made to introduce suitable fish where their presence is likely to prove beneficial, and to afford protection to them where they exist.

B .- Quinine treatment and prophylaxis.

- (1) The Conference adopts the conclusions of the sub-committee, regarding the quantity of quinine required (i) for treatment of malaria and (ii) as a prophylactic.
 - (a) Quinine should be given in the form of sulphate or hydrochloride for adults:
 - (b) for children some palatable form, such as tannate, is recommended.
- (2) Generally speaking, the method of selling quinine by treatments is to be preferred to that of selling by the dose, but in order to meet the wants of the

poor it is advisable that both systems should be maintained. It is suggested that the ordinary size of the tablet should be one of five grains, which is the proper prophylactic dose for adults.

- (3) The agency for the sale of quinine should not be limited to postmasters but the services of all grades of officials should be utilized; special attempts should be made to induce private vendors to engage in the business; and the educated classes should be asked to organize means of spreading a knowledge of quinine among the lower classes. The rate of commission should be liberal.
- (4) In order to disseminate a knowledge of quinine as widely as possible, recourse may properly be had to moveable camps, itinerant dispensaries, leaflets, notices and advertisements, especially in the vernacular papers, and to teaching in all grades of schools.
- (5) The free distribution of quinine should as a rule be resorted to only in the case of severe epidemics. This rule will be open to exceptions at the option of local Governments, especially in backward tracts where quinine is unknown, and in the case of school children in malarious tracts and during the malaria season for prophylactic purposes, provided that arrangements can be made to secure that the quinine is actually taken.
- (6) General measures of quinine prophylaxis, such as the sale of Government quinine by all available agencies and the dissemination of a knowledge of the benefits it confers, should be carried out as widely as possible. More specialized and expensive methods, such as moveable camps and the distribution of free quinine to adults and children, should ordinarily be confined to selected areas.
- (7) The Conference is informed that the maximum output of the Indian factories is limited to 100,000 lbs. of sulphate of quinine, which would be sufficient to treat about three million people; and that the world's supply has for some years been stable at one million pounds, or enough to treat about thirty millions of people. These facts have an important bearing on the possibility of treating malaria by quinine. In the event of the supply from the Government factories proving insufficient, it will be necessary to purchase quinine in the open market. In any case the Conference think hydrochloride of quinine should be procured by purchase and should not at present be manufactured in the Government factories.

It is desirable that the area under cinchona should be increased.

C .- Education.

- (1) The local organization in each province should frame a scheme for instructing the inhabitants of malarious tracts regarding the main facts connected with malaria. Such instructions should be given by lectures, illustrated if possible by magic lantern slides, and by leaflets, and pamphlets in the vernacular languages. Private medical practitioners should also be invited to disseminate a correct knowledge of the subject.
- (2) The Education Department should arrange to include in text-books, lessons on malaria and hygiene, and to give similar instruction in normal schools.

(3) The Conference strongly recommends the constitution of divisional and district committees of the nature suggested by Sir Herbert Risley, and of local societies similar to the league started by Mr. King with such success in Gurdaspur. Such committees and societies should consist of both officials and non-officials.

D .- Sanitary Staff.

It is desirable that the Sanitary Department should be organized with reference not only to general sanitation, but also to the suppression of malaria.

E .- Finance.

- (1) Each local Government should be invited to make a special allotment of funds every year for the investigation of the problems connected with malaria and measures of prevention.
- (2) The Conference recognize that the amount of this allotment will depend upon the state of the provincial finances, but they would urge that the prevention of malaria has a strong claim upon all surpluses and increases of revenue.
- (3) Municipal Councils and local Boards should also be urged to set apart funds for the prevention of malaria.
- Periodical reports of the Health Officers of the Presidency towns.

 of the health statistics, etc., of the Presidency towns. The uniformity secured for the annual returns does not, however, extend to the other periodical reports of the respective municipal Health Officers. In Calcutta a weekly as well as a quarterly return is published, in Rangoon a monthly report, and in Madras and Bombay a quarterly report. The form of these reports also differs widely and it would be a useful measure if they could be prepared, as far as possible, on uniform lines and designed to afford a concise and clear account of events during the period under report.
- 168. Since the issue of the last report the following numbers of the Scientific Memoirs have been published by the Sanitary Commissioner with the Government of India:—No. 35, Blackwater Fever, by Captain S. R. Christophers, I.M.S., and Dr. C. A. Bentley, No. 36, Observations on Rabies: with special reference to an atrophic form of the disease occurring in animals, by Major G. Lamb, I.M.S., and Captain A. G. McKendrick, I.M.S. Attention may also be directed to a recently published work entitled, Small-pox and Vaccination in British India, by Major S. P. James, I.M.S.

JOHN T. W. LESLIE, Lieutenant-Colonel, I.M.S.,

Sanitary Commissioner with the Government of India.

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APPENDICES

TO THE

Annual Report of the Sanitary Commissioner with the Government of India

FOR

1908.

TABLE I .- Highest, lowest and mean temperature in shade and its departure from the

			JANU	ART.			Fannu	ARY.			MAI	иси.			Ar	Mil.			Ma	ν.			Jos	XE.	The second
Stations.		Highest.	Lowest.	Mean	Departure,	Highest.	Lowest.	Mean,	Departure,	Highest.	Lowest.	Mean,	Departure.	Highest.	Lowest.	Mean.	Departure,	Highest,	Lowest.	Mean,	Departure.	Ilighest.	Lowest,	Mean.	Departure,
												0							0						
Calcutta (Allp	ore)	\$3.0	47'3	64'7	-1'5	94,1	51"2	72'8	+1.0	103.1	6013	81'7	+1.2	103.1	72'7	9010	+4'3	101'1	6913	86'7	+07	101"1	74"7	86%	+173
Narayanganj	-	80'5	46-8	64.8	-1.8	8910	49'8	70'5	+0*2	100"5	59"3	7973	+0"1	103,0	67'3	8510	+3.3	97'5	68-8	84"3	+07	95'5	71'8	84'1	+0.2
Chittagong		81.1	4974	66-1	-0.8	8971	52'9	71'0	+0.4	97"1	58-4	78'4	+173	94'6	64.0	82-8	+1'5	93'6	67'4	8212	+0.3	91.1	6979	81.8	+0"
Sibeagar		7376	44"2	5972	-07	78-6	48-3	63.1	-0.3	91'6	51'2	70"3	+07	93.6	61'3	76'5	+2.1	9176	66.3	7816	-0.3	93'6	73.3	81-8	-0,1
Silchar		820	47-8	64.7	-0.4	8810	49'8	6879	+0.8	98-5	49"8	75'0	+1.3	101.2	64.8	83.0	+37	95'0	64.3	81'5	+079	95"5	71'8	8377	+079
Cuttack		87'9	507	67:8	-4'5	96-4	54'7	75.7	-1.3	102'4	65.3	8375		1000	75'2	92.0	200	110'4	73'2		+0'4		71'3	877	-0'3
Hazaribagh	***	31.7	35-3	59'8	-2.0	877	45'3	66.3	-0.1	95'7	30.3		-1.0	104'7	69.3	88-1		1057	69.3	89'1	+1*8	108.4	71'3	86-6	+2"5
Patna	***	18.2	41.3	5375	-3.1	84.2	47'2	65.8	-0.1	100.2	5373	10.3	100		74'7	89'9		109.2	20.2	80,3	+1'3	Will.	71.3	897	+1'5
Darjeeling		53.3	317	43'0	+1'2	54'8	33,3	44'2	+374	65'8	35'2	50'9	+1'5		48.3	597	+4'1	69'3	43'3	58'0			23.3	93.0	
Allahabad	947	81.6	39.0	55'9	-1,3	93.6	44'0	66.5		105.2	50'5	76'3	-1.1	112'6	66'5	91.1	3000	114'6	76.0	95'6	1000		79'0	96,1	+40
Lucknow		79'5	37.6	57'5		91'0	45.6			105'0	49'6	75'4		108.1	65'6	800		114,0	69.1		+2'1		70'5	9379	+2.0
Delhi	***	77'6	38.8	53"7	-0'1	8915	30.8	62.0		101'6	43'3	71'3	-11	1097	647	857	3273	110'5	65'8	93'7	-03	115'2	807	88.3	+3'5
Agra		79'0	38'0	58-8	-0.0	900	43'5		+0'5		40'0	74'2	-07		650	88-6		113'5	71'5	93'5		114'5		967	+373
Jhousi		88-8	41.1	63.3	-0'4	95'8	48":		+1-87		55%	78.1	-1.0		68-6	93'4	1000	114'3	74'6	97'7	13 13	116.3	Sors	9972	+5'8
A)mer		80'4	40.3		+0%;				+2'57					107"4		85'0		108'4			+1'78		75'2		+273
Saugar		84'6	350	63'5		92'6	45'0	100		101"1	52'5	75'1		107'1	670	88-8	+17	43.00		92'7	199	109'6	73'5	91'8	
Jubbulpur		85'0	36.3	dors.		94'5	40'8		-0'8		47'8			109'0	63.8	877	100	111.0	71'3	93'4		110'5	71'3	9372	- 100
Multan		76-3	40.0	57.6	+0.0	86'3	400	61.8	+173	101,3	40'5	71'1	-14	109'8	56'5	8379	+0"1	117'8	63'5	93"1	+10	117'3	78.2	97-8	+272
Lahore	***	76.4	37"2	56-0	+ 2.0	85'4	38"2	or:	+27	100'4	397	69'1	-0.0	10974	56-7	81.3	+0.03	114'4	64'2	897	+0'3	116-9	707	95'0	+1"6
Peshawar	***	20.3	36'4	51'3	+018	737	34'9	547	+0.3	89.7	3819	63.1	-0.0	94.3	52'9	727	-1'1	107"2	59'4	827	-116	117'2	979	94"1	+2'5
Chakrata		65'3	29"7	47'5	+4"2	76"3	26.4	47"1	+3'4	20.3	31.7	53'9	+0.0	79'3	43.3	6370	+1'9	84"3	4477	66-8	+114	85'3	50'7	6979	+1%
Indore	***	85.1	4171	63'5	-11	9376	400	67.0	-0.1	103.1	45'1	73'4	-2.1	105.6	63'1	86'4	+1'3	109%	70'5	8919	-0.5	104%	20,1	8613	+174
Doesn		90-3	46.4	67.3	-0.3	98:3	4114	68-9	-2'0	10973	43'7	77'1	-3.8	111.3	51'9	86-8	-12	109'8	71'4	90.8	-1.3	110%	77"4	98'1	+0/5
Kurrachee		23.0	49*3	66'2	+0'5	5914	447	68-6	-0'3	100'9	4772	747	-114	101'9	63'3	81'8	-0.1	1059	73'7	96.0	+0.3	90'9	Sora	8-83	+0'8
Bombay		87-5	61.2	75'0	4-0"7	9000	60'5	76'0	+0'3	8gro	63'5	78.0	-1.6	1000	75'5	\$2.8	+07	92.0	18.2	85'4	-0.4	950	77'5	85'1	+175
Belgaum	-	55"3	45.6	697	-0.8	92'3	,tard	73'9	-0.3	95'3	5176	77"4	-17	100'8	6316	82'5	+0'8	103.3	64'6	80-3	-0.2	95"3	64.0	75'6	+171
Nagpur		8916	44'1	67'0	-2%	97'1	46.1	74'3	-0.3	104'6	55"1	8074	-3.7	11175	68%	9913	+1'3	117.0	77'1	97"1	+15	1126	6816	920	+3%
Bellay		94'5	57'3	75'6	+116	9970	57'3	8079	+0.4	10370	63:3	84.8	-1'4	fogro	69.3	91'9	+1'5	110,0	70'3	50.7	+0.3	105.0	72'3	86-8	+17
Bangalore		88-3	\$1.8	70'3	+17	8913	528	71.8	+0.1	93.8	51'3	10.8	-1.0	99.8	65'3	81/8	+1.0	97'8	62.8	79'9	-6.1	63,2	64.8	77'1	+1'4
Madras	***	88-0	60'5	76'3	+0.3	92'5	64.0	77'4	-0.1	97'5	dars	8:15	-0.0	109'5	75'5	8772	+971	109'5	780	91'2	+1%	107'5	77'0	93"4	+278
Rangoon	***	93.1	6014	77"3	+016	08-1	6019	797	+0'4	101.1	6619	841	+0/3	103.1	7279	87'7	+0"3	981	73'9	83'4	-1.3	93.0	73'4	80%	-0'6
Akyab	***	8074	57'3	6973	-13	88'9	57"3	73"3	-1.0	62.0	60-8	78-3	-07	95'9	73'3	84'8	+0'9	93'9	71'8	84'4	-0.1	9079	74'3	81.0	-0,3

average of each month of thirty-three stations in India during 1908.

	Jes	LV.			Aug	DAT.			Sapti	MREE.	9 11		Осте	ers.			Novi	NBIR.			Duce	MDER.		
Highest,	Lowest.	Mean, .	Departure.	Highest.	Lowest.	Mean.	Departure.	Highest.	Lowest.	Meas.	Departure,	Highest.	Lowest,	Mean.	Departure.	Highent,	Lowest,	Mean,	Departure.	Highest.	Lowest,	Mean.	Departure,	Stations.
03,1	76'2	83'5	+0.2	99'6	76'7	82-6	+0.0	93'6	747	8379	+1'2	93.1	637	81'5	+170	88'1	57"1	72'8	-0.3	83'1	497	65:8	-0'5	Calcutta (Al Ipore
91'5	74'8	83.3	- 0.2	93'5	75'3	84'1	+079	9175	74'8	840	+0.3	93"5	65'8	81-8	+0.3	87.5	59'8	74"1	-07	82'5	23.3	66'7	-1'2	Narayanganj.
89'6	75'4	807	-0'5	90'6	73'9	\$1.4	+0.0	92'6	73'9	81'4	-912	90'1	62.4	79'3	-07	87.1	58'9	73'4	-1.0	82-1	49"4	65'7	-3.4	Chittagong.
92'6	13.3	82'4	-1'5	93'6	75'3	8216	-0.8	91'6	68-3	81.4	-07	87.6	60'7	76'9	-0.0	70'6	50'3	66-8	-3.3	73'6	43"2	58'9	-3,3	Sibragar,
91'8	74'8	83.0	-08	95.8	74'8	83.2	+0.3	95'8	73'8	81'3	-0'3	90'8	61'3	79'3	-1.3	88.3	55'3	73'1	-1.1	8273	46'3	65'1	-3.3	Stichar.
83.0	7612	83'4	-0'8	90'4	74'2	82'0	-1.7	93'4	757	8379	-0.3	92'4	67.7	81.0	-0'2	8814	59'3	73'8	-1'9	85'4	50-7	67'3	-3'3	Cuttack.
98.3	79'3	79'3	+0"1	86'7	72'3	78.3	-0'2	88.3	70'8	7900	+015	857	50'8	75'1	+0.1	82'7	53'3	66-8	-0'9	777	43'3	607	-07	Hazaribegh,
102'0	77'2	85'7	+17	97'5	247	26-4	+2'1	95'0	74'3	84.0	+0.4	93'5	61.7	80'1	-0.3	87'5	53'3	70.8	-0.3	75°0	45'7	61'7	-1.3	Patea.
72'3	55.5	6219	+17	71'8	23.3	61.3	+1'0	20.3	54"7	61.3	+1'5	70'3	417	36.3	+1,3	58-3	39'2	49'3	+0.4	58'3	34"2	44'9	+2"3	Darjeeling.
05'1	75'0	8612	+0.3	95'1	75'0	84'4	+0.3	9776	71'0	85'4	+172	96"1	5610	79'6	+0.2	91'6	49'5	69.6	+0.2	8016	3975	61.1	-0.1	Allahabad,
05'5	74'5	86'1	+0'4	95'5	76.1	84'1	-0.4	97'0	70'1	8416	+0.3	950	\$375	78-3	-0.3	89'5	45-1	68.1	0	Soro	39"1	60.3	-07	Lucknow,
9976	.72'8	84'0	-1.3	54.1	75'8	82.1	-1'5	95'6	65.8	82'3		9316	51.8	15.9	-0'5	89'1	46-8	66-3	+0.7	79'5	33.8	58-8	0	Meeruf, Delhi,
08.3	75"2	85-6	-079	92.7	73'3	83'4	-3.3	68.4	73'3	85.0	+0.1	97'2	5977	86"1	+0.6	557	50'7	70'0	+0.3	78'2	427	60'7	-0.3	Agra.
99'5	75"0	85'3	1	94.0	74'0	83.9	-1,1	90.2	74'0	84.4	+0.2	95'5	20.2	82'6	+1'6	80.0	49'0	75'4	+1-5	84.0	42'5	65"1	-0.1	Jhansi.
00,0	71'2		-1.6	87.4	73"2	100	-2.1	91.0	67'2	79'3	-3.0		22.3	1	+0.3	87.0			+1'3	80"4	30,8	60'8		Ajmer.
95.1	70.0		-1.3			1000	-1.0			1832	+00	1	1000	100	+17						45'5	63.8	-0'5	Sauger.
9370	71-8	1000	-0.0	Line	1		-10	1		13.0	+0"3			100	-0'5	8810	44'8	67.0	-0'5	Sone	36'3	59"5	-20	Jubbulpur.
111.3	780	1000	+0'4	2 0		90'5	-1.0	100'8	700	86'1	-29	97"3	550	1917	-0.3	80'8	47'5	61.8	-0.7	75'8	37"5	55'1	-11	Multan.
112'4	73'7	8816	-1'5	97'4	73"2	858	-4'2	97"4	65.7	83.0	-27	96.4	50"3	26.6	-0.2	85'4	43'2	65.0	+0-3	26.4	36-3	25.3	-0.1	Lahore.
118-3	73'9	9112	0	104'3	70'9	16-6	-1.0	95.3	63.0	79'8	-3.3	90.3	4979	71'9	-079	8212	30'9	61.6	+0.2	75'7	32'9	51'5	-1.8	Peshawar.
75'3	57"2	65'3	+0"3	71'3	56.3	63'7	-0.2	76'8	547	617	+1'8	75"3	44'2	61'5	+2.9	65'3	22.3	23,3	+0.3	65'3	30'2	47'6	+0'5	Chakrata,
83-6	70'6	77'2	-13	84'1	69.6	70.3	-0.0	03.1	63.1	77.7	-07	93.1	59"1	7619	+121	9216	48'1	70.3	+17	8216	39"1	-63'4	-0.9	Indore,
103,3	73'4	817	-3'0	91'3	72'9	80.2	-1.8	105'3	65'4	\$379	+0'5	100'8	5979	82.6	+0'7	100'3	49"4	74'8	+0.3	88-8	40'4	66.9	-2.3	Deesa,
95'4	25'5	84"3	-1'3	91:0	74'0	81'7	-1.8	91.2	71'5	8017	-1.3	9510	650	7918	- 2757	92'0	59'5	74'1	076	88'5	53'5	69.1	+1.1	Kurrachee.
850	75'5	80"7	-0.3	850	75'5	80'0	-0.2	90'5	75'5	\$1.2	+1"1	32.0	73'0	82'8	+0'8			79'3	-079	87'0	64'5	76'0	100	Bembay.
76'8	6516	70'4	-0.0	77'8	65'6	70'8	-0'4	1	1	200	+0'4	1	100		+1'4	87.3		1000	-0.3	8413	200		-1,3	
93'6			-1'0		71.6		-1'8			\$1.2	0				-0'4	92'1		-	-176	85-6			-	Nagpur,
950	la la		-0.3	100	71'8	1000	+0.0	1500		1000	-0.7	100	000		+3.0	94.0			+0'5	1000	54.8		-0'8	
25.8			-1.1	85'3			-0.4			7.03	+1'1				+1.4	85'3			+0'4				+0.3	
101.0	100	100	+1'0	100	1	1	+11	100	1.8	and the	-1.2	1000	1.30	and the	+0.3	87'5		90 6	-1,1		01.2		+07	Rangoon,
88%	1				73'9		-0'5				+07		1		+0.8	87.0			-1'1	84"4	57-8	460		Akyab.
25.0	75'3	50,0	-0.3	86'9	75'8	90.2	-0'4	89.0	75'8	08.0	-0.4	60.0	71'8	01.7	-03	-/9	10.3	12.0	- 23	-44	31 0	103		

11.-Monthly and Annual RAINFALL and its departure from the average at thirty-four stations in India during 1998.

					-	Ap.	per	nd	ix	to	26	ecti	1011	1	-	-,32	et	001	rol	08.	y.													7
	TOTAL.	Inches.	+21,31	-178	12.1-	-14,21	-15.80	+8.30	10.0	to 27	130.81	-3.40	+4.84	+13.18	+6.73	+8.30	+14.43	19.00	+1.33	+1,10	+13,36	+ 7.97	1230	-8.80	+13.30	08.11	-21.67	09.9+	+0.24	+3.43	98.6-	+4.40	+13.34	411.38
	To	Inches.	80.77	02.19	95.35	81,70	68.61	06.49	47.35	20.00	07.00	35 42	36.91	40,52	35'15	18.91	36.22	45.93	60.33	60,01	33,36	31,01	40.30	24.75	37.82	6.46	53,34	\$6.73	\$0.03	14.76	25.80	24.92	109,23	200,28
DECEMBER.	Departure.	Inches.	-0.13	91.0-	-0.83	-0.37	94.0-	-0.57	-0.30	010-	20.01	-0.38	-0.38	-0.53	-0'27	61.0-	-0.37	-0.10	40.17	61,0-	90,0-	+0.40	9,0-	-0.30	90,0-	-0.13	90.0-	9	61.0+	11.0-	-0,31	19.4-	50,0-	-0.20
Deci	Actual.	Inches	NH	NII	Nil	NII	NE	NE	NIL	Mar	20,00	Nil	0,30	NIL	0,02	0.02	Nil	NII	0.20	Nil	0,30	0.73	0.00	Nil	NI	Nil	MI	Nil	19.0	Nill	0.17	1.35	to,0	Nil
November.	Departure.	Inches.	19,0-	1.07	+3.37	-0.03	+ 0.55	10.1-	00.00	-0.22	0000	10.11	+0.31	11.0-	11.0-	-0.13	-0.17	-0.15	84,0-	20,0-	10,00	24.0-	10.38	-0.34	-0.17	10,0-	64.0 -	-1.45	-0.81	86.1-	-3.30	-2'01	+4.60	+2471
Novi	Actual.	Inches	10,0	Nil	4.85	Nit	17.71	MIL	Nil	N. J.	N.11	NIL	0.34	Nil	NE	Nil	0,03	0.31	Nil	Net	Nil	NG	Nin	0,01	Nil	NII	Nil	0.34	Nil	Nil	20.0	12,03	7.03	27.48
Остовки.	Departure.	Inches.	-2718	96.1-	18.0+	- 0.39	-1.73	-3.62	-1.25	2 5	# : 1	90.1-	-0.35	90.0-	to,0+	tg.0-	62.0-	12.1-	-1.26	NET	7.0	+0.03	12.17	-1.43	-0.27	Nil	- 1.62	10.5-	-2,43	+3.10	7.77	+13.08	61.5-	+2,14
Oct	Actual.	Inches	16,1	2,25	7.18	4.00	4.30	1.03	1.89	TANK!	160	0.10	NII	NH	0.43	Nil	NII	Nil	0.30	NII	90.0	0.12	Nati	NI	10,0	N:3	0.62	0,05	10,0	0.57	2,33	24.22	4,50	12,43
SEPTEMBEP.	Departure.	Inches.	- 1,03	+8.2 -	41.46	+0.37	86.0+	40.01	-5.48	96.2	16.01	-2.01	-3.57	8.7	-3.54	-2.30	+0,37	16,1-	-4,01	+3.01	-0.53	+4.51	-5.15	-7.10	-3.88	05.0-	-4.06	-2.30	+0.23	+4.69	94.1-	+4.20	-5.33	-2.30
SEPTE	Actual	Inches	7.89	5.73	12.24	12,33	14.03	10,04	3.40	3.65	15 04	2.18	1.73	0.05	69.0	3.30	2.30	2.40	3.89	3,36	1.40	4.73	1.30	0.38	01,0	10,0	6.30	3,34	6.51	9.31	4.47	9.21	10.47	89.91
August	Departure.	Inches.	+2,03	-5.17	(2,51-	86.8-	+ 20.0	+1271	-3.04	-4.48	500	+2.33	16.87	+ 14'43	+5,62	47.39	+ 9.45	+ 10.07	\$6,014	+0.33	\$ 15.03	+0.18	+ 3.30	2.08	+3.00	87.1-	07.7-	+5.13	+1.84	19.1-	-3.10	59.0-	+10,02	+13.60
Au	Actual.	inches	14,43	6.84	4.52	7.36	22,36	15.61	95.0	010	16.81	14'06	16.13	25,52	13,39	19,00	02.91	23.04	27.43	3,34	50,30	3.14	62.01	5.48	6.62	0,40	18.6	13.50	12790	0.68	1,40	4.70	30.80	22,00
July.	Departuse.	Inches.	+15.37	+5.87	+15,53	08.94	+5.0-	1.00	+5.27	1000	6/11/2	+5.36	44,03	+ 5.36	+6.35	+879	+5'55	+2.14	\$1.0	+ 0.40	05.0+	11.32	40.1	+4.43	+17.49	41.45	-2.40	+13.03	-0.83	06.0	40.05	60.0-	-2.37	06.9-
Ju	Actual.	Inches	49.42	17.88	31,17	25.52	17.89	9.37	19.08	+500	27.51	68.91	14:27	13.84	17.15	16,02	15.01	17.41	20,00	2.91	93.9	0.30	21,24	13.42	27.65	5,111	23.02	29,38	13.81	0.78	4,13	1.73	19.81	45,72
JUNE.	Departure	Inches.	+1477	+1.0-	-7.07	-4.40	-6.18	+0.48	10.35	20,4	-6.32	-5.54	00.1-	-3.33	19.1	27	+ 0.03	-7.34	-2.80	09.0-	- 0,40	-0.03	60.51	25.1-	61.2	14.0-	-7.34	84.0-	+3.47	66.0-	64.1-	-1.92	\$1.7+	-8.34
30	Actual	Inches	26.32	06,11	69,41	61.6	12.81	17.30	61.9	4 .00	0.00	0.47	1.89	61.0	1,76	1.24	2.50	1.45	09.9	0,03	1,6	0.33	17.80	4.80	0.08	NE	12,30	3,00	66.11	0,20	1,16	60,0	31,05	36.22
AY.	Departure.	Inches.	to.1-	+3.36	10.1-	41.11	+0.20	-2.37	-1.03	7	00.00	00,0-	-0.05	62.0-	60,0-	01.0-	87.0-	-0.20	-0.25	-0.10	94.0-	-0.30	-0.63	-0.29	-0.35	NE	14.0-	-0.33	-0.65	84.0-	+2.08	-0.83	+ 2.49	91.9-
M	Actual.	Inches	40.4	13,00	6.53	84,11	17.74	1.87	0.21	0.53	N.	0.11	0,25	0.43	0.47	0.31	0.33	Nil	Nil	0,50	90.0	0.47	94.	Nil	NH	Nil	NII	3,10	0.01	1,30	3.30	0.01	13.21	5,12
III.	Departute.	loches,	7.3	-1.28	+4.05	90.1-	-10,00	86.0-	66.0-	12.0	13.10	10.01	01.0-	- 0.00	10.0-	-0.07	-0,11	to.0-	80,0-	+0.13	+0.40	+ 3.62	- 1.03	Nil	10.0	-0.32	10.0-	08.1-	-0.48	62.0-	-0.34	-0.40	+1.18	-1,30
APRIL.	Actual.	Inches	0,31	2,63	2.80	5.44	3.01	Nii	Nii	IV 16	N.	Nil	60,0	0,15	0.00	0,02	NIL	0,02	0.13	0.83	0.83	5.37	1.08	0.13	NIL	Nil	NIL	0,10	Nil	0.45	0.72	Nil	3.01	0.03
сн.	Departure.	Inches.	61.1-	-2.48	-2'27	14.33	-8.31	-0.30	-0,31	10.0	41.14	10.50	19.0-	-0.20	92.0-	-0.03	to.0-	+0.38	10,0+	-0.33	-0.63	-1,43	8 :	+0.01	-0.05	61.0-	to.o+.	-0.33	+0.32	+0.08	-0.43	-0'21	-0.30	-0.25
MARCH.	Actual.	Inches	Nil	0,32	0.47	0.88	0.30	6,0	0,20	0.33	2 00 x	0.10	Nil	. Ni	Nul	0.24	0.13	0.02	0.44	Nit	0,03	0.02	0.00	0.02	Nil	NII	90.0	01.0	0,13	0.33	90,0	Nil	NII	NE
FEBRUARY.	Debutnie.	Inches.	00,1-	-1.28	+0,50	-0,30	18.1-	94.0	+5,31	41.07	+0.18	-0.34	90.0-	-0.15	-0.50	-0.33	-0'24	14.0-	81.0-	00.00	01.1-	4 0,50	+0.03	-0.18	-0.00	16.0-	+0.02	-0.03	10,12	+0.18	60,0-	+0.25	10.31	-0.13
FEBR	Actual.	Inches	Nil	NEL	1.18	1,78	0.44	Nit	3,00	1.07	6 1	0.47	98.0	0.20	NII	60,0	Nit	Nil	0.38	0.13	NEL	1,12	2.35	Nil	0.03	NH	0.01	NII	94.0	0.30	Nil	0.48	0.00	Nii
ARY.	Departure	Inches.	+0.54	+0.15	+0'13	+0.25	-0,30	40.10	-0.31	+0.18	+0.15	0.00	-0.53	+1,30	+0.73	+0.70	+0,43	90,0+	90.0-	-0.03	19.0+	+ 1,00	70.0	+0.15	+0.14	61.0+	10,0-	10,0-	11,0-	+0.47	+3.81	- 0,20	=0.13	90.0-
JANUARY.	Actual	1 8	0.86	0.63	0.43	1.53	0.23	0.02	0.37	0.74	0.83	0 40	0.83	1.53	1.50	1.35	0.87	0.10	97.0	0,40	1.73	3.60	3 :	0.18	62,0	0.83	60.0	Nil	0,33	95.0.	10.4	0,03	Nil	NE
- Carlotte	45000	1	_	-	i	1		i	i	-	1	1				:		:	:	-	-	1	*			-	-	:			-			1
San I	Stations.	1	Calcutta (Alibore).	Narayangani	Chittagong	Sibsagar	Silchar	Cuttack	Hazaribagh	Patna	Darjeeling	Allahabad	Meeruk	Delhi	Agra	Ihansi	Ajmer	Saugor	Jubbulpore	Multan	Lahore	Peshawar	Ranikhet	Indore	Deesa	Kurrachee	Bombay	Belgaum	Nagpur	Bellary	Bangalore	Madras	Rangoon	Akyab

		1810)	Ange .	0.8231	E HATEO	TAR		R	ATIO	PER I	MILLE	OF S	TREN	GTH.			
				of the same	Annual	into	1 ,					1	DEATHS	FROM			
A-ARMIES	AND	DIVISIO	ONS.	Years.	Average strength.		Constantly sick.	Deaths.	Invaliding.	Cholera.	Small-pox.	Enteric fever,	Heat-stroke.	Tubercle of the lungs.	Paeumonia.	Dysentery.	Abscess of
			1	1907	36,551	744	46	8:34	22	.05		260	-68	-27	-41	.33	'90
lorthern Army		-		0	.6.6.6							200					.0_
			(1908	36,676	939	49 50	8:32	16		.03	3.13	79	.13	*46	35	1-19
outhern Army			}		3,,,,,	,	30	032	3.				-3			33	
			1	1908	30,243	724	44	7'51	16	-23	.03	2*28	-26	.13	'33	.46	.76
	*		No.			-		-	-								
t (Peshawar)	Divisio			1907	2,478	1,158	61	4.84	27			2'02	***	'40	'40		'40
A CONTRACTOR OF THE PARTY OF TH				1908	3,019	1,431	61	18-89	15	2.98	***	7'29	2'32	-66	-33		1.33
			1	1907	7,270	728	43	6.46	20			3,30	*14		'41	.28	*83
ed (Rawalpindi	" (100								les !			13	
			(1908	6,909	877	48	13'32	21	-87	***	4.63	'43	.38	'43	*29	-87
d (Lahore)	18	116		1907	8,710	648	38	7.58	12	.11		2.23	·So	*34	.11	.11	*57
a (Danier)	"	100	1	1908	8,572	881	50	7.70	11	*35		1'75	.70	.47	'35	.58	1.03
			(1907	4,422	784	41	7'46	29			2:26			-23	*23	'45
th (Quetta)					1991	Fine	1 2								1	1-116	
			i	1908	4,003	610	33	5.75	18	.25	***	1.20	-25	*25	.20		'50
th (Mhow)				1907	6,731	861	45	10'40	39			5'94		***	15	*30	1.19
in (senow)	"	1		1908	6,730	899	43	9.06	10		'15	3.13	*74	'15	.30	74	.59
			1	1907	6,838	723	48	746	20		15	263	*15	.29		14	1'02
th (Poona)	10		4														
			i	1908	6,534	642	41	7'04	11			1.00		.12	-61	"15	1.07
100				1907	8,466	821	52	9°57	30	***		4,03	-83	'35	*35	'35	-85
th (Meerut)	10	Total .		1508	8,656	1,114	53	8.90	16	***		2.77	'23	-12	-58	-35	-69
			(1907	9,628	667	45	10.58	24	.10		1.87	1'04	'31	'73	-62	1'45
th (Lucknow)	,				139			13									
			i	1908	9,521	723	42	10.01	17	1.02	.111	2-63	1.10	.11	'53	'53	*74
191				1907	8,135	780	62	7'99	35			3.30		'25	37	25	1.72
th (Secunderab	ad) Di	rision		1908	8,143	706	51	7'49	.16	*25		270	*25		'12	'37	-86
			(1907	3,800	761	46	8-16	21			*79			*79	79	1'31
urma Division					13.11			1								11/12	
	100		1	1508	3,733	745	51	8:30	17	1.07		1.88		.'27	-27	*80	*54
				-					-						101		
den Brigade				1907	1,099	850	43	7'28	63					-	.91		.91
origane		The same	-{	1908	1,100	629	41	4.55	26							1.82	.91
					-			-			-	-					-
No.			1	1907	69,332	756	46	8.18	26	.03	*01	2.77	•38	*20	'35	.33	1.01
NDIA			1	1908	68,933	840	46	9.78	16	1,10	*03	2.76	'54	*23	.39	'42	*80

жин	10 252	Ang o	SAR			RATI	O PE	MILLE	OF STRE	ENGTH.	-		3
seas region									ADMISSION	S FROM			
B-Groups.	Years,	Average strength.	Admissions.	Constantly sick.	Influenza	Cholera,	Small-pox,	Eateric fever.	Malaria.	Pyrexia of un- certain origin,	Paeu monia.	Dysentery.	Veneral diseases.
		1					1000						
	1897-1906	1,148	1,260	77	17'2	***	.8	6.3	135'4	76.6	1'2	368	419'8
Group I.—Burma Coast and Bay	1907	1,294	726	45	2'3	***		***	86.2	166.3	-8	19'3	135'2
9	1903	1,276	683	48			***	116	93.3	82.3	-8	21,3	112'1
1	1897-1906	2,195	1,253	78	4'2	1'0	1	3'7	339"7	41'4	2'4	18.8	332'4
, IIBurma Inland	1907	1,727	778	45	3'5	***		5'2	77.6	68'9	.6	13.3	148'2
· ·	1908	1,751	761	48	***	5,3		12'0	617	90'2	1.7	5'1	120'5
	1897-1906	1,973	1,319	80	16.8	10	-4	0.1	3806	31.6	3'5	546	333'9
,, IVBengal and Orissa	1907	1,953	791	5.5	56	***	2'0	41	128'5	94'2	77	18'4	189'5
i	1908	1,756	844	45	171		*6	3'4	1407	168-6	3'4	12'0	124'1
	1897-1906	6,558	1,058		-10			200	soft.	rate	2.0	22.8	
, VGangetic Plain and	1907	6,556	677	73	7'0	1.6	1'0	25'2	196°6 85°7	59'0	5.1	16.0	296'4
Chutia Nagpur.	1908	6,641	715	43	6.2	1'7	3.6	17'3	136.6	134'6	6.3	16.0	68'5
45. 1			1				3						
	1897-1906	12,719	1,146	71	4'4	7	'4	24'0	319'0	29'1	5'2	17.7	250'1
,, VI.—Upper Sub-Himalaya	1907	13,391	798	45	6.2	.1	3	13'5	1981	43'5	3.9	6.4	72'3
10 10 10 10 10 10	1908	17,428	1,148	57	14'4	7	1'4	18.3	466.0	72.2	5'6	10'9	54'8
VIINorth-Western Frontier,	1897-1906	4,754	1,243	67	18'2	*1	1'0	15'5	452'3	39'4	6.0	14'0	211'1
Indus Valley and North-	1907	4,621	1,062	55	89'8	***	17	7:4	3926	25'8	4'3	3'7	64'3
100	1908	4,894	1,254	53	20'8	2'0	-775	20'0	500'4	210.2	5'5	9.8	49'7
	1897-1906	5,922	1,305	81	4'9	.7	1'5	33'5	391'1	23'2	3'6	22'0	322'0
,, VIII,-South Eastern Rajpu-	1907	5.730	842	45	0,0			23'4	245'9	197	2'4	16'2	82'9
Gujarat.	1908	5,528	1,007	44	3'4		'4	9'9	4076	75'1	2'5	15'9	65'7
				100	1000								-
(1897-1906	9,456	1,099	71	10'2	9	9 '9	21'1	209'6	34'4	216	24'3	330'8
, IXDeccan	1907	10,260	709	48	1,3		'5	18.1	89'8	33'5	1'9	19'4	96.9
· ·	1908	10,288	668	40	3.0	7	'4	18'5	139'0	43'7	3'9	216	826
1	1897-1906	1,559	896	63	2'1	-1	'9:	4'0	147.6	17'0	2'9	12'4	288'5
" XWestern Coast	1907	1,372	738	53	***	7		3,3	188-8	9'5	7	8.0	148'7
i	1908	1,485	703	51			***	2'0	264'6	5'4	1'3	18-9	1098
2 13 13 13 13 13 13 13 13 13 13 13 13 13			-						1			100000	-07/09
1	1897-1906	3,302	1,117	68	3.6	. 3	'5	16.0	154'9	39'5	3.0	23'7	332'0
,, XISouthern India	1907	3,537	807	60	.8		.3	21'5	42'1	34'2	4'2	19'2	1547
	1908	3,671	762	55	.2	.3		14.2	54'5	42'0	1.0	25'6	117'1
	1897-1906	0.049				8	2410				-	-	
" XII.e.—Hill Stations	1907	11,689	625	55	6.5	.3	.,	21'9	101'7	26'7	5'1	13.0	207'8
	1908	10,923	575	39	10,3		'3	13.0	113'3	25'5	27	8.6	54'4
			-13	, 33	30	3	119	-30	33	-33	1		303
	1897-1906	3,358	1,086	75	5.6	12	'2	15'4	234'8	12'4	4'3	18'5	225'3
, XIIs.—Hill Convalescent De-	1907	3,515	797	62	4'8			8.0	177'0	8.8	1'4	10'0	101'8
1 9 4	1908	3,812	754	65	1.6	***		10'8	165'5	19'2	216	10'2	66.6
4 21 - 3		200	1 1 2 2	1 65	1 8	1	107,3	800	1/2				
1	1897-1906	66,891	1,107	68	7"1	7	.6	20.8	266'0	33.0	4'1	22'5	271'5
INDIA	1907	69,332	755	46	12'5	0.	14	13'1	153'8	36.8	2'8	11'7	8979
	1908	68,933	840	40	6.3		18		1330	300		11/	6916

Appendix to Section II-European Troops-concluded.

C-Admission and death rates from Enteric fever in stations of over 1,000 strength.

		19	908.	DECENNIUM	, 1897-1906			15	08.	DECENNIUS	1897-1900
Stations.		Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.	Stat	ions.	Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.
Jubbulpore		34.6	3.92	32-1	8.44	Ranikhet		14'0	3.02	23'4	3.62
Rawalpindi		51.0	6.17	26-3	5'29	Kirkee		10.1	1.84	30'6	4*47
Peshawar	-	31.3	721	29'4	11.48	Poons	Pice-	9.8	.23	23.0	512
Meerut		27'4	6.61	35'9	10.31	Ambala		8-3	2.61	30.0	7.78
Jhansi		26.2	8.85	35.6	10.75	Karachi	0000	6'0	*86	5'5	1.63
Secunderabad	-	25.9	5.17	22'0	4.87	Fort Willia	m	5.1		3'4	-36
Cawnpore		25'4	7'51	15.5	3.13	Chakrata	-	4'3		24'9	2.80
Sialkot		2019	5'43	16-1	5.50	Mhow		4-1		35.6	8'45
Bangalore		19'0	1.22	23.9	4'03	Bareilly	165. m.	3'5		14'9	3.11
Quetta		17'9	213	30.1	7'34	Wellington		2.9	-96	11'2	1.20
Belgaum		146	3.88	8.3	2*44	Aden	-	1.8		6-6	2'48
Lucknow		14'3	4.48	39'3	8:35	Colaba	man	1*7	-87	3.5	1 62
	67 19		-	- 1	1 100	Rangoon	2000	1.6	-78	6.0	1.78

			100	DOF	FICERS.			E.—W	OMEN.			F.—Сн	ILDREN.	
Per	iod.	-	Average annual strength.	rate per	Constantly sick rate per 1,000.	rate per	*Average annual strength.	Admission rate per 1,000.	Constantly sick rate per 1,000.	rate per		rate per	Constantly sick rate per 1,000.	Death rate per 1,000.
1897-1906	21 10	-	2,060	798:2	29-6†	14'42	3,052	736-8	34'1	14'02	5,211	528-6	25'2	41.68
1907			2,20.4	633'4	256	771	3,496	6576	28.8	6-58	5,379	368-3	15'3	32.72
1908		***	2,188	668-2	25.2	9.60	3,696	719.7	30'5	13.23	5,819	450'1	16.3	50.18

^{*} The decennial rates are, of course, worked on the total strength of the ten years period. † For eight years period (1899-1906).

Appendix to Section III-Native Troops.

	00.3.3						RATIO	PER	MILLI	OFS	STREN	GTH.			-
Some of the second				-soq	123					DEATH	S FROM				
A.—Armies and Division		Years.	Average strength.	Admissions into pital.	Constantly sick.	Cholera.	Small-pox.	Enteric fever.	Malaria.	Tubercle of the lungs.	Pneumonia.	Dysentery.	Abscess of the liver.	All causes.	Mortality including absent deaths.
Northern Army	{	1907	61,163	712	24 26	124	'03	³⁹	93	·38	2.62	.30	'05	7'28 8'69	
Southern Army	{	1907	50,484	584 599	21 21	·38	°06	. 40 '51	·46	-30	1'64	.18	*10	5-68 6-30	and the
rst (Peshawar) Division	{	1907	9,198	835 944	27 33			*33	·98	111	3'37	122		10'00	waite
2nd (Rawalpindi) Division	{	1907	10,949	682	27 26	.09		*64 1*51	·64 ·38	'55 '47	2.26	*37 *28		7'49	and a
3rd (Lahore) Division	{	1907	11,684	428 582	17	'09 '34		*26	-86 1'02	'43 '59	1'45	-17		6·25 7·46	1970
4th (Quetta) ,	{	1907	7,964 9,192	599 608	24 21		·25	*25 *87	-88	·25	3.64	·63		8·66 8·38	
5th (Mhow) "	{	1907	15,200	665 693	22 21	·68	·06	'43 '66	*49 *39	°25	1*23	'20		5°24 4°47	-
6th (Poona) "	{	1907	9.375 9.994	583 542	20	·21		-6o	·21	.11	1'07			4°59 5°30	-
7th (Meerst) "	{	1907	10,527	630 720	22 26	-26		'47 1'28	'95 '77	'57 '85	1'33		.09	5'98 7'61	182
Sth (Lucknow) ,,	{	1907	10,433	708 666	21			.10	1*25	·29 ·67	1.05	.10	.10	508	25,00
9th (Secunderabad) Division	{	1907	10,306	370 476	16 19	-58 2°20		·78	.19	19	1'75	·19		5'82 8'33	
Burma Division	{	1907	5,096 4.950	650 663	26 26				'79 '81	'39 '40	'59 1'41	-20	.39	3°73 4°24	-
Kohat, Derajat and Bannu Brij	gades {	1907	8,372 8,472	1,240	34 33	*36 *59	*12 	-6o -83	*96	·24 	3.80 2.89	·12		9.03 8.03	-
Adea Brigade	{	1907	1,509	861 621	29 25				-96	2-65 -96	1'90	1.33	-	7'29	-
Army of India	{	1907 1908	1,26,392	629 674	22	.16.	*04	'35 '57	·66	*33 *42	1'99	'20 '22	'05 '02	6.52 7.41	8·51 8·49
	{	30000							1						

[.] Worked on the average annual strength of the troops present with and absent from their regiments during the year.

" X.—Western Coast . " XI Southern India .		1		-				_					
oup I—Burma Coast and Bay Islands. II.—Burma Inland IV.—Bengal and Orissa V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India			0					ADMISS	IONS FRO	м			
Islands. II.—Burma Inland IV.—Bengal and Orissa V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic lindus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	Years.	Average strength.*	Admissions.	Constantly sick.	Influenza.	Cholera.	Small-pox.	Enteric fever.	Malaria.	Pyrexia of un- certain origin.	Paeamonia.	Dysentery.	Venereal
Islands. II.—Burma Inland IV.—Bengal and Orissa V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	1897-1906	1,435	721	27	5'4	7	-2	-1	191'4	17.8	2.6	64.9	47
Islands. II.—Burma Inland IV.—Bengal and Orissa V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	1 1907	1,297	563	22					1658	57'8	-8	23.1	5
V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontis Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	1908	1,286	632	19					130%	1128	2'3	83'2	13
V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontis Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	f 1897-1906	3,955	865	32	1.0	.2	.1	7	427'4	9°2	26	31.3	31
III.—Assam IV.—Bengal and Orissa V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	1907	2,807	620	26				'4	163-2	57.0	4.6	21.0	16
V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Fronting Indus Valley, and North Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	1908	2,823	661	27				2'1	230'3	3'5	6.4	22.7	13
V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Fronting Indus Valley, and North Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	1897-1906	1,327	859	37	3'5	1.3		20	349'3	3'2	80	79'9	48
V.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Fronting Indus Valley, and North Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India		964	1,059	30			1'0	2"1	429'5	2.1	2'1	24'9	45
VI.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic Indus Valley, and North Western Rajputana. VIII.—South-Eastern Rajputana, Central India a Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	1908	923	882	23		2-2	1900		446.4	9.8	8.7	336	23
VI.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic Indus Valley, and North Western Rajputana. VIII.—South-Eastern Rajputana, Central India a Gujarat. IX.—Decean X.—Western Coast	[1897-1906	2,528		188	8.9						56	64.8	36
VI.—Gangetic Plain and Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic Indus Valley, and North Western Rajputana. VIII.—South-Eastern Rajputana, Central India a Gujarat. IX.—Decean X.—Western Coast XI.—Southern India		2,022	972	35	1	-4	.2	4	504'3	57	-	1000	22
Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontii Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana, Central India a Gujarat. IX.—Decean X.—Western Coast		1 10 10 10	507	28	1'5	244	'5		431'3	4'9	7.4	54'9	10
Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontii Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana, Central India a Gujarat. IX.—Decean X.—Western Coast	1908	2,219	731		.2	***	***	.0	240'2	257	979	111	26
Chutia Nagpur. VI.—Upper Sub-Himalaya VII.—North-West Frontic Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast	1897-1906		575	24	4'3	1.0	-6	-4	175'7	6.0	7.8	38'4	
, VII.—North-West Frontis Indus Valley, and Nort Western Rajputana. , VIII.—South-Eastern Rajputana Gujarat. IX.—Decean IX.—Decean X.—Western Coast		5,990	444	16	-2		.3	***	100'7	14'2	8.3	32.6	10
, VII.—North-West Frontis Indus Valley, and Nort Western Rajputana. , VIII.—South-Eastern Rajputana, Central India as Gujarat. IX.—Deccan X.—Western Coast XI.—Southern India	1908	5.972	604	20	.5	2.7	1.3	2	252-2	75	13'9	55'4	I.
, VII.—North-West Frontis Indus Valley, and Nort Western Rajputana. , VIII.—South-Eastern Rajputana Gujarat. IX.—Decean X.—Western Coast XI.—Southern India	1897-1906	15,882	618	24	1.8	7	-6	·8	238.9	3.2	15'0	279	2
Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana, Central India a Gujarat. IX.—Decean X.—Western Coast XI Southern India		20,904	582	20	4'9	'2	.2	2.6	223.5	19.9	11.6	188	L
Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana, Central India a Gujarat. IX.—Decean X.—Western Coast XI Southern India	1 1908	21,425	704	23	1.2	-8	1.1	5.2	334'3	22'4	14.1	39'5	1;
Indus Valley, and Nort Western Rajputana. VIII.—South-Eastern Rajputana, Central India a Gujarat. IX.—Decean X.—Western Coast XI Southern India	ier. [1897-190	6 16,892	894	30	47	1.2	7	14	394.1	4'9	22.4	53.0	17
, VIII.—South-Eastern' Rajpa ana, Central India a Gujarat. IX.—Decean X.—Western Coast XI Southern India	th-{ 1907	18,024	951	28	12'9	'2	.1	1.4	441'0	2.3	230	44'9	1
ana, Central India a Gujarat. IX.—Deccan X.—Western Coast XI Southern India	1908	17,733	1,116	32	3'3	1.2	*2	4.5	544'3	7.8	31.3	53'3	1
ana, Central India a Gujarat. IX.—Deccan X.—Western Coast XI Southern India	1897-190	6 12,058	778	18	1.8	1.0	'7	14	338.9	8.7	14.7	29.6	4
XI Southern India	and { 1907	13,094	656	21	37	1	-3	.9	2557	7'9	10.0	26.0	1
XI Southern India	1908	12,114	687	21	1.0		*5	1.2	288-8	26	123	23.9	1
XI Southern India	1897-190	6 17,042	613	23	4'0	1'4	-6	'4	207'9	12.3	8.0	30.2	4
, XI Southern India .	{ 1907	16,794	492	19	36	1'2	7	2'4	79"2	37'5	6.5	327	2
, XI Southern India .	1908	17,631	485	19	9'2	1.9	3.0	2'4	1069	23'1	6.6	30'7	2
xI Southern India .	1897-19	06 2,279	735	31	2.4	•3	1'4	-1	203.1	11'2	10.3	60.1	5
, XI Southern India .	3 1907	1,652	930	31				2'4	250'0	2'4	100	73'2	2
NI WINGS	1968	1,707	920	34	1.8		1'2	2'3	300'5	12'9	5'9	70'3	1 5
NI WINGS	(11897-190			20	3.0	1.6	.6	3	162'3	21.8	8-8	23'3	1
W. W. Santa	3 1907	3,880		16	'5	1'5	1.2	1'0	58.7	297	7.0	18:3	2
x XII,—Hill Stations .	1908	4,623		21	*2	2'4	'2	14	155'5	17.7	78	350	2
xII.—Hill Stations .	1897-190	1		1	97	-5	3	10	337'5		10.0	458	3
- Ann Stations	!	22,710			14'3		* 4	17	223.7	1000	16.8	37'2	1
	1 1907	23,465			4.8	1.8	-2	3.7	236.3	1	155	133	1
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1		1.0	1	1 133	289.5	8.8	13.6	33.5	1
Army of India.	1897-190				5.1		'5	'5	2250	16-6	1000	42.7	
Army or India.	1907	1,26,392	1	23	6·5	1'4	·4 ·8	2-8	266-2	16.5	12'4	33'5	1

The decennial ratios are worked on the total strength of the ten years period.

1-ACTUALS. 2.-RATIOS.

C. I	Plains and Hills.	Average annual strength.	OST.	Malar	ia.	Tuberc the lu		Pneur		Otherespii tor: disease	ra- y	Dysen and Diarrh	1	Scur	vy.	Anser and Debil			II Ses.	e number con-
	7 7 3	18		A	D	A	D	A	D	A	D	A	D	A	D	A	D	A	D	Average
1	Plains }	98,289	5	17,787 181°0	85	340	25	1,048	190	1,924	23	3,476	20	324	10.	1,283		56,276	692	2,151
-	Hills}	20,366	5	4,816	30	125	30	318	50	426	4	702	8	3.3	1	252	12	13.377	180	576
1904	Hills above)	1000	(1,523	1'47	61	12	156	13	165	3	34'5 269	139	35	105	12'4		5,055	884	28.3
10	5,000 feet sea-level.	8,576	5	1676	1.64	57	1'40	12'0	1.22	19'2	'35	31'4	12	4'1	12	9'4		589'4	8:40	26.5
	Hills below 5,000 feet sca-level.	11,790	{	3,293	1.45	6.4	1'53	18.2	37	221	.08	433 36-7	*59	48		171		705'9	916	349 29'6
-	Plains}	99,771	5	15,130	69	287	33	1,265	185	2,523	23	3,771	18	124	3	1,080	9	55,250	602	2,083
	Hills}	20,224	5	3,677	26	93	26	277	50	920	5	850	9	84	1 1	253		553.8	6°03	624
1905.	Hills above	9,583	5	181.8	1'29	46	1.29	95	20	45·5 333	2	341	6	4.3	1	100		729°3 5,698	18:05	30.9
-	Hills below)	10,641	5	2,320	1.12	4'8	1:36	99	30	34'7 587	3	35·6 509	63	5°2 34	.10	10'4		594°6 9,051	27:13	27°1 364
-	5,000 feet }	10,041	5	218.1	1'41	4'4	1'22	17'1	2-63	55.3	47	478	-28	3'2		14'4		85016	9.87	34'2
-	Plains}	1,01,783	{	26 833	64	221	32	856 84	159	2,108	14	4,656	27	214	10	1,349	3	68,275 670'8	665	2,201
	Hills}	22,469	5	6,250	16	79	29	285	39	754	2	926	8	92		347		17.057	158	646
.900	,	22,409	5	278'2	.71	3'5	1,50		1.4		'09	41'2	-36	4'1	***	15'4	.09	759'1	7'03	28-8
-	5.000 feet sea-level.	11,510	{	2,546	69	34	78	118	17	289	17	437 38%	7	70		163	17	6,923	78 6.78	293
	Hills below 5,000 feet sea level.	10,959	{	3,704 338°0	8 '72	45	20	167	5.01	465 42'4		489	1 1	22		184		10,134	8o 7'30	353
-	(m.)		-	22,265	50	218	25	1,171	185	2,464	19	3,802	17	223	14	1,168	6	61.973	582	2,047
100	Plains }	59,460	1	224'1	.20	2.3	'25	11.8	1.85	24'8	.19	38.5	17	2'2	14	11.8	-06	62372	5'85	2016
	Hills}	22.399	5	5,155	32 1'43	52	13	379	2'95	29.5	6	982	36	54	2	338	3	14412		568
1907.	Hills above 5,000 feet sea-level,	11,378	5	1,292	8	22	7	152	16	231	3	501	4	42	2	151		5,499	8.32	25'4
	Hills below)	100	6	3,863	71 24	30	6	13'4	50	20'3	3	481	35	37	.18	209	3	483'3	5.19	338
-	5,000 feet }	11,021	1	350.2	218	27	*54	2006	4'54	3819	-27	436	-36	1.1		190	-27	808-7	11.61	307
	Plains }	98,138	5	27,893	51	272	32	1,210		1,720	26	4:724	28	140	***	1,144		67,837	653	2,201
-	Hills}	23,465	5	5.545	·52	92	20	364	60	582	11	1,054	8	48		352	3	691'2	232	550
1908.	Hills above 5,000 feet	12,079	5	1,757	794	3°9 60	13	15'5	29	24.8	6	44'9 581	5	10		15'0	.13	5,914	9'89	23'4
2000	Hills below)		(145°5 3,788	·58	5'0	1.08	13.8	2°40 31	319	50	48°1 473	3	1.6		12'0	;°08	489°6 8,746	8:36	18'0
	5,000 feet sea-level.	11,386	1	332.7	1.33	2.8	-61		2.22	28'0	-44	41'5	-26	2.2		18.3	18	768-1	11.21	2972

			1	1897	-1906,	10	of,
	D-Estra	c FEVER.		Admission rate per 1,000.	Death rate per 1,000,	Admission rate per 1,000.	Death rate per
Suropean troops	7	-	 	20'8	509	14'5	2-
Native troops		***	 	*5	15	2-8	'57
Surkhas only		***	 	2.3	*64	8.0	1-69
risoners			 	*4	*14	1.0	.31

*Including Gurkhas also,

1 2 2 2			E-Tesercia		F-VENERRAL DISEASES
IV BIB BI			Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000.
Army of India excluding Gurkhas	 	 	 2.7	*28	14.8
Gurkhas only	 	 	 2.0	1'43	1852

				G-Is	FLUENZA.			н-г	NEUMONIA.	
	1.0		1897-	1906.	190	8.	1897.	1906.	190	8.
10.12		1	Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1 000,	Death rate per 1,000.	Admission rate per 1,000.	Death rate per 1,000.	Admission rate per 1,000,	Death rate per 1,000.
European troops			7'1	101	6.3		41	-58	3'9	*39
Native troops			5.1	.03	3.8	*02	136	2'90	12.8	2*20
Prisoners			13'0	.18	3.7	*03	13.3	3'49	12.1	3*34

						1	RATIO	PER MI	LLE OF	STREN	GTH .				
		No. of the last of		Tama						DEATHS	FROM				
A.—Administrations.	Silvery of the last of the las	Years.	Average strength.:	Admissions.	Constantly sick.	Cholera	Small-pox.	Malaria.	Tubercle of the lungs.	Paeamonia,	Respiratory diseases.	Dysentery.	Diambos.	Attemia and debility.	All causes.
Jurma	-{	1901-1905 1907 1908	11,779 13,721 13,871	453 256 277	22 14 15	-68 -22 -79	.03	*61 *37 *50	3,38 3,99 3,93	1°33 '80 1°33	'51 '44 '43	9'77 '73 1'37	'81 '39 '14	"33 "22 "14	12
Castern Bengal and Assam	{	1901-1905 1907 1908	6,285 7,310 7,118	1,099 861 917	45 38 37	-67 -95 1'97	*10 *14 *14	1,30 3,00 3,53	3°34 3°97 4°50	3'47 2'87 3'23	'75 '95 1'97	7'67 7'25 8'43	1,02	1'45 '68 1'25	18 19
lengal	-{	1901-1905 1907 1908	14,573 14,408 15,555	999 938 939	37 35 38	"77 "35 3'98	*04 *28 *06	3'03 1'04 '84	3'85 3'93 5'01	3'48 3'64 3'31	*54 *62 *45	5'83 2'85 8'54	1'30 '35 1'80	"55 "43 "96	10 31
Inited Provinces of Agra and C	oudh{	1901-1905 1907 1903	25,517 23,887 28,308	699 603 679	34 29 31	*45 *04 *21	'04 '04 '32	'96 '88 1'55	1°07 1°07	3'54 3'43 4'91	794 795 1738	3,13	1.02	"22 "17 "46	15 24
anjab	-{	1901-1905 1907 1908	12,333 11,154 11,019	999 707 581	31 30 25	. "11	*10 *17	'97 '72 '41	3'63 3'86 5'87	4°74 4°93 4°53	165 154 184	3.4g 3.0g	'75 1'34 1'09	*68 *99 *41	21 19 23
North-West Frontier Province	{	1901-1905 1907 1908	1,287 1,183 1,345	1,016 1,209 1,223	33 35 37	=	78	1'49	793 3°38 74	4°35 5°92 4°46	147 273	3'73 3'38 '74	*47 *85 ***	.31	1) 1)
entral Provinces	{	1901-1905 1907 1908	4,429 3,241 4,013	772 526 632	25 81 21	.09		"54 1"24 1"00	2°53 2°47 3°99	2'48 '93 1'00	1°31 '62 1°50	3'6t 4'33 5'23	1°85 '69 '50	93	20 10 21
ombay	{	1901-1905 1907 1908	8,725 7,537 7,930	689 693 654	39 33 33	.02	***6	1'40 '53 1'26	3,23 3,23	6°56 5°84 3°28	1'60 1'46 1'13	1'74 1'86 '83	1°59 '63	'83 '93 '85	26 26 16
tadras	-{	1901-1905 1907 1905	9,833 10,166 10,638	482 376 443	21 19 23	1°36 3°84 7°05	'02 	1'04 1'18 1'03	3°50 3°46 3°30	1,82 1,82	133 120 175 -	3.32 3.82 3.32	"14 "10	*37 *39 *94	15 15 25
NDIA†	{	1901-1905 1907 1903	95,479 93,164 101,335	759 624 646	31 27 29	*54 *50 1*68	*06 *06 *15	1°17 '94 1°04	3°32 2'74 3'76	3'07 2'90 3'24	79 73 1'03	3'71 9'57 4'07	1'04 '80 '94	'55 '45 '55	21 17 24
NDAMANS	{	1901-1905 1907 1908	13,259 14e11 14,057	1,838 1,903 1,439	6t 75 79	*07		3,19	7.81 2.30 2.30	4°23 4°30 4°13	1,38	10°84 3°12 4°34	1°57 '69 '71	103	20.00.00
NDIA;	{	1901-1905 1907 1908	108,750 107,675 115,403	891 795 743	35 34 35	'47 '52 1'47	*05 *05 *13	1°51 1°11 1°18	3'85 3'07 4'17	3°21 3°08 3'34	*85 *75 1*03	4'58 3'65 4'63	1711	'49 '32 '49	25 18 24

^{*} Excluding Subsidiary Jalls. † Including Ajmer, Sibi, Quetta, Mercara and Secunderabad and excluding Andamans,

\$ 1ec	luding Andar	nass.										11000	10
95 4 75 85 110					KAT	TIO PER	MILLE	OF ST	RENGT	H*.			
1002 MIL	-		-		N.			Ари	SEIONE F	ROM		Pall	
BGroups.	Years.	Average strength.t	Admissions.	Constantly sick.	Influenza.	Cholera.	Small-pox,	Enteric fever.	Malaria.	Pyrexia of un- certain orb- gin.	Poenmonia,	Dysentery.	Diambra,
Group 1Burma Coast and Bay Islands {	1901-1905 1907 1908	7,957 9,718 9,542	443 248 271	21 14 15	.7 .8 .6	1'2	1	·6 .::8	35°9 35°9	19"2	5'8 1'3 2'0	37°0 10°6 14°0	35'3 6'6 35'3
" II.—Barma Island{	1908-1905 1907 1908	3,812 3,993 4,379	471 274 291	23 14 16	4"3	1,8		3,0 .2	110'2 39'6 40'4	15.7 6.3 3.0	8°0 4°5 7°2	67'7 43'1 31'2	39'1 8'5 11'1
" III.—Assam	1904-1905 1907 1908	1,239 1,545 1,532	850 865 1,135	43 28 27	89°3	1'5	77	10	953'9 318'8 627'3	4'4	4°8 5°2 7'8	234°2 173°5 91°4	55°7 53°7 91°7
" IV.—Bengal and Orissa	1901-1905 1907 1908	13,182 13,670 13,984	1,014 946 957	40 41 42	10°0 18°0	1'4 1'4 5'5	'4 '9 '5	'5 '3 3'1	373"4 305"4 251"5	1178 177 576	0,0 11,0 10,3	258°9 101°2 196°0	8579 8579
, VGangetic Plain and Chutia Nagpor {	1901-1905 1907 1908	23,685 32,645 26,317	769 630 661	33 26 29	16°0 2°5	'9 '4 3'0	1'0 2'6	'4 '2 '3	206°5 204°5 204°5	4°5 6°0 11°3	10°0 0'8 11°7	85°0 64°0 85°8	50°1 30°6 40°3
" VIUpper Sub-Himalaya	1901-1905 1907 1908	13,091 11,880 13,349	946 752 771	31 31 30	17'8 7'7 7'3	7	3,1 .0	-8 1'0 '9	410°5 251°6	3°9 2°1 7°6	17'5 21'4 25'7	56'3 34'3 56'3	54'5 27'1 25'8
WIL-North-West Frontier, Indus Valley and North-Western Rajpotana.	1901-1905 1907 1908	8,142 7,058 8,293	7 ⁸⁵ 738 650	31 38	1,0 1,0 8,2	- '3 	1'7	79	303.0 333.3 303,4	1°1 1'5 4'2	27'4 31'7 22'7	48'5 52'5 47'8	49'1 45'9 31'4
" VIII.—South-Western Rajputana, Central {	1901-1905 1907 1908	4,772 4,206 4,666	754 664 580	39 34 37	123	*5 ***;	-8	77	193.3	.3	18.3	36°5 10°0 25°7	31°2 35'0 29'4
, IXDeccan	1901-1905 1907 1908	8,373 6,963 7,537	813 727 744	31 29 32	14'0 5'2 2'5	·1 ·2 ·8	13 19 77	"5 "6	290'4 210'3	4'5 '6 9'0	9°9 3°7 4°2	50'8 46'8 50'8	44°5 38°7 49°4
" XWestern Coast{	1901-1905 1907 1908	3,718 3,190 2,400	537 479 530	23 23 25	174		1'0	317 3174 378	109.3 (q.0 120.8	8.3 2.3 8.3	9'S 7'0 6'7	40'3 75'1 80'0	35°1 40°3 30°4
" XI.—Southern India	1901-1905 1907 1908	8,815 9,106 9,636	497 376 433	19 23	4°4 "'' ₁	13'0 11'6 13'0	17	7 12	55'9 69'1	36'S 8'9 13'4	9'0 4'6 8'5	55'1 51'3 58'7	5°\$ 5°9
" XII.—Hills	1901-1905 1907 1908	504 068 655	841 671 858	23 25 27	2.1	40'5	1.0	2°4 1°6 	270°0 210°5 184°7	2,3	2012 1115 1615	82.8 82.8	50'5 41'1 61'6
INDIA†	1901-1905 1907 1908	95,479 93,364 101,336	750 628 646	31 27 29	4°9 4°3	1.2	*5 *7 172	77	191'3 197'7	8'1 5'1 9'4	13'4 11'5 13'4	98'3 67'9	45'8 34'4 37'6
ANDAMANS{	1901-1905 1907 1908	13,389 14,411 14,067	1,818 1,903 1,439	61 78 79	7'0		=	=,	1,191'4 1,319'6 850'5	22.6 9.5	13,0	155°9 150°8	93°5 31°2 63°5
INDIA)	1908-1905 1907 1908	105,759 107,675 115,403	891 795 743	35 34 35	13'0 4'4 3'7	173	.4 .6 1'1	1,0 .0	350°0 343°3 278°0	7°1 7°5 9°4	13'3	21.1 23.2 59.1	45°0 34°0 37°3

^{*} Excluding Subsidiary Jalls. † Including Aden and excluding Andamans. 2 The quinquennial ratios are, of course, worked on the total strength of the five years.

									1			_	_	_		
C.— Causes of ad:	nission.		Years.*	January.	February.	March.	Apel.	May.	June.	July.	August.	September,	October.	November,	December,	Total.
fornza	-	-{	1904 1905 1906 1907 1908	14 77 29 7 44	9 114 35 49 21	5 90 45 122 27	32 223 51 4 - 23	51 52 64 1 43	41 30 96 3 12	33 43 50 63 5	32 130 22 13 63	28 192 50 8 74	47 59 103 32 76	40 21 30 33 29	33 21 10 131 13	370 1,057 365 454 430
	Total	-	1904-1908	171	929	269	333	311	182	203	259	352	316	153	198	2,876
olera 🔟 🖟	4.3 5	-{	1904 1908 1900 1907 1908	3 4 3 2 6	3 3 2 1	5 1 1 3 10	3 3 9 8 16	7 3 91 33	30 5 2 65	1 2 43 6 114	13 37 16 81	1 39 5 3 3	2 5 30 1 4	3 47 3 3	3 3 3 2 1	47 73 187 140 337
7 323	Total	-	1904-1908	16	9	20	38	137	92	163	146	51	42	56	"	784
tericifever	-	-{	1904 1905 1905 1907 1908	13 	3	3 4 4 3 3	8 4 2 3 9	3 6 5 9 5	8 6 7 3 13	3 14 14 3 11	5 11 33 6 13	6 3 14 7 24	3 6 4 6 14	5 3 3 5 3	7 4 6 5	55 64 102 65 113
	Total		1904-1908	35	31	15	27	23	31	45	68	54	33	18	24	399
daria	-	-{	1904 1905 1906 4907 1908	1,357 1,087 874 1,481 935	1,090 977 676 963 662	1,160 1,128 909 1,063 814	1,342 1,302 1,159 1,181 907	1,403 1,359 1,187 1,372 1,133	1,301 1,380 1,353 1,273 1,273 1,217	1,625 1,327 1,595 1,447 1,957	2,012 1,555 1,015 1,609 1,603	2,568 1,858 2,511 2,041 3,084	2,575 1,887 2,915 2,145 3,634	2,031 1,735 2,873 1,865 3,768	1,454 1,108 1,928 1,401 1,735	19,627 16,813 19,005 17,841 20,039
100000	Total		1904-1908	5,625	4,377	5,484	5,961	6,453	6,324	7,163	8,894	12/053	13,159	11,271	7,890	94,275
exia of uncertain origin	-		1904 1975 1905 1907 1908	51 47 31 25 35	48 50 36 30 35	32 56 71 29 61	36 78 52 23 68	57 100 85 40 77	65 69 90 50 79	58 94 94 47 78	50 81 117 55 69	99 94 123 66 66	87 104 130 41 205	68 62 63 83 87	83 57 40 37 79	735 892 930 478 953
33333	Total		1904-1908	190	198	249	256	359	363	371	573	448	571	314	196	3,988
egnocia			1904 1905 1906 1907 1908	147 86 95 125 175	131 122 88 103 108	89 94 71 72 245	60 89 70 54 75	65 65 85 60 66	69 41 83 47 62	38 53 54 61 64	62 55 48 53 49	46 54 67 66 79	73 64 68 68 105	\$8 72 101 146 118	97 100 133 215 210	985 895 983 1,074 1,259
100000	Total		1904-1908	618	552	474	343	341	303	271	167	312	378	515	758	5,157
residery ~		-{	1904 1905 1905 1907 1908	508 410 432 480 350	383 339 336 342 260	550 377 446 502 422	561 390 \$34 303 \$39	\$15 607 572 506 543	675 391 358 470 559	868 751 855 645 837	952 978 1,070 736 1,023	748 901 794 672 953	765 763 755 583 844	669 635 615 497 810	583 509 538 497 676	7,747 7,490 7,525 6,338 7,796
MIRERA	Total		1904-1908	2,180	1,650	2,327	2,622	2,743	2,864	3,055	4,768	4,063	3,532	3,236	2,856	36,893
arbea	-	-{	1904 1905 1905 1907 1908	201 219 182 200 177	\$70 138 135 178 167	410 294 331 283 297	350 378 425 353 359	323 364 368 169 336	355 321 326 204 354	454 423 483 341 464	417 480 519 371 472	317 337 318 306 355	236 273 263 262 336	913 291 234 231 254	2:8 186 201 2:1 235	3.774 3,693 3,734 3,207 3,806
MERCHAN	Total	-	1904-1908	939	588	3,614	1,774	1,600	1,650	2,164	2,268	1,658	1,350	1,143	1,071	15,124

1	Raylon.	Death rates,	1,41	914 0		-	2 273	F 118	1 2'35	8 1700	1 374	1	FROM ALL CAUSES.	[-emonard	6.9	8.6	17.1		13.4	Ç	9.51	502	0.10
PNEUMONTA.	R	Admission rates.	15.4	15.0	-	1276	10.5	200	101	11.3	1374	1	MARK C.	Native troops.	12.3	8.54	20	1.7	20,1	3.0	25	-	160'6 1970
PNE	Actuals,	Deaths,	338	4 450	0 10	90	\$ 252	910	3 243	4 370	918		TRUE	European troops.	12	33.4	=	2	0,4	9	7	2	100.0
	Act	, an oles lond	1,518	1,654		-	968	895	619	1,074	1,159			Prisoners, ‡	1,6	*	8	11	8	2 .	2 %		23,
THE	RATIOS.	Death rates.	3.05	8.8 276		17 5.17	14 3.00	67 379	5.5	173 274	9.4 3.50		PERCENTAGES.	"edoon samen	25	11		10 /	86	=	0 1	2	2
NGS.		Admission rates.	300	50		-	979	203	900	136	180		PERC	European troops.	107	22	-	•		0	w :	-	7
TUBERCLE OF THE LUNGS.	ACTUALS.	Admissions, Deaths.	170 30	973 41		763 38	763 2	803 2	844 3	204 3	156	-	-	T,ersoneiri.	89.1	200	19.5	52.	75	1,03	376		84'17
-	-	Death rates,	7	10 10	10	10		10.		-	60.		AVERADE STRENGTH	"wdoon sanen	16,		90	2	70.00		7		741 84
ERTAL	RATIOS.		6,11	0.50	-	1.0	- 60	. 1.6	1.0	15	7.0		VERAGE		1,10	3.47	-		-				
PYREXIA OF UNCERTAIN	-	Admission rates.						-				-		European troops.	1:			1	27				978
EXIA	Астелья.	Deaths.	25	25 5	440	540	735	801	670	478	656			deaths.	1	1	- stu	chility .	-	leases			
PYR	Ye	Admissions.	1,257	3,085	-	**	-	-	*	*	0		1.3	E. Causes of deaths, 1308.	1 1		Bowel-complaints	Assemia and debility	elooia	Respiratory diseases	Tubercie of the lungs		All causes
	RATIOS.	Death rates,	1.35	70 1		60.1	183	0.11	96. 4	\$6. 6	10,1 4			0	Cholera	Ferens*	Bowel	Ansem	Precmonla	Kespir	Tuben.		Y
RIA.	RA	Admission rates.	250rd	2777	184.1	938.0	217.2	152.9	1/05	191.3	1977	-	1		1								
MALARIA.	178"	Destips.	133	2 0	154	26	22	101	6.	28	105	.X.	109.	Death rates.	1	17.32	96.	.30		7	# :	2 25	35.
	Acreats,	Admissions.	34,739	30,617	28,813	\$54,00	19,617	16,813	\$00'61	17,841	\$0,039	AVÆMIA AND DEBILITY.	Rerios	Admission rates.	9,71	1,61	1578	13.7	6.11	11.1	2 1	11.3	11.5
VER.	Ramos.	Death rates.	Ģ	55 .	. 15	80.	1.00	91.	61.	or.	R	UNA A		Deaths.	12	151	20	8	8	15	8 :	1 2	2
IC FE	Rs	Admission rates.		7 7	-	27	30		2		5	VÆMIL	Acreats,	-410	10	-		-	-				
ZNTERIC FEVER	ACTEALS,	Deaths.	11	17 17		45 25	11 88		81	65 10	3 36	<	V	Admissions.	1,440	2,137	1,657	1,389	1,058	1,116	1,014	1,068	1,194
	,	Death rates.		13	10	- 60	10.	9 +0.	E01 60.	90	E11 S1.		18.	Death rates.	11.1	37.70	1.36	1.38	111	16.	7 5	90	*
Pox.	RATIO	Admission rates,	7	# P	30	r	2	27	2		1.5	Y-	RATIOS.	Admission rates.	9.15	0.85	8.60	420	5.17	0	1.00	34.4	37.6
SMALL-POX	ACTUALS.	Deaths.	10	1 0	0	0	*		6	9	1.5	DIARRHGEA.		sates goluloph									_
	Act	Admissions		6 2	4	20	25			65	113	DIA	Acreats.	Deaths.	113	674	25	141	8 3	2 3	20 04	75	98
	RATIOS.	Death rafes,	9	10.1	77. +	70	7. 10	-	-	-	20.0		Acr	Admissions.	5,094	6,393	5.016	4,703	3,714	3,774	3,000	3,307	3,806
CHOLERA,	25	Deaths. Admission rates.	3	4 4	**	22 1.	31		*	55 1.3	170 3.3	-			10.0	68.9	\$1.5	10.4	3.10	16.	3.32	25.2	40.0
CH	ACTUALS.			505	8	22	47		-	140	337 43		RATIOS.	Penth Tates.		19		-					
	Ac	*enoissionh				*	0	**			1000	ERY.	22	Admission rates.	5,06	117'0	9.101	2	C.re	Brid.	78'0	6.49	169
1	108,	Death rates,	90,	5 5	91.	\$1.	61.	91.	113	90.	\$0.	DYSENTERY.	1	Deaths.	436	715	240	100	fer .	? :	310	97	473
KZA.	RATIOS,	Jeast 1 noiselembh	10.7	27.0	1.0	5.6	+	11.5	6	6.4	-	۵	ACTUALS.		8,038	000'81	999'01	150%	7,790	1 100	7,515	6,338	2,796
INFLUENZA.			2	# E	9	2	12	15	=	2	-	96		Admissions.	1	-			7.	-	7.5	6,3	7.0
H	Acreass.	Deaths.	-	0 4	-	-		-	15			SEASE	RATIOS,	Death rates,	10,	3	-	2 ;	2 2	-	7	s 12	1.03
1	V	LeadisslonbA	14971	2:0:0	999	834	330	1,057	\$98	454	430	ORY D		Admission rates.	30.	28.0		_	200		-	14	137.3
	‡-da	Sante Laudne agenarA	6123	105,010	101,417	88,050	99,353	216'16	95,394	93,164	101,135	RESPIRATORY DISEASES	Acreats.	Deaths.	1,050 91	3,188 93			20 20			89 89	101 99
N188	-	96	1	1		1	i	i	1	-	1	RES		Admissions,	1	*		2,77,5	2.00			\$4,568	3,366
N-Sign	MORTALITY	Year	899	1999	8000	506	500	506	Sodi	1967	8001	-		Years					292			-	
-			18	10 10	0.	2	0.	0	9	2		1		WE STATE	1820	1900	8 5		2 20	1005	1905	1001	8

10000			1904.			1905.			1906.			1907.			1908.	
FStatistics of cos only, Ad.=Admission ra D=Death rates.		strength.		O PER DOO ENGTH.	strength	1	O PER ,000 ENGTH.	strength,	1,00	O PER O OF NGTH.	strength,	1,	O PER 000 ENGTH.	rength.	1,	10 PER ,000 RENGTH.
D-D-Call Taxos		Average st	Ad.	D.	Average st	Ad.	D.	Average st	Ad.	D.	Average st	Ad.	D.	Average str	Ad.	D,
Burma 3	tral	6,9*2	381'1	21'69	7,401	278.9		1000	24616	13'59	8,226	255'9	10,42	8,376	279'8	12.89
	trict	4,151	390.2	14'21	4,460	367.7	17'04	1000	308.5	14'56	4,782	235'5	12'97	4,788	361.3	13.28
Assam includ- Cen	itral	***		-	1,886	608'2	24'92	1,901	630'2	23.67	2,025	530%	25'67	2,001	785'6	43'48
and 1908 the	1011/12		145.69		100	12 (2)	MARS	100	1	-		1935	Party 1		1	1
jails of the new Province	1000	100	100 19		Pare!	LICE SE	10000	1000		-		APIN W	1	179	-	
of E. B. and Dist	trict	1,430	65016	28 68	4,392	1,248.4	35'06	4,832	997'1	30'22	5,147	991'1	31,00	4,883	981'2	27.65
Bengal exclud- Cen	tral	9,519	803'7	18.01	7,631	1,041'0	25.22	7,658	1,152'4	23.61	7,511	1,008'1	13.85	7,852	927'0	26'36
1906, 1907 and 1908		100	NE IS		inag	. 10 200	Dill	1	COLT !	1		100	Lab 1	19 3	1111	
the jails transferred to	27 1		1000	P	100	19 [3]	101,00	1		1	20	20 00	TAPA T	3 2		
Eastern Ben-	trict	8,483	1,154'1	21.81	5,885	931'5	23'96	6,305	943'5	53'31	6,121	928.6	21'40	6,724	973'4	38'22
(Cen	tral	5,913	502'7	12'78	9,389	489'8	15'76	9,934	482°4	14'90	9,394	498'2	11 60	11,287	453'2	20,50
United Provin-{	trict	12,777	687.6	15'34	12,292	620'0	18'22	1,296	679 8	16.95	12,316	671'1	17'94	14,076	845'6	26'57
	tral	4,822	915'2	25'0)	4,570	714'9	17'94	47,510	625'8	15'37	4,667	649'5	26 14	4,522	529'4	31'84
Punjab Dist	trict	5,930	951'3	15'85	5,961	740'3	16'10	6,017	868.3	17'28	5,549	792'8	15'86	6,244	649'3	18-90
North-West Cen	tral	***				***	***			***			***	***	***	
vince. (Dist	rict	1,055	118.5	16,11	1,077	1,953'9	21.36	1,091	1,631'5	24'75	950	1,311'5	19*79	1,040	1,431'7	14'42
Central Provin-	tral	2,468	489'9	10,13	2,418	574'0	14'06	2,272	520'2	13,33	2,213	251.0	19.88	2,358	681'5	19'93
ces. (Dist	trict	1,085	847'9	18'43	864	862.7	16.50	184	866'1	15'31	731	595'1	12'31	1,177	604'1	26'34
Bombay	tral	3,039	556.8	17'11	3,092	654'6	12'94	3,145	801,3	13'35	3,236	928'9	18123	3,321	727*8	19'57
1 10000	trict	4,868	639'1	20'95	4,836	583'3	20,10	4,851	564.0	24'12	6,123	370'9	16'50	4,592	615'4	16'77
Madras Cent	tral	3,143	439'9	15'01	6,695	500.6	15.08	2,940	460'2	22'37	2,702	394'8	16.62	7,641	417'1	21'86
Total of the (Cent	VIII -	42,252	391.2	17'51	43,172	598'8	18'18	-	-	17'59	44,614	457'4 572'1	16.53	2,876 47,358	547"2	22,53
above Pro-}	rict	42,922	791'3	17'99	43,203	723'2		119	P. C.	20.16	44,431	670'2	18:82	45,400	765'3	26'70
2000	-	Can St			and comb	1122	See and		10000	-2.5	Chicago I	200		201	10.00	
						1 .	YIG	orths	-	year	rears	eding	ears		ears	-
			THE REAL PROPERTY.				9	жеее	-	ceed	y	and not exceed three years.	200		2	
G.—S	Statistic	s of cor	victs on ation of o	ly. confinent	ent.	an and in		shove six mo	one year.	Above one y and not exceed two years.	two	year year	Above three y and not excer seven years.		Above seven	
100 0100							-	Above and n	00	Above and n	Above	ree n	ove ad n		ove s	Të.
NO 0002		113			13	2	B	Ab	5	Ab	Ab.	2.5	Ab	1 :	Abo	Total.
•	(Street	ngth			1 .	. 1	1,446	7.6	105	8,32	8	5,642	6,74	0	2,475	42,245
District Jails	. 3 Dear	ths	000 of st	- 60			196	1	7'4	15	1	70	14	0	20'0	740
7001	Stre	ngth				2	3,849	9.5	67	5,34	8	2,192	1,87	2	213	43,041
Central Jails	(Rati	o per I.	000 of st	rength	ST.	. 1000	19.5	10	57	16		35	12	8	9'4	17'9
District Jails	. Deat		Harris.	8100	C PELLE	O R. C . D. C.	2,322	7,9	43	8,60	1	5-733	5,93	4	2,925	43,483
1905.	(Ratio		ooo of st	rength	:		3,285	9,7		16'3		2,315	29'3		236	18'05
Central Jails	. } Deal	ths	000 of st	renoth		. 77	477		95	21.7	5	29	20'30		8 8	876
Chinada Jaile	Stren	ngth		***		. 1	3,611	8,2		8,29	7	5,820	5,898	8	3,107	45,021
District Jails	Ratio	o per I,	ogo of st		100		15'21	17	62	16.0	9	18.38	24.75	5	13.84	17'55
Central Jails		ths					535		95	5,90	7	33	2,012	5	4	44.365 899
}	(Ratio		000 of st	rength			23'14	8,3		8,50		6,454	5-957		12'54	20°25 44,672
District Jails	3 Dear	ths	ooo of st	1 100		. 100	231 1866		32	14'5	4	75	21'01	5	37	724
Central Jails	Strer	ngth				. 2	1,741	10,0		5.94	7	32	2,001		415	42,656
Central Jans	(Ratio	per I,	ooo of st	2000			22'77	17	40	16.6	5	12.83	15'49		9'64	836 1960
District Jails	Strer	ths					819		14	6,33	2	34	43	3	7	1,239
1908	(Strer	ngth	000 of st	rength			3,622	8,9	99	8,93	0 1	6,601	6,324	3		26°56 47,612
Central Jails	Deat		ooc of st	rength		_	281	10.	72	21'50		140	31.31	1000	65	1,053
	1000		7.72			1 -		-	1		1	-				

APPENDIX TO SECTION V.—VITAL STATISTICS.

STATEMENT No. I .- Birth and Death Stutistics.

214-1-1			EIRTH		Non	SER OF DE	ATHS.	72	O OF E		HIGH DEATH-		Low		DURI	DEATH NO PRE VE YEA	WIOUS .	males the of
Province.	Year.	Total number.	Ratio per 1,000 of population.	Mean ratio per 1,000 of population dar- leg previous five years.	In maste patities and towns.	In districts exclud- ing towns.	Total.	In monicipalities and towns.	In districts exclud- ing towns,	Total.	In municipalities and towns.	In districts exclud- ing towns.	In monicipalities and towns,	In districts exclud- ing towns.	In municipalities and towns.	In districts exclud- ing towns.	Total.	Number of deaths of mal to every 100 deaths females.
Bengal{	1907	1,905,415	37'70	36'90	116,272	1,789,920	1,906,192	35'23	37'83	35'56	95'95	55'09	7'66	23,23	37'52	34"43	34'63	105
Eastern Bengal and Assam,	1907	1,103,592 1,226,602	37°01	38'56	14,417	859,335 908,409	873,752 916,546	22'67	30,08	39°30	43°85 57°86	43'80	5°01	31,22	24'58	32'35		110
United Prov- inces of Agra and Ondh,	1907	1,963,963 1,986,702	41'18	44,03	185,190	1,887,346 2,349,640	2,514,761	55'14	43°57		142'87	87°58 81°22	18'29	24°£2 27°43	50.69	37"16	35"13 40"30	103,45
Panjah{	1907	819,571 840,061	40'8	43°3 4a°6	110,180	908,152	1,248,729	54°65 55'58	1	50°73	144'31	105°67 84°35	12,12	19,03	48'44	44°99 48'86	45°33	104,3
North-West Frontier Frontier Frontier	1907	62,062 71,181	33'5	35'8	6,071 6,002	60,945 6a,359	67,017 68,361	35'00	35'04		58'47 65'39	41°59 37'41	750	31'63	30°57	29°51 31°44	29°61	110,2
Ceutral Prov- inces and Berar.	1907	623,529 633,575	52°46 52°84	50'47 51'26	55,478 46,567	440,125 410,514	495,603 457,681	45'11 37'74	41°30	41'70 38'12	93°28 70'55	59°58 42°59	19'51	32,00	49'35	36'57	35'21	103'13
Madras Presidency. {	1907	1,119,170	30'8	30.0	137,291	761,735 823,628	883,016 960,919	38.2	23'7 25'3	24'3 26'a	70"8	37'1	4'5 a'8	13.8	29'3 29'4	31'9 31'9	21'7	103'6
Coorg {	1907	4,304	23'83	24'75	767	5,677 5,544	6,349	20,30	34'34	34'94	83.13	44°23 38'85	31'50	27'01	35°65 40°08	18,30	35°13 39'74	119"23
Presidency {	1907	610,533	35'72	33'47	99,850	505,795 402,334	605,605 501,838	38'19	31'54	32.82	89°35	38.07	8'08	13'19	55°33 50'9a	35'65	37'00	108,83
Lower Burma {	1907	181,834	34°06	33,11	30,183	119,189	155,250	42°18 42°55	25'94	25'84	75'90	33,18	20'18	18'74	36'49	53.33 33.30	25'06	131
Upper Burma {	1907	105,960	36,35	33'06	13,087	63,133 70,405 8,843	76,120 83,200	38 80	24'30 25'46	26'52 26'52	47'75 61'31 6'102	43'85	17°14 19°60 25°52	18.10	1	19'47 21'17	23,00	101
Merwam. {	1907	20,261	42.48	38,00	6,819	12,274	19,003	52.60	35'34	40'03	90'37		36.77	17:41			30'49	10 9.0

STATEMENT No. II .- Total number of deaths by months.

Province.	ary.	lary.	ų.					18ť.	September.	ctober.	ovember.	ecember.	Total.	1,000	O PER O OF ATION.
481 19	Japan	February.	March	April.	May.	June	July.	August	Septo	Octo	Nove	Dece		1908.	1907.
Bengal Eastern Bengal and Assam.		130,782 59,328	188,015 84,201	191,251 89,970	185.968 86,804	214,645 80,293	156,827 62,957	169,899 63,396	155,083	124,662 61,424	139,475	135,095 99,291	1,948,513 916,546		
United Prov- inces of Agra and Oudh.		132,226	140,345			173,167	121,309	135,158	202,152	392,915	397,191	306,851	2,514,761	52.73	43'46
Punjab North-West Frontier Prov- ince.	73,677 7,860								99.697 4,837	207,510 7,573			1,020,125 68,361		
Central Prov- inces and Berar.	35,453	29,819	32,501	34,722	38,189	34,805	28,205	41,900	52,573	50,969	42,003	35,940	457,081	38.12	41'70
Madras Presi- dency.	96,862	75,883	74,050	67,144	69,981	74,263	100	96,811	81,417	74,302	77,390	84,750	960,919	26.2	24'3
Coorg Bombay Presi- dency.	393 46,088		590 48,146	509 42,527										34 94 27 15	35,12
E Lower	14,069		10,772	11,827						1250000	1000000			28 06	26.84
The second second	7,090	- Contract	6,739	7,419							-		83,200	28-52	26.13
Ajmer-Merwara									-				21-20	40.03	29.63
Total	685,778	546,917	647,533	666,799	684,146	686,837	564,411	624,782	726,369	987,100	990,304	842,031	8,653,007	38.51	37.18

STATEMENT No. III .- Births.

			of Births pe		Number of males	Excess of births over	Excess of
Province,	Population under registration.	Maximum for any one dis- trict,	Minimum for any one dis- trict.	Mean for the province.	born to every too females born.	deaths per 1,000 of popula- tion.	over births per 1,000 of population
Bengal	50,528,446	44.68	20'10	36.00	105		2'47
Eastern Bengal and Assam	29,812,735	52'40	31'29	41'14	107	10'40	***
United Provinces of Agra and Oudh	47,691,782*	61'28	25'12	37'46	100,11		15'27
Punjab	20,108,690	74'3	197	41'8	109'7		15.57
North-West Frontier Province	1,908,184	40'8	35.1	37'3	123.6	1.2	
Central Provinces and Berar	11,990,419	65'41	46'08	52.84	104'03	14'72	
Madras Presidency	36,744,483	39'3	21'6	32.4	104.0	6'2	
Coorg	180,607	37'04	17'44	24'17	101'43		10'77
Bombay Presidency	18,481,362	56'53	16.72	35'72	107'92	8:57	***
(Lower	5,568,479	42.63	20'04	34'06	107	5	***
Burma }				1000		1 00	10000
(Upper	2,917,501	45'72	28.31	36.35	106	8	100
Ajmer-Merwara	476,912	54'13	39'02	42'48	114'67	2'45	***

Statement No. IV - Deaths.

	Marie I		Average		DEATHS PE	R 1,000 OF	DEATH RA	TE BY SEX
Province.	Population under registration.	Area in square miles,	population per square mile.	Maximum for any one district.	Minimum for any one district.	Mean for the province,	Male,	Female.
Bengal	50,528,446	110,469	457	67'44	26.44	38.26	40.61	36.24
Eastern Bengal and Assam	29,812,735	71,555	416	51'40	19'97	30'74	31'75	29'69
United Provinces of Agra and Oudh.	47,691,782*		445	78'02	27.71	52.73	51.79	53'73
Puniab	20,108,690	97,209	207	84'1	25'1	50'7	47'9	54'0
North-West Frontier Prov- ince.	1,908,184	13,688	149	37.7	31.6	35.8	35'2	36.2
Central Provinces and Berar.	11,990,419	100,396	119	42'40	32,42	38.13	40'34	35'94
Madras Presidency	36,744.483	129,241	284	44'1	15.6	26.2	27'1	25'2
Coorg	180,007	1,583	114	38.85	32.52	34'94	34'86	35'05
Bombay Presidency	18,481,362	122,984	150	39'47	16'39	27'15	27.56	26.83
(Lower	5.568,479	76,992	72	41'59	20.60	28.00	29'54	26.39
Burma {			12 1-1		1 1	1 12 1	701	0,7
Upper	2,917,501	29,411	90	43*26	18.76	28.52	30°26	26.95
Ajmer-Merwara	470,912	2,711	176	41'15	36*26	40'03	38.72	41'50

STATEMENT NO. V .- Deaths in Towns and Rural Circles compared.

Province.		IER OF L		1	OPULATION.			OF DEAT	
1000 1811	Rural.	Town.	Total.	Rural.	Town.	Total.	Rural.	Town.	Total.
Bengal	401	128	529	47.319.539	3,208,907	50,528,446	39.06	31'20	38.56
Eastern Bengal and Assam.	242	54	296	29,177,017	635,718	29,812,735	30.92	22.53	30'74
United Provinces of Agra and Oudh.	815	446	1,261	44+335-992*	3-355-790	47,691,782*	53.00	49'20	52.73
Punjab	408	143	551	18,094,078	2,014,612	20,108,690	50.10	55'58	50'73
North-West Frontier Province.	65	11	76	1,739,531	168,653	1,908,184	35.85	35'59	35.83
Central Provinces and Berar.	321	105	426	10,756,551	1,233,868	11,990,419	38.19	37.74	38.15
Madras Presidency .	190	232	422	32,494,434	4,250,049	36,744.483	25'3	32'3	26'2
Coorg	5	5	10	105,358	15,249	180,607	33'53	50'30	34'94
Bombay Presidency .	.224	65	289	16,027,055	2,653.369	18,481,302†	25'10	37'50	27'15
Burma Lower .	219	39	258	4,858,774	709,705	5,508,479	25'94	42.20	28.00
Cupper .	113	17	130	2,587,732	329,769	2,917,501	27.51	38.80	28.2
Ajmer-Merwara .	17	6	23	347,280	129,632	470,912	35'34	52.60	40'03

^{*} Includes 16,010 persons enumerated at the Ajodhya Fair.
† The total excludes the increased population of Bombay City according to the special Census of 1906.

APPENDIX TO SECTION V .- VITAL STATISTICS -- concld. STATEMENT No. VI. - Deaths according to age.

	-		-						RATIO	PER I	,000 0	POP	ULATIO	N.						
Province.	Under or	ne year.	1-5	years.	5-10	years.	10-15	years.	15-20	years.	20-30	years.	30-40	years,	40-50	years.	50-60	years.	60 yes	ars and ards,
	Male.	Female	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female	Male.	Female.	Male.	Female.	Male.	Female.
Bengal [®] Eastern Bengal and Assam.	303.02	264°68 212°56	59'97 41'45	53'30 36'64		18.71	16.02	14'00	19.63	18'32	23'30	21'55		23.11				48°34 37°38	77'48	S1'61
United Prov- inces of Agra and Oudh. Punjab North-West Frontier Prov- ince.	419'33 393'7) 232'1	418'79 408'64 190'4		1			15.03	19'95		19'92 20'44 11'1	20°58 16°95 13°6	20'87	25°14 10°65 17°7	25'03 24'15 23'4	38°32 28°99 27°6	35'40 29'79 32'5	43°85 43°3		130'22 110'94 84'6	7000
Central Prov- inces and Berar				67.71	1		Inform	nation 1	not ava	ilable.	1			- 1						
Madras Presi- dency. †	217'1	177'8	34'0	32.3	11'5	10'8	8.7	8.4	12'3	15'5	14'3	14'6	16'5	15'3	22'4	18'2	33'6	28'0	75'2	69'1
Coorg Bombay Pre- sidency.	316.66	191'98 280'84	56.67 49.01	53'99 46'53	13'70	9'21	9.68	10°88 8°34	16'94	16.66	1384	29'96	33'18	30,32	44'04	38,02	62:33	50°12	90.65	85°17 74'68
Burma { Lower Upper Ajmer-Mer- wara.	339°64 351°52 298°13	246.45 255.09 310.21	3230 166'53	29'23 33'70 29'23	12'46	13'14 11'86 16'45	8'35	9°68 7°68 6°84	14'40 11'35 9'35	16,81 0,10 15,15		14'72 12'21 18'32	15'07	16'21	27'74 19'38 26'19	23'75 15'73 22'59	33'21 30'21 51'13	28'54 22'29 43'52	76'92 101'09	
Total	249'64	241,40‡	67:29	64'55	18.76	17'00	12'34	12'16	15'84	17'75	18.25	19.66	22'14	21.60	3 0.8	26'52	48*88	44'08	98'75	87.59

Revised population figures according to age of the Saran District not available and hence the discrepancy of 402 in the total population of the province.

† Calculated on the total population as per census of 1901, including Europeans, and Eurasians though the statistics are exclusive of Europeans and Eurasians and born dead.

‡ Ratio calculated on the number of births during 1908.

**Note.—The total ratios under the age periods " 1-5" to "60 years and upwards" exclude Central Provinces and Berar for which the age distribution of the population is not known.

STATEMENT No. VII. - Deaths according to cause.

			DEAT	HS PER	1.000 OF PO	PULATION I	N 1908.			.5	ii.
Province.	Cholera.	Small pox.	Plague.	Fevers.	Dyseatery and Diarrhoea.	Respiratory diseases.	Injuries.	All other	All causes.	Ratio of deaths 1907.	Ratio of deaths 1906.
Bengal	5'32 1'99 1'75 0'61 1'49 0'76 3'9 '63 '09 1'68 -18	71 '31 1'25 1'42 0'38 0'75 0'6 '21 '14 '13 '19 1'81	'31 '48 1'53 0'30 0'59 0'1 4'1 1'48 '93 '34 '15	23'44 22'37 41'31 34'66 26'62 18'16 8'0 27'84 13'17 9'3 8'23 30'79	1'28 '83 '41 1'05 0'17 3'40 1'7 2'26 2'21 1'77 '68	'30 '13 '43 3'22 0'97 2'59 0'8 '12 2'96 '94 '81	'49 '33 57 0'35 0'44 0'58 0'3 '13 '38 '33 '42 '40	6:68 4:76 6:52 7:88 5:45 11:36 10:8 3:62 6:72 12:65 16:76 4:75	38-56 30-74 52-73 50-73 35-83 38-12 26-2 34-94 27-15 28-56 28-52 40-03	3772 29'30 43'46 62'10 35'12 41'70 24'3 35'15 32'82 26'84 26'13 29'63	36'08 31'67 39'07 30 94 33'73 43'47 29'26 35'06 27'15 26'22 32'22

STATEMENT No. VIII .- Ratio of Deaths from all causes according to months.

			§ANNU.	AL DEA	TH BAT	E RER	MILLE	FOR TH	E MONT	н оғ-	100		
Province,	January.	February.	March.	April.	May.	June.	July.	Angust.	September.	October.	November.	December.	Rate for the year
Bengal	28°31 43°17 43°26 48°63 34°91 31°12 25°69	32.67 25.12 34.99 31.94 38.14 31.39 26.06 29.70 29.06 26.34 27.15 36.44	43°93 33°35 34°74 32°85 27°84 32°00 23°79 38'57 30'75 22'84 27°27 42'62	46·18 36·82 40·92 34·12 23·31 35·33 22·20 34·38 28·07 25·91 31·02 40·60	43'45 34'38 44'34 36'03 38'87 37'60 22'49 43'93 23'41 25'15 24'39 30'15	51'83 32'86 44'30 31'83 33'02 35'41 24'66 54'09 20'40 28'03 27'78 22'51	36·64 24·93 30·03 25·51 23·27 27·77 28·30 42·23 21·69 35·47 30·94 20·94	39'70 25'11 33'46 27'55 26'52 41'26 31'11 39'68 26'65 33'08 28'71 33'74	37'44 26'92 51'71 60'49 30'93 53'49 27'03 30'53 27'85 20'92 28'93 42'67	29'13 24'33 97'27' 121'84' 46'86' 50'19' 23'87' 25'43' 28'56' 28'08' 28'36' 58'92'	33'68 37'49 101'61 101'07 51'17 42'74 25'70 25'94 30'31 27'47 28'96 57'89	31'57 39'32 75'06 61'88 41'32 35'39 27'23 28'11 29'85 24'47 [29'99 53'65	38'56' 30'74' 52'73' 50'73' 35'83' 38'18' 26'13' 34'94' 27'15' 28'56' 40'03'
India	 35.76	30.49	33.77	35'93	35.68	37 01	29'43	32.28	39'14	51'47	53-36	43'91	38-2

									-	4PI	en	ara	A	to	26	ctz	012	VI	-	Ch	ref	D	ise	ase	s.									XIX
1	Mysore.	2,903	723	11	25	25	893	121	330	2,677	10	833	1,015	1,590	9:614	1,204	\$5.497	089	328	2,334	2,100	4,248	1,193	123	977	11,351	21.8	88	471	626	1,223	4.972	2,449	
-	Hydera- bad (can- tonment stations.)	7,414	9599	9	;	1,721	150	1,947	2,479	1,387	400	2,831	2,057	1,128	à	3,103	S	165	98'1	467	525	1,039	9	1	3,813	-		-	1	†9	190'1	-	937	100
1	Central India.	926	8,047	2,734	299	58:	1961	1,740	1,018	4,624	290	8,868	161	3,344	3,132	13,474	8,384	127	5,210	6,043	15,706	13,202	61		20,450	72	12	1,110	150	27	10,147	413	1,730	Frank i
1	Rajputana.	9	2,393	816		161	1,527	797	1,297	1,615	173	2,612	32	6,923	2,746	2,946	26,760	314		64041	3,707	1,496	c	498	28,719	9	61541	236	-	69	4124	70	737	The state of the s
1	Ajmer- Merwara.	-	210	120	2	91	289	87	217	100	. 765	384	13	55	408	533	2,352	**	1	682	12	61	-	-	4,842	S	23	1	1	1	284	-	ı	6400
1	Upper Burma.†	1	,	1	1	-	!		1	1				1	1	1	1	1	1		!		1	2,050	17	**	53	2,587	Sos	1,836	2,343	414	2,575	AND THE PERSON NAMED IN
-	Lower Burma,	7,275	6,759	1,828	9,438	5,239	7,177	2,185	5,515	7,685	4,027	2,649	15,982	3,240	1,076	2,400	6,108	2,393	7,428	5,150	2,059	8,538	2,072	4,042	3,440	3,552	1,844	5,345	2,472	3,511	5,529	1961	9.336	
-	Dombay.	\$7,228	46,743	6,037	189	16,694	7,904	37.954	13,804	37,287	167	112'50	36,500	32,431	3,259	17,850	42,000	18,833	33,588	8,890	35,404	57,109	4,368	8,579	163,889	13,500	3,230	1,925	13,156	5,396	46,119	7,656	1,759	njab.
-	Coorg.		4	-	1	9	31		1	-	1	0	**	6	50	7	88	0	60	1	40	106	90	,	-	28	-	1	1	1	10	187	114	Excluding Zamindaris. Including Berar from 1903. • Eastern Bengal and Assam. a) 1877—1900 included in the Punjab.
1	Madras.	357,430	47,167	13,295	613	9446	23,604	36,284	75,476	58,109	12,417	28,359	28,677	76,020	35,288	98,773	19,033	31,209	42,289	21,172	47,847	143,445	65,444	29,082	60,662	81,370	29,769	27,393	23,109	16,883	142,811	81,965	141,970	ng Zamind ig Berar fro Bengal an 900 include
	Berar.	842	34,306	223	-	3404	3,573	27.897	87	3,683	926	14,396	305	10,925	847	7,058	2,030	8:14	3,452	610*11	12,764	10,122	1	241	18,375	17	91	1	1	1	:	1	1	Excludi Includii Eastern
-	Gentral Provinces,	3,418	40,985	27,575	330	9,140	11,932	16,235	140	21,868	669,91	12,536	126	52,588	4,787	21,312	39,972	557	7,043	15,506	52,985	57,131	1	192	63,114	00	200	437	2,967	1,217	38,768	4-291	810'6	
Ī	N.W. Frostier Province		;		1	:	,	1	,		1			-	1	ı	1	1	:	1		1	1	1	1	111	,	1,354	-	300	1	300	2,845	ga. ilable.
1	Punjab.	30	215	26,135	274	5,207	39	190	419	1,936	12	8,804	14,938	2,838	3,401	10,107	75,959	639	113	549	5,146	622	335	1,816	28,260	180	371	14,688	216	2,197	4,232	437	12,297	898 not ava
	United Provinces of Agra and Oodh,	31,770	22,231	35,892	21,546	25,865	89,372	18,160	30,143	63,457	34.565	200,628	18,704	48,494	80,295	169,013	194,585	12,154	178,079	51,362	69,147	44,208	2,505	8,142	84,960	53,995	25,160	47,159	6,617	121,790	140,549	22,438	83,544	Excluding Calcutta from 1877 to 1892. Statistics from 1877 to 1898 not available. Statistics not available. Including 30 deaths in cantonments.
	Assam.	11,377	6,732	17,415	2,083	5,010	21,055	14,908	22,275	7,753	20,188	7,941	56976	18,288	15,396	23,882	21,552	21,849	13,497	18,962	17,043	33,240	11,149	8,380	23,761	7,468	12,658	8,360	5,583	142,312**	108,278	77,181	59,319	Excluding Statistics Statistics Statistics Including
		305	95,192	363	39,643	79,180	352	90,139	107	167	308	878	391	103	885	575	398	946	150	087	824	247	65,020	678	878	753	110	500	101	139	968	702	800	muid.
-	• Beegal.	155,305	95.	130,363	39,	79,	182,352	68	134,421	173,767	118,368	172,578	166,111	171,103	145,885	239,575	159,398	126,976	236,150	177,087	226,824	196,247	65,	107,678	345,878	110,753	150,971	203,405	137,701	146,339	192,596	205,702	268,508	
ı																																		
1		100	-	-	-			-	-				100	100				-	3		-	100								-	-			17
-																															-			10 -
1	day of						100	-			10		100				7.								-					10)				-
1	YEAR.									-						12														3			-	na a
1			*				1												3.4															
1		***			**		1.	**				10.		1.	100							***			110									
1		11	38	02	80	81	82	33	84	35	86	87	22	89	06		603	93	16	56	8	16	86	8	00	10	20	03	70	. 50	90	10	80	

STATEMENT 11 .- Deaths from Cholera in British Provinces, by months, during the year 1908.

1134							7				2		Total.	RATIO 1,000 OF LATIO	POPU
Province.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	1908.	1907
Bengal	11,826	12,564	29,984	42,895	46,192	53-793	30,124	25,095	10,343	3,317	1,602	1,173	268,908	5'32	4'07
Eastern Bengal and Assam.	3,242	2,630	8,892	16,568	15,330	5,598	2,348	1,121	815	530	685	1,570	59,329	1.99	2'58
United Pro- vinces of Agra and Oudh.	79	43	86	2,232	11,657	16,661	4,689	11,993	19,349	14,483	2,1 26	146	83,544	1.75	-47
Punjab			1	443	1,966	2,130	2,155	2,520	2,394	654	. 74		12,297	0.61	0103
North-West Frontier Pro- vince.			-		775	734	210	242	385	420	81	1	2,845	1.49	014
Central Pro- vince: and Berar.	9	24	34	136	87	430	997	2,501	2,347	1,790	599	94	9,048	0.76	0'36
Madras Presi- dency.	15,649	11,08	8,829	7,375	8,102	11,695	19,956	25,685	12,428	7,036	6,079	8,055	141,970	3.9	3.3
Coorg	2	1	16	10	38	38	9						114	-63	1'04
Bombay Presi- dency.	49	90	1111	49	91	328	416	241	37	5	102	240	1.759	.00	741
# (Lower	652	368	564	1,422	1,222	761	1,218	609	555	1,058	686	221	9,336	1.08	1'43
E Lower	26	58	149	473	47	60	501	197	261	487	180	136	2.575	-88	11.
Ajmer-Merwara															.00
Total	31,534	26,859	48,666	71,603	85,507	92,225	62,623	70,204	48,874	29,780	12,214	11,636	591,725	2'61	1.81

STATEMENT III .- Details of the distribution and occurrence of Cholera during the year 1908.

Province.	Mortality in 1908.	Mean mortality of previous 5 years.	Urban mortality.	Rural mortality.	Percentage of villages attacked.	Maximum mortality in any one district ex- cluding towns.	Maximum mortality in any one town.	Month of maximum mortality.
lengal	 3	3.11	4'3	5'38	24'47	26.26	36'42	June.
Eastern Bengal and Assam	 1.99	2'95	2 16	1'98	9'97	8 84	23.18	April.
United Provinces of Agra and Oudh	 1.75	1.46	1'27	1'79	6-68	7.60	12-45	September
Punjab	 0.61	0 22	1.29	0.20	3'54	2.00	19'48	August.
North-West Frontier Province	 1.49	0'20	2.77	1:37	1310	2.35	5'55	May.
Central Provinces and Perar	 c·76	'79	0.26	0.78	2.67	2.16	11'79	August.
Madras Presidency	 3.9	1.0	4.8	3.7	26.17	9.3	49'5	August.
Coorg	 -63	.53		-69		5.01	-	May a
Bombay Presidency	 .00	-80	,19	-08	0.76	1:32	3'49	July.
(Lower	 1.68	-89	2.84	1.21	6.68	5'93	16.08	April.
Burma Upper	 -88	'55	1.43	-81	3'46	26	2811	July.
Ajmer-Merwara	 	112						

TABLE I .- Small-pox mortality.

				-										
Descript	Provinces, Districts, Towns.	Bengal.	Bengal	P. P.	Punjah.	North-West Prontier Province.	Central Provinces and Berns.	Madras Presidency.	Ceorg.	ombay		Bura	Ajmer-Merwata,	Registration India.
January	-Mortality by Provinces :-													
Patenting					0									
March	January	3,935	551	4,738	2,258	143	639	2,275	10	133	18	17	215	13,943
Ageil	February	2,799	715	4,677	1,786	87	639	2,435	4	237	48	41	133	13,57
May	March	4,921	1,183	7,125	2,842	45	909	3,204	2	444	27	98	173	21,213
Jame 5,200 1,205 6,235 5,447 75 1,048 1,553 1 277 77 68 68 2 Jaly 1,205 275 5,723 2,805 77 1,048 1,553 1,77 1,05 2 3 3 3 Reptumber 1,209 277 1,006 1,006 43 40 1,056 60 107 3 2 3 Reptumber 1,205 275 5,703 1,505 41 405 1,056 65 20 1 2 3 Revumber 1,205 275 275 275 275 275 275 275 275 275 275 Revumber 1,205 275 275 275 275 275 275 275 275 275 275 275 Resumber 1,205 2,105 2,105 2,105 2,105 2,105 2,105 2,105 2,105 Total 21,006 5,272 5,205 2,105 2,	April	6,390		1376	3,737	5/0	200000	777	100	419	83	150	165	28,041
Jay						20	113.00	1000			1000	2.70		28,773
Assent			7.00		-	132		350		1000				24,527
Registance	200		200					10000	1000		1690	1	- 1	15,84
Revember .			10 100	10000	100000			300		10000			1000	4,268
December					1977			75000			72.2		10000	2,870
December	1		1 10000	7.0	370		300	7.72		1000	100		100	3,868
Total 31,665 0.373 30,006 25,633 734 0,044 22,444 33 2,345 726 550 850 177 Annual death ratios =- Rais per 1,000 of population, 71 1/3 1/10 1/4 0/35 0/35 0/6 1/31 1/4 1/33 1/20 1/4 1/33 1/20 1/4 1/33 1/20 1/4 1/33 1/20 1/4 1/33 1/20 1/4 1/33 1/20 1/4 1/33 1/20 1/4 1/33 1/20 1/4 1/4 1/33 1/20 1/4 1/4 1/33 1/20 1/4 1/4 1/33 1/20 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4 1/4				1330	100	200	100	33333					1000	6,085
Annest death ratios =— Rais per 1,000 of population, '72														
Ranio per 1,000 of population 71 131 135 141 0735 075 076 721 144 123 125 176 176 180 18	Total	35,965	9,373	59,996	28,651	734	9,044	22,204	38	2,526	748	550	863	170,694
Ranio per 1,000 of population 71 131 135 141 0735 075 076 721 144 123 125 176 176 180 18	and the last war													
Patts Patt		'71	*31	1'16	1'41	0735	0.42	016	*21	*14	*115	*10	1'8;	0'75
Difference 4-14 4-08 4-79 4-07	1908.			1000			7000			10000				
Difference 1/3		-57	.10	*47	0755	6,40	0.73	0.9	1,12	.10	-72	-40	1'04	0.40
Difference	Difference	+14	+102	+'79	+*87	03	+*43	-	96	+.04	-15	27	+77	+120
District mortality excluding 33 23 48 39 5 23 23 2 2 3 23 9 17	un ratio per 1,000 during 1903-07	'37	*23	*29	0'54	0,10	. '44	0'5	,20	.33	-63	*25	49	0753
Name of districts affected 32 22 48 20 5 23 22 7 22 13 9 17 Highest district ratio 2733 275 579 5711 0.81 2750 178 0.758 177 2730 767 5731 Name of that district Patna, Darrang gath 100 0.00 0.00 0.00 0.00 0.00 0.00	Difference	+34	+'08	+*97	+-85	-3:	+-3:	+1	'49	18	50	-105	+1*32	+*37
Number of districts affected 33 22 48 29 5 23 22 3 22 13 9 17 Highest district ratio 9732 3765 579 5711 051 2790 178 0798 127 3730 797 5723 3765 579 5711 051 2790 178 0798 127 3730 797 5723 178 0798 127 3730 797 5723 178 0798 127 3730 797 5723 178 0798 179 179 1790 1790 1790 1790 1790 1790 1		Tree												
Highest district ratio 3'33 3'95 5'79 5'11 0'81 2'99 1'8 0'78 1'7 2'39 5'23 7'9 5'23 Name of that district 2 Patna Patna		12	22	48	20		22	22		23	12	- 0	12	245
Name of that district Patna Darrang Partab Lyalipur Peshawar Bilaspur Vizaga Mercara Ratasgiri Kyanipyu Pakekku Peshar Pargiri O'04 O'05 '003 '000 '02 '03 '000 '02 '03 '000 '03 '0			Tal Wal		2073		1000		1995		100	197		5'75
Lowest district ratio		-	Darrang		Lyallpur,	Peshawar	Bilaspor.	Vizaga-	Mercara	Ratnagiri			Pohkar.	Partab-
Name of that districts without mortality: Name of that districts without mortality: None None None None None 1 None 2 3 5 2 None. District death rate per 1,000 of 731 1'22 1'36 0'30 0'75 0'3 '23 '06 '15 '18 1'80 1'80 1'80 1'80 1'80 1'80 1'80						-			Talok.					garh.
Number of districts without mortality. District death rate per 1,000 of population. None None None None None 1 None 1 None 2 3 5 2 None. Le-Town martality: Number of towns affected 103 24 78 128 4 54 113 None. 26 9 4 5 116 1170 1170 1170 1170 1170 1170 1170							Maria Carlotta			Land Cold				*00
Name of that town	Name of that district	Darjeenng	Cachar	Aleitra.	Ghazi	panen.	Morwara	Hinterchy	Kiggatnad	bad,	Henzada	Meiktiia.	Manual,	Henrad
District death rate per 1,000 of population, 100 24 78 128 4 54 112 None, 26 9 4 5		None	Nene	None.		None		Fone.	2	3	5	2	None.	1
Number of towns affected 103 24 78 125 4 54 112 None, 26 9 4 5	District death rate per 1,000 of	40	*31	1'29	1,30	0,30	0'75	erd	*23	*06	*15	*18	1'60	07
Number of towns affected 103 24 78 128 4 54 113 None. 26 9 4 5 Highest town satio 1183 296 907 1103 179 1240 69 3750 191 247 473	population,	-												
Number of towns affected 103 24 78 128 4 54 132 None. 26 9 4 5 Highest town satio 1183 296 9'07 11'03 179 13'40 6'9 3'50 1'91 2'47 4'81 Name of that town Dumka Golaghat. Muharak-Shahabad Haripur. Rajim. T. C. Ratam. Dhulia. Kyaukyyo Pakeku. Almer Subarb. Lowest town satio '03 '04 '02 0'13 0'05 0'03 0'02 '05 '03 '02 '31 Name of that town Baraca-Sirajganj. Jhansi. Isa Khel. Kohat. Burhan-yur. Chopda. Bassein. Mandalay. Nasirabad Man Town. Number of towns without mortality :— Children under one year 6,028 1,571 19,362 6,469 126 3,349 6,665 666 34 39 300 Children 1-10 years 13,898 2,401 30,124 26,065 484 3,314 5,955 900 84 175 351 3													10000	
Highest town ratio		100		0	***				Mone	-6				54
Name of that town Dumka Gotaghat, Muharak- Shahabad Haripor. Rajim. T. C. Ratam. Dhulia, Kyaukyyo Pakekku. Almer Subarb. Lowest town ratio Dumka Gotaghat, Muharak- Shahabad Haripor. Rajim. T. C. Ratam. O'03 '03 '02 '31 Name of that town Baraca- gore, Baraca- gore, Sirajganj- Jhansi. Isa Khel. Kohat. Burhan- M. T. C. Chopda. Bassein. Mandalay, Nasirahad Man Town. Number of towns without mortality. Town death rate per a cod of population. '90 '21 '79 2'05 0'28 0'76 0'3 '58 '05 '23 1'84 lation. V.—Infactile mortality :— Children under one year 6,028 1,571 19,362 6,459 126 3,349 6,665 666 34 39 300 Children 1—10 years 13,898 3,401 30,124 16,665 484 3,314 5,955 900 84 175 351 3		10000		1		7000		333						1374
Lowest town ratio '03 '04 '02 0'13 0'05 0'03 0'02 '05 '03 '02 '34 Name of that town Barana-gore, Sirajganj-gree,		Land Park					100000	and the second						Rajim
Name of that town Barana- gore. Number of towns without mortality. Town death rate per 1,000 of population. Children under one year 6,028 1,571 19,362 6,469 156 3,349 6,665 656 34 32 300 4	Name or cour town			pur,			No.	Razam.				1000000	Saburb.	
Number of towns without more 26 30 27 15 7 51 120 5 30 30 13 1 Town death rate per 1,000 of population. Town Cuddalore Town. Town.	Lowest town ratio	The said	No. of the last	The state of the s	The second	The state of the s	Name of the last			Second State				.0
tality. Town death rate per 1,000 of popu- lation. 1.—Infantile mortality : Children under one year 6,028 1,571 19,362 6,459 136 3,349 6,665 666 34 39 300 6 Children 1-10 years 13,898 3,401 30,124 16,665 484 3,314 5,985 900 84 175 551	Name of that town		Sirajganj.	Jhansi.	Isa Khel.	Kohat.		Cuddalore	***	Chopda.	Bassein.	Mandalay.	Nasirabad Towe,	Mandala
Town death rate per 1,000 of popu- '90 '21 '79 2'05 0'28 0'76 0'3 '38 '05 '23 1'84 1.—Infantile mortality : Children under one year 6,028 1,571 19,362 6,459 126 3,349 6,665 666 34 39 300 (Children 1-10 years 13,898 3,401 30,124 16,665 484 3,314 5,955 900 84 175 351 3		The second	30	27	15	7	51	120	5	30	30	13	- 1	36
Lation. L-Infantile mortality : Children under one year 6,028 1,571 19,362 6,459 126 3,249 6,665 666 34 39 300 Children 1-10 years 13,898 3,401 30,124 16,065 484 3,314 5,955 900 84 175 351 3	tality.	1	-	-	-	1	and.	-		100	100	- 1	1181	1
Children under one year 6,028 1,571 19,362 6,409 136 3,349 6,665 656 34 39 300 6 6,665 656 34 300 6 6,665 .		-90	-31	79	3.02	0 25	076	673	-	-35	105	.33	1.94	0.1
Children under one year 6,028 1,571 19,362 6,409 136 3,349 6,665 656 34 39 300 6 6,665 656 34 39 300 6 6,665 656 34 39 300 6 6,665 656 34 39 300 6 6 175 351 30 100 100 100 100 100 100 100 100 100												-		
Children 1-10 years 13,898 3,401 30,134 15,955 484 3,314 5,955 900 86 175 551	,-Infantile mortality :-	- white			THE STATE OF THE S		1	-			-	1	1 1100	
	Children under one year		11115	2000	11000		1 1970	6,665		665	933		111111111111111111111111111111111111111	44,00
Percentage of children in total 55'40 51'05 82'50 81'30 57'40 21'07 05'84 61'00 15'98 65'01 05'01		720	1 23330			100000		1000		1 (3)		1 20	10000	75,86
amail-pox mortality.	Percentage of children in total small-pox mortality.	55'40	53'05	82'50	81.95	87.19	23.07	55/84		62'00	15'78	38-91	98-61	7016

TABLE II - Fever mortality.

													-
Pacvinces, Districts, Towns.	Sengal,	Eastern Bengal and Assam.	United Provinces of Agra and Oudh.	Punjab.	North-West Promiler Province.	Central Provinces and Herar.	Madras Presidency.	Coorg.	Bombay Presidency.	Lower Burma,	Upper Borma,	Almer-Merwara.	Registration India,
													-
1Mortality by Provinces :-		1811					- 3		1		I - I have		
A Deaths by months :-	100		1000				2			1	11000	1500	1 1 1 1 1
January	101,607	52,715	135,027	45,692	6,319	15,846	37,317	335	23,843	5,830	2,372	1,111	415,555
February	79,555	43,397	95,488	28,432	4,498	13,175	21,528	377	21,218	4,387	1,787	1,015	315,106
March	105,640	58,485	95,057	28,414	3,398	14,755	23,102	456	23,806	3,787	2,054	1,214	351,189
April	102,978	56,995	102,855	25.747	2,548	15,534	21,578	387	10,245	3.711	3,203	1,073	355,859
May	99,667	55,230	112,605	31,270	3,946	19,025	23,156	500	17,227	3,793	1,718	877	359,025
June	113,815	58,788	110,304	28,949	3,259	17,595	23,359	881	14,234	4,294	1,501	654	377.755
Jely	88,953	47,215	82,457	22,795	2,557	12,300	24,904	518	15,174	5,525	1,971	653	305,135
August	102,841	48,745	93,397	25,650	2,893	18,024	25,613	503	18,186	5,510	1,892	1,083	314,447
September	100,913	50,319	153,184	69,418	3,243	24,720	25,359	399	18,248	4,378	1,954	1,385	454,549
October	89,225	46,352	364,862	169,135	5,010	25,233	24,381	332	27,003	3,881	1,025	2,015	735,237
November	103,480	71,810	353,545	138,161	6,632	23,015	25,501	318	24,796	4,102	3,082	1,837	754,358
December	95,711	77,005	279,488	83,364	5,584	17,540	18,515	358	24,192	4,442	2,141	1,748	620,097
	1	10000		100	1222	100000		20.4			90000		V. 198
Total	1,184,704	607,145	1,070,319	697,058	50,795	217,773	195,834	5,018	243,373	53,650	24,011	14,681	5,424,372
										_	-		
		1000	200				1			THE PERSON	100	1000	
BAnnual death ratios.	23'44	22'37			25-62	18*16	5.0	27'84	13'17	9.63	8'93		23,00
Ratio per 1,000 of population,	20 44	2.3/	41'31	34'66		10.10		27.04		, , ,	,	30*70	-3,00
Rario per 1,000 of population,	32.18	21'17	18,31	20*15	27'44	18.00	2'8	26'95	14'00	10'18	7'53	37,31	19775
1907.													
Difference	+ '25	+ 1,30	+13'00	+ 14'50	82	+ '16	+'2	+ '80	'02	- 165	+70	+7'48	+4"20
					1								
													_
M can ratio per 1,000 during 1900-1907	22721	22'44	26 83	20'60	24'32	16'59	8.0	24"18	13'98	9.81	7'25	25'15	19'35
		1000					AL SHOW	1000	2000				
				1775									
Difference	+ 1,33	- 107	+ 14'43	+ 14'05	+ 2'30	+ 1'57	-	+ 3.66	81	- '18	+'98	+7'65	+4'51
		39.33									Salar Salar		
17. 17. 15. 15.				10000							1858	CONTRACTOR OF THE PARTY OF THE	100
II District mortality excluding towns-							-				100	A PORT	1
Number of districts affected	33	31	48	29	5	24	22	5	25	18	11	17	253
Highest district ratio	40'30	37.86	73,30	5771	29724	30,13	30,0	34'13	27'20	16.33	16.30	50'45	72'29
Name of that district	Palaman	Jalpaiguri	Bareilly	Delhi	Peshawar.	Damoh	Vizaga- patem	Nanjaraj- patna.	Broach	Tharra- waddy.	Mandalay	Ghegal	Bareilly
Lowest district ratio	9'94	13'47	19'40	7'13	25 23	671	1.3	21'31	5'19	2'86	3'93	18:04	1'1
Name of that district	Howrah	Sylhet	Ballia	Simla	Dera Is-	Buldana	Ananta-	Yedenal-	Belgaum	Maubin	Meiktila	Sawar	Auanta-
	Mana	Nana		**	mail Khan	Nana	None	None	None	None		W	ber
Number of districts without mor- tality.	None	None	None	None	None	None	None	Ivone	tante	1000	None	None	None.
District death rate per 1,000 of	24'30	22'59	41*88	34'99	27'44	18,83	8-3	28,10	13'80	10,31	8.55	33"37	14'67
population.						THE S					-		18
IIITown mortality:-	10	1				190	11				Marie de		11 10
	1000	1	10-23			1077					2 19	-	16 16
Number of towns affected	118	54	105	143	11	105	131	5	65	39	17	6	909
Highest town ratio	36.21	30'45	104'69	91"38	36:22	24'94	23'7	34'38	27"35	20'82	8 93	55'51	104'59
		-	-							Allanmon		-	
Name of that town	Sahib- ganj.	Sherpar	Kalrana	Hodal	Newa- shahr,	resemal	T. C. Sri- mgavara-	Somwar- pet.	umarkot	Allanmyo	Yenang-	Pisangan	Kairana
Legast tons sale		-	-	-	3,20	1711	pukota	20,20	*93	*75	1'05		1
Lowest town ratio	1'45	3,03	9'97	1,33	1.30	1711	6-1	27 20	93	75	1.03	13'35	0,1
Name of that town	Bodge budge.	Mymen- singh	Mirzapur (Bindha-	Dharm-	Tank	Deulgaon	T. C. Kosgi	Mercara	Bijapar	Zalun	Mying- yan.	Ajmer	T.C. Kongi.
	Dunge,	- Ingil	chal.	- Control of the Cont			-			1		100	acong a
Number of towns without mor-	None	None	None	Note	None	None	1	None	None	None	None	None	1
Town death rate per 1,000 of popu-	10'76	12'55	33'85	32'53	18-16	11,40	5'09	24'98	8-58	5,03	2,23	25'54	15'77
lation,		1	200	-			150	1	-			0.00	17
					-		1		-				

TABLE No. III. - Dysentery and Diarrhaa mortality.

Provinces, Districts and Towns.	Bengal.	Eastern Bengal and Assam,	United Provinces Ages and Oudh,	Punjah.	North-West Frostler Province,	Certral Provinces and Beran,	Madras Presidency.	Coerg.	Bombay Presidency.	Lower Berma,	Upper Burma,	Ajmer-Merwara,	Registration India.
										1		11/20	
Mortality by Provinces :-	117			Labor.	1 w			1	191	1993	900		
-Deaths by mouths -	1 11			1 -			1	1					
January	4,691	1,375	7,313	1,043	35	2,552	7,250	13	3,305	650			- Lune
February	4,013	1,288	938	711	19	2,007	5,110	21	3,000	573	113	31	17,84
March	5,907	1,613	1,098	754	21	2,243	4,871	46	3,118	671	138	44	20,5
April	5,421	2,377	1,797	1,021	27	2,656	4,268	38	3,285	267	158	95	21,8
May	5,118	2,706	2,330	1,627	45	2,843	4,330	74	3,794	955	148	50	23,8
Jone	6,387	2,430	2,081	1,181	34	2,258	4,614	105	2,717	957	215	26	23,0
July	5,579	3,215	1,510	913	8	2,475	5,433	45	3,618	1,348	324	48	23,5
August September	7,045	2,169	1,854	1,379 2,806	28	5,449	6,175	30	4,777	1,250	153	95	39,4
October	4,548	2,313	1,775	4,097	27	6,895	5,233	10	4,552	853	931	104	33,5
November	3,978	2,001	1,478	3,348	35	3,373	4,557	5 7	3,183	733 522	125	79	25,8:
December	3,886	2,101	1,411	2,18:	18	9,748	4,725	13	3,027	545	102	88 77	20,8
Marian Chr.	100		100		1339			1111				"	
Total	64,899	24,853	19,588	21,103	320	40,760	60,874	408	49,781	9,833	1,975	727	18 5,91
Annual death ratios :-						7	1						
to per 1,000 of population, 1908	1"28	'81	*41	1'05	0*17	3'40	1'7	3.10	3,31	1"77	*68	1'52	1'
lo per 1,000 of population, 1907	1.03	*68	'47	0'75	0.33	3'94	1'7	2108	9'91	1'61	*47	1'04	1.
								1300	10000				
Difference	+-35	+15	-105	+,30	113	54	-	+-18	20	+.10	+'21	+.48	+-
WINDS OF THE PARTY													
un ratio per 1,000 during 1903-07	193	772	'59	0'75	0"20	****				-		1000	
	. "		37	.,,	- 27	3'05	1.2	193	2,13	1'51	-45	.97	1.
		- 37											
Difference	+*35	+111	18	+.30		+*35	+'2	+1'33	'91	+126	+122	+-55	+1
M. Daniel Co.								COO P.					
-District mortality excluding												-	
Number of districts affected	100	100					No.		1111	100			
	9752	23	48	20	5	24	22	5	25	13	11	10	2
Name of that district	Pari	Lakhim-	S'35 Garhwal	Simla	Dera Dera	9°53 Akola	4'8 Malabar	3'40 Vedanale	7°35 East	2'94	Pakokku	4°45	g*
		pur.			Iswail Khan.	record	Pr dia Gal	knad.	Khandesh	Mergui	LULUERU	Dewair	Pori.
Lowest district ratio	*03	*01	*01	0,10	0,04	0'10	0.3	0'55	101	*60	-12	*01	100
Name of that district	Shahabad	Malda	Jauspar	Heshiar-	Kehat	Bhandara	Vizaga-	Nanjaraj-	Upper	Maubin		Pohkar	Jaunp
				Pat.			patam.	patna.	Sind Frontier				
Number of districts without mortality.	None	None	Neas	None	None	None	None	None	None	None	None	7	
District death rate per 1,000 of population.	1719	*81	"20	0'84	0,10	3'37	1'4	1,10	3,03	1'35	*57	*19	1
-Towa mortality :	F377	1793		19507		1844		FIRST	A Inch	11-11	-	174	
Number of towns affected	125	52	93	138	10	105	415			-			
Highest town ratio	8:05	11,30	6'61	875	3,20	11'70	915	16'11	12'81	12'05	4793	13.02	10
	Kurseong		Chandausi	20.50		Nandura	M. T. C.	Virajend-	Nasira-	Insela	Yenang-	Ajmer	Vicaje
		1	1	Maghiana			Bimlipa-	rapet.	bad.	10000	yaung.	Saburb	rape
Lowest town ratio	.00	*14	*08	0.10	0*11	0.02	6"1	1112	*07	*13	'93	*13	1
Name of that town	Jangipur	Bogra	Rudauli	Tanda Urmar.	Kehat	Umrer	T. C. Pa-		Larkhana		Yamethio	Pisangan	Umr
The second second second second second	35	- 30	12	The state of		41				lebin.		Town,	
Number of towns without mor-	3	2	100	5		None	17				None		
Number of towns without mor- tality. Town death rate per s.cog of	9'54	1'62	1'83	3,00	0,01	3/67	3'5	7'34		1	None.	1	1999

TABLE IV .- Plague mortality.

Freedoct or Bilate.				-							,					
British Previous or											11.3		1		Te	TAL.
Personal	Frovince or State.		January.	Pebruary.	March.	April.	May.	June.	July.	August.	September,	Octuber.	November,	December.	1908.	1907,
Part	British Provinces :															
Deligat Programs of Agra	Bengal		1,587	3,351	6,001	3,054	489	157	109	70	99	161	318	542	15,948	83,602
## Parish	Eastern Bengal and As	sam					-				-		-	-		8
North-West Provision and Benne	United Provinces of A	Agra	2,743	5,148	7,895	5,041	907	90	55	39	93	81	209	576	22,578	318,862
Visite. Contrail Provinces and Bernst 600 694 203 203 203 203 204 114 205 204 204 204 205 205 206 207 207 207 207 207 207 207	Punjab		1,173	3,130	7,407	10,459	4,711	653	19	15	244	621	983	1,284	30,708	608,685
Mainter Presidency efs 210 200 201 138 114 235 691 214 234 233 35 3.383 3.58 3.383 3.58 3.383 3.58 3.383 3.58 3.383 3.58 3.383 3.58 3.383 3.58 3.383 3.58 3.383 3.58		Pro-	1		52	219	250	49	3	-					563	1,547
Court	Central Provinces and E	Berar	629	894	718	338	23		9	272	1,101	1,160	535	548	6,236	37,774
Bembay Fresidency	Madras Presidency	-	454	318	309	108	138	114	235	491	314	324	923	135	3.358	2,872
Burna (Lower 777 1,055 759 759 233 443 5312 647 322 109 66 57 1323 5,669 5,691 (Upper 259 263 221 23 6 6 15 11 6 38 72 165 448 1,563 2,377 Ajmen-Merwara 13 4 32 39	Coorg		2	9	6		1	4	-	-	-	,	2		26	3
Durma Upper \$60 \$55 \$21 \$33 \$6 \$15 \$11 \$6 \$38 \$73 \$185 \$438 \$1,585 \$3.897 \$4.397 \$	Bombay Presidency		2,245	2,557	3,776	3,185	1,650	452	542	1,611	3,011	3,712	2,699	1,890	27,345	93,609
Ajmer-Merwara 11 4 31 20	The state of the s		717	1,055	759	393	443	512	647	973	107	66	57	120	5,169	5,979
Total (1008 9,0142 15,040 127,050 123,050 2,050 0,057 2,070 1,050 12,177 5,040 0,000 5,132 5,333 113,308 1,305,240 13,208 13,208 1,305,240 13,208 1,305,240 13,208 1,305,240 13,208 1	(Upper		200	363	931	38	6	15	11	6	35	73	105	418	1,583	3,227
Total	Ajmer-Merwara		113	4	31	20					3	3	1		74	13
Total Care	233200000000000000000000000000000000000		9,842	15,840	27,255	22,950	8,617	2,070	1,630	2,777	5,010	6,203	5,133	5,533	113,558	
Bengal Native States	(1907	-	57,310	102,249	237,05E	348,607	270,405	61,245	11,840	10,004	22,915	23,148	11,001	9,515		1,165,223
Eastern Reagal and Assams Native States.																
Native States				100	1									-	-	
and Outh Native States 217 645 1,046 2,491 2,090 225 1 81 310 553 545 9,414 61,231 Native States in Central Provinces. Madras Native States 2	Native States.	2000		200			Star		1000	122	220	1000			-	7
Native States in Central Provinces. Madras Native States 2	and Outh Native Stat	108-	-	1979	-	-				-			-	-	3.	185
Provinces			217	645	1,946	2,491	2,290	225	1	-	81	310	\$13	\$45	9,414	61,231
Bembay Presidency Native States, 2,005 2,274 1,706 457 215 76 663 1,072 1,583 598 767 14,127 54,188 States, 2,005 2,274 1,706 457 215 76 663 1,072 1,583 598 767 14,127 54,188 States, 32 114 85 67 41 720 1,125 Station, 32 114 85 67 112 Station, 32 114 85 67 112 Station, 32 114 85 67 112 Station, 32 114 85 8,809 1,125 Station, 32 114 8,809 1,125 Station, 32 114 85 8,809 1,125 Station, 32 114 8,809 1,125 Station, 32	Native States in Cen Provinces.	tral	277		-	-			100	-		-		-	-	255
Babachistan	Madras Native States		2			-	***		***	***	-				,	
Bangalore Civil and Military 164 112 57 19 24 18 16 33 114 85 67 41 730 1,285 Rajputana 658 1,989 2,053 5,031 191 2 144 304 285 335 7,562 5,825 Central India 65 214 125 27 2 50 162 360 277 112 1,404 8,609 Hyderabad State 305 93 57 22 4 54 338 220 389 770 64 1,685 3,038 Mysore 1,461 1,664 641 128 158 172 400 739 793 629 870 448 7,133 11,84 Jammu and Kashmir States 4 4 43 3 6 2 61 3,017 Total 1908 4,353 6,125 8,117 8,596 3,232 629 547 1,824 3,395 3,681 2,829 2,123 42,592 140,669 Grand Total 1908 14,205 22,666 35,283 28,555 11,859 2,709 2,177 4,601 8,405 9,883 7,071 7,765 156,450 140,669 Grand Total 1909 65,287 115,035 237,078 372,750 204,888 60,305 14,832 16,272 37,170 49,014 20,009 14,254 1,315,692 Galcotta City 80 350 1,452 1,811 951 203 135 143 107 62 28 29 5,248 18 1.00 100 110 110 110 110 110 110 110 11	Bombay Presidency Nat States,	tive	1,581	2,005	2,374	1,795	457	915	75	663	1,079	1,583	598	707	14,327	54,185
Siation. Rajpotana 668 1,080 2,013 1,031 191 2 144 304 285 335 7,562 1,835 Central Iedia 65 214 123 27 2 50 162 260 277 112 1,404 8,809 Hyderahad State 205 93 57 22 4 54 338 220 359 179 64 1,625 3,038 Mysore 1,461 1,664 641 158 158 173 400 729 723 639 570 428 7,133 11,854 Jammu and Kashmir States 4 4 41 3 6 2 61 3,017 Total 1908 4,353 6,125 8,137 5,596 2,232 629 547 1,824 3,395 3,681 5,839 2,122 47,392 61 3,017 Grand Total 1908 14,205 22,605 35,383 28,555 11,059 2,709 2,177 4,601 8,405 9,883 4,738 140,669 Grand Total 1907 65,257 115,035 257,078 372,750 294,888 65,296 14,583 16,272 37,170 49,214 20,009 14,254 1,315,692 Calcetta City 65 84 408 409 308 121 98 54 33 25 32,709 14,277 1,315,692 Madraa City 80 350 1,452 1,811 951 203 135 143 107 62 28 28 25 5,248 Madraa City 80 350 1,452 1,811 951 203 135 143 107 62 28 28 25 5,248 Madraa City 80 350 1,452 1,811 951 203 135 143 107 62 28 28 25 5,248 Madraa City	Baluchistan				***			1							1	5
Central ledia 65 214 125 27 2 50 162 360 277 112 1,404 8,809 Hyderabad State 205 93 57 22 4 54 338 220 389 179 64 1,635 3,038 Mysore 1,461 1,664 641 158 158 172 400 739 723 639 570 418 7,133 11,854 Jamme and Kashmir States 4 4 42 3 6 2 61 3,617 Total 1908 4,363 6,125 8,117 5,596 3,232 639 547 1,834 3,396 3,681 2,839 2,133 47,592 61 3,617 Grand Total 1907 7,037 12,787 20,027 24,143 24,682 5,050 3,043 6,263 14,255 17,766 8,988 4,738 140,669 Grand Total 1907 65,257 115,035 257,678 372,750 294,888 65,296 14,583 16,272 37,170 40,014 20,009 14,254 1,515,892 Calcetta City 65 84 408 409 308 131 98 54 33 25 37,170 40,014 20,009 14,254 1,515,892 Madras City 80 250 1,452 1,811 951 203 135 143 107 62 28 28 25 5,348 Madras City 1	Bangalore Civil and Mill Station.	itary	164	113	57	19	24	18	16	33	114	86	67	41	750	
Central ledia 65 214 125 27 2 50 162 260 277 112 1,404 8,809 Hyderabad State 205 93 57 22 4 54 318 220 359 179 64 1,625 3,038 Mysore 1,461 2,664 641 158 158 172 490 739 793 639 570 428 7,123 11,834 Jammu and Kashmir States 4 4 41 3 6 2 61 3,017 Total 1908 4,363 6,126 8,117 5,596 2,232 639 547 1,824 3,396 2,631 2,839 2,123 47,592 66 3,017 Total 1907 7,037 12,787 20,027 24,143 24,683 5,050 3,043 6,263 14,255 17,766 8,983 4,738 149,669 Grand Total 1907 65,257 115,035 237,078 372,750 294,888 65,296 14,83 16,272 37,170 49,914 20,009 14,254 1,315,892 Calcutta City 65 84 408 499 308 131 98 54 33 25 37,170 49,914 20,009 14,254 1,315,892 Calcutta City 65 84 408 499 308 131 98 54 33 25 5,348 Madras City 80 350 1,452 1,811 951 203 135 143 107 62 28 28 25 5,348 Madras City 80 350 1,452 1,811 951 203 135 143 107 62 28 28 25 5,348 Madras City 1	Rajpotana		663	1,980	2,013	1,031	191	2			144	304	285	335	7.562	. 2-5
Hyderabad State 205 93 57 32 4 54 338 230 359 179 64 1,625 3,038 Mysore 1,461 3,664 641 158 158 172 400 739 723 639 570 428 7,123 11,834 Jamma and Kashmir States 4 4 43 3 6 2 61 3,017 Total 1908 4,363 6,125 8,117 5,596 3,232 639 547 1,834 3,396 3,681 2,839 2,222 42,592 1907 7,037 12,787 20,027 24,143 24,682 5,050 3,043 6,268 14,355 17,766 8,988 4,738 149,669 Grand Total 1908 14,205 22,666 35,283 28,535 11,259 2,709 2,177 4,601 8,406 0,883 7,071 7,765 156,460 Grand Total 1907 65,257 115,035 237,078 372,750 204,888 66,296 14,583 16,273 37,170 49,014 20,909 14,254 1,315,632 Calcotta City 65 84 408 409 308 131 98 54 33 25 37,170 49,014 20,909 14,254 1,315,632 Bombay City 65 84 408 409 308 131 98 54 33 25 31 33 1,779 Bombay City 65 84 408 409 308 131 98 54 33 25 5,348 Madras City 65 84 408 409 308 132 98 54 33 25 5,348 Madras City 80 350 1,452 1,811 951 103 125 143 107 62 28 25 5,348 Madras City	Central India	-	65	214	125	27	,	-		50	162	360	377	112		1
Mysore 1,461 1,064 641 158 158 172 400 739 793 639 570 428 7,133 11,854 Jamma and Kashmir States 4 4 41 3 6 2	Hyderabad State	-	205	93	37	22	4		54	338	220	359	179	64	President .	1000
Jammu and Kashmir States 4 4 41 3 6 2	Mysore	-	1,461	1,064	641	158	158	172	400	739	793	639	570	428	1000	12.000
Total 1907 7,037 12,787 20,027 24,143 24,682 5,050 3,043 6,368 14,255 17,766 2,983 4,738 140,669 Grand Total 1908 14,205 22,666 35,383 28,555 11,859 2,709 2,177 4,601 8,406 0,883 7,071 7,765 156,450 1907 65,257 115,035 257,078 372,750 204,888 65,296 14,883 16,272 37,170 40,214 20,009 14,254 14315,892 Calcutta City 65 84 408 409 308 131 08 54 33 25 31 33 1,779 Bombay City 80 350 1,452 1,811 951 203 125 143 207 62 28 25 5,348 Madras City 1 1 1 1	Jammu and Kashmir Sta	ites		4		- 41	3	6				~	-	-	61	and a
Total 1907 7,037 12,787 20,027 24,143 24,682 5,050 2,043 6,268 14,258 17,766 8,988 4,738 149,669 GRAND TOTAL 1908 14,205 22,906 35,383 28,535 21,859 2,709 9,177 4,601 8,406 9,883 7,071 7,765 156,450 1907 65,257 115,035 257,078 372,750 294,888 65,296 14,583 16,272 37,170 49,914 20,909 14,254 14315,892 Calcutta City 65 84 408 409 308 131 98 54 33 25 31 33 1,779 Bombay City 80 350 1,452 1,811 951 203 135 143 107 62 28 25 5,348 Madras City 1 1 1			4,353	6,125	8,117	5,596	3,232	639	547	1,824	3,395	3,681	2,839	2,131	47,502	
GRAND TOTAL 1908 14,205 22,665 35,283 28,535 11,859 2,709 9,177 4,601 8,406 9,883 7,071 7,765 155,450 1907 65,257 115,035 257,078 372,750 294,888 65,296 14,883 16,273 37,170 49,214 20,909 14,254 1,315,692 Calcutta City 65 84 408 409 308 131 98 54 33 25 31 33 1,779 Bombay City 80 350 1,452 1,811 951 203 135 143 207 62 28 25 5,348 Madras City 1 1 1		***	7,037	12,787	20,027	24,143	24,482	5,050	2,043	6,263	14,255	17,766			-	The same
GRAND TOTAL 1907 65,257 115,035 257,078 372,750 294,888 65,296 14,583 16,272 37,170 49,214 30,909 14,254 12315,592 Calcotta City 65 84 408 409 308 131 98 54 33 25 31 33 1,779 Bombay City 80 350 1,452 1,811 951 203 135 143 107 62 28 25 5,348 Madras City 11 11 11 11 11 11 11	£1908		14,205	22,005	15.183	28.555	17,350	2,700	P.127	4.601	8,406	0.883		-		
Calcatta City 65 84 408 409 308 131 98 54 33 25 31 33 1,779 Bombay City 80 350 1,452 1,841 951 203 135 143 807 62 28 25 5,348 Madras City 1 1 1	GRAND TOTAL						COR.	150	F-31 3 1/4					-	1	
Bombay City 80 350 t.452 t.811 951 203 135 143 107 62 28 25 5.348 Madras City 1 1 1		-											25,969	14,754	***	1,315,592
Madras City				-	The same	10000000	2000	age of	4300	· HOSON	-		31	33	1,779	-
			10000						1				28	25	5,348	-
	marine City in	-	***	1	-			-	***		-		-		2	-

TABLE V .- Mortality from Respiratory Diseases.

OTERCES, DISTRICTS AND TOWNS.	Bengal.	Eastern Bengal and Assam.	United Prorinces of Agra and Ouells.	Punjab.	North-West Frontier Province,	Central Provinces and Berar,	Madras Presidency.	Coorg.	Bombay Presidency.	Lower Burma,	Upper Burna.	A)mer-Merwara,	Registration India.
fortality by Provinces:-	100			-	and or	-						1	
Deaths by months :-													
anuary	1,668	359	2,432	8,659	239	3,095	2,665		5,455	495	243		1
ebroary	1,371	330	1,707	5,535	128	3,900	2,257	1	5,437	312	192	35	25,28
(arch 100	1,034	386	1,795	5,563	115	3,150	2,273		5,610	410	304	29	22,16
peil	1,218	350	1,658	4,322	115	2,539	2,052	4	4,552	465	174	23	17,50
fay	1,177	279	1,757	4,433	179	2,322	3,169	2	4,034	417	168	17	16,95
une	1,211	361	1,616	3,809	204	1,903	2,090	1	3,611	456	154	6	15,34
uly	1,103	310	1,219	3,557	139	1,636	2,352	2	3,077	442	179	7	14,52
logust	1,353	390	1,563	4,139	183	2,141	2,253		4,233	541	243	14	16,85
eptember	1,131	293	1,659	6,358	153	3,619	2,197	3	4,150	537	234	16	19,44
October	957	315	1,643	7,377	157	2,653	3,273	3	4,313	454	923	19	20,39
forember	1,268	413	1,681	5,719	129	2,947	2,551		4,312	407	162	32	19,62
December	1,408	396	1,724	5,273	115	3,097	2,647	5	5,166	394	197	45	20,45
Total	15,399	3,950	20,474	64,744	1,857	31,002	27,779	11	54,671	5,160	2,370	290	227,81
innual death ratios:-	1		10000			177	The same						132400
tatio per 1,000 of population,	*30	"13	*43	3*22	0'97	3'50	0.8	.,,	2796	'94	-8:	-61	
1908.			300	100000	masons		Rassi	1 1 1 1 1 1	SORY OUR	a become			1.0
tatio per 1,000 of population, 1907	.30	.09	'45	3,30	0,99	2'64	0.7	'43	3'14	*70	-64	78	1.00
Difference	+ '01	+ '04	'03	+ '02	"02	- '05	+ 0'1	71	18	+ '24	+ '17	- 117	+ '0:
dean ratio per 1,000 during 190307	'21	*06	.46	3,63	0.63	1.28	0.0	.10	3.12	'61	*35	-74	0.81
Difference		+ '07	20100000		0114 7014								_
Difference	+ ,69	+ 07	03	+ ,10	+ .24	+ 1,01	+ 0'3	- '07	10	+ '33	+ '25	13	+ 1
Histrict mortality excluding towns:-			Jane 1	1 30	133 12	917.19					1		
Sumber of districts affected	33	22	48	2)	5	24	21	1	24	18	- 11	6	24
lighest district ratio	2'47	1'93	8'75	13'64	1.33	10:87	1'6	0,03	9,00	1'48	*93	'49	13.0
lame of that district	Puri	Lakhim- por-	Hamirpur	Dethi	Hazara	Jubbul- pore.	Ananta-	Yedenal- knad,	Kaira	Tavoy	Lower Chindwin	Pohkar	Delhi
owest district ratio	'003	1007	'01	0.00	0,10	0'14	0,1	0'03	.03	101	.03	.04	*00
ame of that district	Darbh- anga.	Chitta- gong.	Buland- shahr.	Muzaffer- garh,	Kohat	Seoni	Vizaga- patam.	Yedenal- kead,	Larkhana	Sandoway	Kyaukse	Beawar	Darbh
umber of districts without morta-	None	None	None	None	None	None.	1	4		None	None	11	1
lity. listrict death rate per 1,000 of population.	*18	*11	'16	5.03	0'63	3'43	0.1	*06	3,00	,31	*18	*03	07
			Pr. III	100		100	STYPEN			nivers w	family free	V-Renall)	
Town mortality:-				103	00	Carolina .	Total Control					aminité	
lumber of towns affected	98	33	94	143	п	94	177	1	63	34	17	Hood.	701
lighest town ratio	6'08 Calcutta	ar3: Mangal- dai,	Rath	14-85 Dathousie	9°39 Buffa	16'30 Khurai	M. T. C. Cochin.	2'97 Mercara	19'76 Ahmed-	Wakema	Thong-	Ajmer Sabarb,	Rath,
owest town ratio	*05	108	*01	0*18	o*63	0°06	Cocnin.	2'97	nagar.	*13	dwingyl,	Suburb.	***
lame of that town	Purulia	Narayan-	7900	Khangarh	Tank	Umrer	T. C.	Mercara.			Yamethin	Kekri	Saharu
	207	ganj.	pur.	1505,000	1000 00	Sto.T	Tenkasi	Distriction.	140	The state of the s	100		pur.
lumber of towns without mortality	30	21	11	None.	None	11	55	4	,	5	None	2	141
lows death rate per 1,000 of	3'10	. "30	2'72	5'94	The same of	3'97	1"6	1'31	7'95	2,10	4'95	2'02	3'58

Statement No. I. Total Primary vaccinations and Revaccinations, successful cases among the children, cost of the Special Vaccination Department, etc., during the official year 1908-09.

	PROVINCE.	Mark Street		TIONS PE	OF OPERA- REFORMED ECTAL AND RY STAFFS INED.		UL CASES*	CHILI SUCCE VACCIN THE SPE DISPENSA	ER OF DREN SSFULLY NATED BY CIAL AND RY STAFFS BINED.	nber of operations by each vaccinator ial Staff.	f the Special De-	st of each success- vaccinated by the epartment,
				Primary,	Revacci- nation.	Primary.	Revacci- nation,	Under one year.	1 to 6 years.	Average number of o performed by each v of the Special Staff.	Total cost of partment.	Average cost of each full case vaccinates Special Department,
				224	- Mail				1 100			Rs. A. P.
Bengal†		***	-	1,810,213	209,318	99*34	61.78	851,786	843,147	1,077	2,17,721	017
Eastern Bengal a	nd Assam			1,351,834	100,426	98.76	74'26	377,425	779,543	1,257	1,10,614	013
United Provinces	of Agra ar	d Oudh	***	1,325,443	131,342	96.49	80*84	794,130	402,814	1,584	1,77,625	0 2 1
Punjab				523,087	145,811	98.43	76-93	417,998	74,850	2,531	1,14,761	0 3 1
North-West From	tier Provin	ce	***	81,181	10,187	98.38	82'14	49,125	17,542	\$ 2,591	12,575	0 2 5
Central Provinces	and Beras		***	553,438	86,209	98'78	75.65	419,424	108,911	2,000	72,482	0 1 11
Madras				1,478,771	120,634	95'48	81'37	626,677	590,577	5 1,983	3,21,757	0 3 5
Coorg		***	***	8,509	1/973	92*41	75'05	878	4,216	1,138	2,809	050
Bombay		***		673,347	52,425	96*02	70'65	470,417	104,887	1,654	3,27,370	085
Burma				342,977	53,436	93'59	59'99	88,317	154,678	1,476	1,49,847	0 7 5
Ajmer-Merwara				12,497	304	97*48	92,11	10,092	1,774	853	2,975	0 3 10
	T	otal		8,161,297	962,065	97*47	73'44	4,106,269	3,073,939	1,507	15,10,536	0 2 10

Statement No. II .- Vaccination operations performed by the Special and Dispensary Establishments separately, deaths from small-pox, etc., during the official year 1908-09.

				OPERATIONS AND REVACO COMBINED),		accinations tion,	il estimat- or 1,000 of olly vacci-		IS FROM L-POX®.
Province.		Population.	By Special Department.	By Dispensary Staff.	Total.	Ratio of successful vaccinations per 1,000 of population,	Percentage of annual estimated births at 40 per 1,000 of population successfully vaccinated.	Number.	Ratio per 1,000 of population.
								-	-
		1	1,876,750	142,781	2,019,531	39,58	43'91	35,966	'71
Eastern Bengal and Assam	***	30,788,134	1,447,6391	4,62199	1,452,260	45'24	30.62	9,373	'31
United Provinces of Agra and	Oudh	47,960,667+	1,456,020	765	1,456,785	28.30	41'39	59,996	1,36
Punjab		20,295,870	668,150	748	668,898	29'32	51'49	28,652	1'42
North-West Frontier Province		2,030,268	90,687	68t	91,368	41 '86	60'49	- 734	-38
Central Provinces and Berar		13,621,559	614,072*	25,575	639,647°	43'84	76'98	9,044	'75
Madras		38,227,818	1,649,350(a)	551	1,649,405	39'19	40'98	22,204	.6
Coorg		180,607	19,250	232	10,482	50'68	12'15	38	'21
Bombay		21,438,769	724,075	0.50	725.772¶	20'03	54'86	2,526	'14
Burma		10,477,508	382,326	14,087	396,413	31'77	21'07	1,298	
A:		476,912	12,801		12,801	26.13	52'90	863	1'81
Marie Committee of the							32 90	003	181
Tota	d	233,999,437	8,932,120	191,242	9,123,362	35'93	43'87	170,694	*75

Excluding those the results of which were not known.
 Excluding figures for the Tributary States, Orissa, received too late for incorporation.
 Including the vaccinations performed in cantonments and Political Agencies.
 Excludes average of work done by each medical subordinate.

For the calendar year.

Excluding 222,045 operations in the Tributary States, Orissa, received too late for inclusion.

Including 2,568 secondary operations.

^{34 ,,} secondary operations.
16,010 persons enumerated at the Ajodhya Fais.
89 secondary operations.

Statement No. 111-Vaccination in the European and Native Armies of India during 1908.

Effective Strength.

				EU	ROPEAN	N TRO	OPS.		This			N	ATIVE	TROO	PS.		
			O	FICERS.			ISSIONE	AND NOS		Eu	ROPEA	N OFFIC	ERS.	NATIV	MISSIO	MISSIONE NED OFFI D MEN.	D, NON-
Armi	es.	Nus	nber.	successi	tage of ful cases l opera- ns,	Nun	iber.	successi	tage of ful cases d opera-	Num	ber.	Percen successf to total tion	opera-	Nun	aber.	Percent successfi to total tio	tage of ul cases opera- ns.
		Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination,	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.
Northern		23	613	65	66	91	10,079	68	56		290		62	3,621	22,813	76	51
Southern			103		42	1	5,785	100	47	3	191	100	43	3,348	26,461	71	, 43
Extra India not i	n the India			***							9		33	125	519	43	57
In	dia	23	716	65	63	92	15,864	68	52	3	490	100	54	7,094	49,793	73	47

Non-effective Strength-Families.

A .- European Troops.

			OFFIC	EBS' WI	VES.	O	FICER	s' CHILD	REN.	-	SOLDIE	s' Wivi	Es.	So	LDIER	s' CHILD	REN.
	Armies.	Nun	aber.	successi	tage of ful cases l opera- ns.	Num	ber.		ul cases opera-	Nun	iber.	Percent successf to total tion	ul cases opera-	Num	ber.	Percen successf to total tion	ul cases opera-
		Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.
Northern		 	132		77	10	61	80	77	6	666	- 83	79	889	429	SS	73
Southern		 ***	13		23	3		67		17	374	100	65	568	250	76	54
	India	 	145		72	13	61	77	77	23	1,040	96	74	1,457	679	81	66

B .- Native Troops.

	EURO	PEAN (DFFICERS	' WIVES.	E		AN OFFI		NAT	va So	LDIERS' V	VIVES.	NATI	VE SOLI	DIERS' CH	ILDREN,
Armies.	Num	ber.	success	ntage of ful cases il opera- ns.	Num	iber.	successi	tage of ul cases l opera- as.	Nun	sber.	successf	tage of ul cases l opera- ns.	Num	ber.	successf	opera-
	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.	Primary.	Revaccination.
Northern		41		95	24	21	100	90	648	336	82	67	2,585	466	83	67
Southern		43		37	48	3	98	33	215	1,374	81	.65	3,735	1,204	79	53
Extra India not in the Indian command.		2		100						-			-			
India		86		66	72	24	99	83	863	1,710	82	66	6,320	1,670	81	57

Appendix to Section 1786-Massis along-conclu-

Statement No. 119-Veccination is the European and Willie Service of India during 1908.

Effective Strength.

-								- miles
	Paren.					4		

INDICATE A PROPERTY OF

A- ungest Trion

							ortio		
		0.							

Distance Property

Andrews Street, or other Persons.								Street .		
				.00						
		10.								
									nd mi	

ANNUAL RETURNS

OF THE

EUROPEAN ARMY OF INDIA

OF THE

NATIVE ARMY AND OF THE JAIL POPULATION

FOR THE YEAR

1908.

COMPILED AND SYSTEMATICALLY ARRANGED FROM THE ORIGINAL DOCUMENTS

BY

S. P. JAMES, M.D., MAJOR, I.M.S.,

Statistical Officer to the Government of India, in the Sanitary and Medical Departments.

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Malaria by months, stations, groups, and armies	XXXV	87
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	XXVIII	91
	XXXIX*	91

<sup>Omitted for the present by order of Government.

†Under the orders of the War Office these tables are no longer compiled for India.</sup>

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(European, Eurasian, native; male, female; adult, juvenile.)

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IV.-TROOPS AND PRISONERS, 1908.

TABLE G.

Grouping of Diseases in the Main Tables for 1908.*

HEAD OF DISEASE.	Includes or includes also
CHOLERA	
HEAT-STROKE	Sunstroke.
	Delirium tremens. Alcoholic Poisoning.
TUBERCLE OF THE LUNGS .	Tubercular Phthisis, and Hæmoptysis due to tubercle
RESPIRATORY DISEASES .	Includes Hæmoptysis and Cirrhosis of the lung not due to tubercle.
	Old age (Tables for men and women). Premature birth (Tables for children).
DIARRHŒA	The same and the s
INFLAMMATION.	Congestion of liver, Hepatitis, Perihepatitis; but excludes Cirrhosis of liver.
VENEREAL DISEASES .	Syphilis, Gonorrhœa, and Soft Chancre.
GUINEA-WORM AND	The entozoa numbered from 1 to 84, 95 to 113: also
PHAGEDÆNA, SLOUGH, AND GANGRENE.	Nomenclature of 1906, Nos. 17 and These two head- 954, and 967. Nomenclature of 1906, Nos. 953 and ings appear only in jail tables.
AND DESCRIPTION OF THE PARTY OF	905.
ABORTION AND AFFECTIONS CONNECTED WITH PREGNANCY	Nos. 506 and 827 to 838.
AFFECTIONS CONNECTED WITH AND CONSEQUENT ON PARTURITION.	Nos. 839 to 870 and all other diseases stated as puerperal by medical officers.
ALL OTHER DISEASES PECULIAR TO WOMEN.	Nos. 765 to 826 and 871 to 882.

*For details of individual diseases, see Table LIII.

1.—EUROPEAN TROOPS, 1908. A.—MEN.

TABLE D.

STATIONS by ARMIES.

(a) STATIONS.	Height above sealevel	Authority for height. +	(a) STATIONS.	Height above sea level in feet.*	Authority for height.†	(a) STATIONS.	Height above sea level	Authority for beight. +
ORTHERN ARMY:-			NORTHERN ARMY :- contd.			SOUTHERN ARMY :- contd.		
Ambala	902 5	S. G.	Landour Convalescent Depôt.	7,362	S. G.	Colaba (Bombay) and Khandalla Sanitarium,	\$ 20 2,000	S. G. M. O.
Agra and Fatehgarh	{ 554 444	I."B.	Lebong	6,000	I. B.	Deolali Depåt	4.35	
Allahabad	298	S. G.	Lucknow	400	S. G.	Fort Dufferin (Mandalay) .	1,829	S. G.
Amritsar	756	,,	Meerut	739		Hyderabad (Sind)	249	**
Bareilly	560	"	Multan	402	.,	Jhansi	134	I. B.
Barian Camp and Khairagali		I. B S. G.	Murree Convalescent Depôt	C 2 250		Inhibations.	860	S. G.
Barrackpore		S. G.	and Upper and Lower Topas.	7,250 7,000 7,320	M. O. I. B.	Karachi	1,306	,,,
Benares	256	**	Muttra	446		Kampti	930	
Campbellpore and Attock .		M. O. S. G.	Naipi Tal Convalescent	6,400	S. G.	Kirkee	1,837	**
Campore	417	29	Depôt.			Madras and Poonamalee	5 15	S. G.
Chakrata	6,885	,,	Nowshera	1,100	М. О.	Depôt	2 50	M. O.
Cherat	4,546	,,	Peshawar	1,165	S. G.	Maymyo	3,508	S. G.
Dagshai	5,982	,,	Ranikhet and Chaubuttia .	5,983	:	Meiktila	860	
Dalhousie Convalescent Depôt.	6,732		Rawalpindi	1,707		Mhow and Indore	{ 1,003 1,806	"
Darjeeling ditto .	7,168	,,	Rurki	884		Mount Abu Sanitarium .	3,960	
Delhi	715	10	Sialkot	829	"	Nasirabad	1,461	**
Dinapore	171		Sitapur	449	"	Neemuch	1,613	,,
Dum-Dum			Shahjehanpur	507	,,	Nowgong	770	I. B.
Ferozepore	100 St. 100	S. G.	Solon	5,166	"	Pachmarhi Sanitarium .	3,481	S. G.
Fort William	17	.,	Subathu	4,124	**	Poona	1,909	,,
Fyzabad	336	,,			10	Purandhar Sanitarium .	4,550	,,
Gharial	6,811	,,			200	Quetta	5,511	,,
Jullander	900	39	SOUTHERN ARMY :-	5	-	Rangoon and Port Blair	5 14	
Jutogh	6,371	,,	Aden	26	S. G.	,	85	**
Kalabagh and Baragali .	(7,036)	I. B.	Ahmednagar	2,125	**	Saugor	1,753	**
	(7,000	м. О.	Bangalore	3,021	**	Secunderabad	1,732	
Kasauli Convalescent Depôt		S. G.	Belgaum	2,473	,"	St. Thomas' Mount	600	M. O.
Khanspur		M. O.	Bellary	1,483	**		250	S, G.
Kuldana		S. G.	Bhamo	351		Thayetmyo	145	
Lahore Cantonment and Fort.	705	"	Cannanore, Calicut and Malapuram.	{ 47 27 500	M. D. M. O.	Wellington Convalescent Depôt.	6,160	

^{*} These heights are usually those of the survey-marks or of the mercury-surface in barometer-cisterns of meteorological observatories.

† S. G. = Surveyor-General of India; I. B. = Intelligence Branch of the Division of the Chief of the Staff; M. D. = Meteorological Department;

M. O. = Medical Officers in charge of Station Hospitals in their Sanitary Reports.

(a) Stations with a height of 3,000 feet and over above the sea level are Official Hill Stations and Hill Sanitarium and Convalescent Depôts.

TABLE I.

RATIOS OF ARMIES.

The ratios of admissions and deaths to strength are taken from Table III. The actuals will be found in Table IV.

										Northern Army.	Southern Army.	India,
RENGTH										36,676	30,243	68,933
CONSTANTLY SICK-R	ATE OF E	ACH MC	NTH-							44'7	46'1	
lanuary	: :				:					38'5	44'9	44°5 39°5
March	: :	:		: :	:	:			-	35.8	39°7 40°6	37"0
May	: :		: :		:	:			:	42°7 45°2	39'7	40'8
une										45°3 48°7	43°0 44°5	44°3 40°8
August	: :								:	60'2	50.6	55.6
October November .	: :	:	: :	: :	:		:	:	:	66°5	51°1 48°6	20,3
December										34'3	41'3	44'2
						OF TI	нк Үн	LAR		49'0	44'3	45'7
omission RATE OF	THE YEAR	-			4 8					10'8 1'0	1'1	6:3
Cholera	: :		: :		:		:	:	:	1.3	'2	1.3
Enteric Fever	: :		:	:		:	-	:	:	16·6 312·9	12'3	14'5 244'1
Pyrexia of uncertain	origin .									100'4	44'7	73'9
Tubercle of the lung								:	:	4'7 18'8	2.8	3.8
Respiratory Diseases Dysentery		:	: :	:	:	:	:	:	1	11'3	16.4	17.4
Diarrhora				:	:	:				19'3	13'9	17.7
Hepatic Abscess . Congestion	and Infla	mmation						Ė	:	10'5 58'3	7.6	8°9
Venereal Diseases										30 3		030
						ALL	CAU	SKS		909'5	724'4	839'5
ATH RATE OF THE Y	BAR-											
Cholera		1	: :	:	:	:	1		:	*76 *03	.03	1,10
Enteric Fever .		-	: :							3'22	2*28	2'70
Malaria Pyrexia of uncertain	origin .	-								**79	*26	*54
feat-stroke Circulatory Diseases Cubercle of the lung	: :		: :		:				3	*25	13	*25
Subercle of the lungs			: :		:	:		:		*33 *46	*33	*39
Respiratory Diseases Dysentery			: :	:	:	:	:		:1	*14 *41	*03 *45	'09 '42
Diarrhœa .										'03 '87	**;6	*80
Hepatic Abscess .				1								
						ALL	CAU	SES		10'72	7'51	9'78
CENTAGE IN 100 AD	MISSIONS	-		75			1	-		1'15	'16	'75
nfluenza			. :							10	'03 '03	16
Small-pox Enteric Fever .	: :		. :	:				:	:	1'76	1'70	1'73
Malaria Pyrexia of uncertain	origin :	:	: :			:	:	:		33 31 10'09	22°67 6'17	29'07 8'81
Tubercle of the lung							(3)	-		17	16	'16 '46
Pneumonia Respiratory Diseases			: :							2'00 1'20	2'27	2'07
Dysentery	: :	:	: :	:	:	:		-		2.02	1'92	2,10
Hepatic Abscess Congestion	and Inflan	nmation				:		:		1,11	1,02	1.00
Venereal Diseases			1		-			-		6.51	11.60	8.30
ECENTAGE IN 100 D	EATHS-								1			
Cholera										7'1	3'1	11.3
Small-pox Enteric Fever .			. :							30%	30'4	28-3 2-3
Malaria Pyrexia of uncertain	origin :		: :	:	:	:	:			5'3	***	***
Heat-stroke Circulatory Diseases								:	:	7'4	3'5	5'5
Tubercie of the lung										3'1 4'3	1'8	2°4 4°0
Pneumonia Respiratory Diseases	: :	:	. :		:					1'3	6.2	.0
Diarrhœa .	: :		: :		:		-	2		3.8		4'3
										8.1	10.1	8.5

^{*} Including troops on the line of march and with the Field Forces. For complete detail of diseases, see Table LIII.

† Worked on the aggregates.

TABLE II.

RATIOS of GEOGRAPHICAL GROUPS.

The ratios of admissions and deaths to strength are taken from Table III. The actuals will be found in Table IV

L_STRENGTH	-	e ratios o	admissio	ons and d		-	-		-		-	III De 10ti	nd in T	able IV
Blooms	and the same of the	-	11	IV	10000								VIII	
Case Bayer			"	10		٧,	NW.	3,-E,	1.0	A	XI	XIIIa	Hill	
LeSTRENGER 1.175 1.755 1.755 6.641 1.1642 1		Coast	Burma	Bengal			Indus	tana,		Waster	South-	1200		
Labada						Hima-	and		Deccan.		ern			India.
L.—STRENGTH 1.750 1.755 1.755 6.61 3.628 4.594 5.538 1.685 3.67 10.935 3.812 6.629 M.—CONTAINED RATE OF EACH 5.77 7.78 4.73 4						laya.		and		-	I II Comm.		Sanita-	
Heaterstands Str. 283 473 473 481 414 313 426 502 359 371 508 473 481	-	-			-			Gujarat.	-				ria.	-
Novemen	I.—STRENGTH	1,276	1,751	1,756	6,641	13,428	4,894	5,528	10,283	1,485	3,671	10,923	3,812	68,933
Alexany	11+CONSTANTLY SICK RATE OF EACH		_		-	-					-			
Perbeary 667 9014 4473 372 271 470 3904 5904 331 337 337 337 347 3		81'7	78'3	47'8	42'3	49.1		4174	42'6	50'2	55'0	357	56'8	
### HIL—ADMISSION RATE OF THE YEAR— Inflacence Inflammation Inflacence Inflammation Inflacence Inflammation Inflammation Inflacence Inflammation Inflammat	February	-610	91'4	44'3	32.5	42'1	37'3	27'1	40'2	50'4	50'4	38'1	53'7	39'5
### HIL—ADMISSION RATE OF THE YEAR— Inflacence Inflammation Inflacence Inflammation Inflacence Inflammation Inflammation Inflacence Inflammation Inflammat	April		39-7	40'0					37'3	46'8		26.7		37'0
### HIL—ADMISSION RATE OF THE YEAR— Inflacence Inflammation Inflacence Inflammation Inflacence Inflammation Inflammation Inflacence Inflammation Inflammat						44'3	49*2		34'8	47'8				40'8
### HIL—ADMISSION RATE OF THE YEAR— Inflacence Inflammation Inflacence Inflammation Inflacence Inflammation Inflammation Inflacence Inflammation Inflammat	July	44'2	42.7		42'9	50'4	53'1	28-4	3976	42'1		37.2	66-8	44'3
### HIL—ADMISSION RATE OF THE YEAR— Inflacence Inflammation Inflacence Inflammation Inflacence Inflammation Inflammation Inflacence Inflammation Inflammat	September	42'5	47'0	57.7	43'2	92"1			4914	49'5	63'3	36'4		55'6
### HIL—ADMISSION RATE OF THE YEAR— Inflacence Inflammation Inflacence Inflammation Inflacence Inflammation Inflammation Inflacence Inflammation Inflammat									45'1			30.1	71'3	59'3
III.	December	33.8	43'0	- Daniel Control	31.9	57'3	64'4	63'4	32.2	54'5	41'4	34'0	92'1	
III	OF THE YEAR .	40 1	45 1	43 4	40.1	50.5	52.2	44'4	400	20.0	54'5	35.4	65.3	45'7
Influence	III -ADMISSION SATE OF THE VELS			1										
Choters 16 170 34 173 187 20 99 185 290 142 130 105 143 144 145	Influenza	***		1000				3'4		10000	'3	3.0		6.3
Enteris Fever	Smáll-pox		***	.6	3.6		13,500.0		- 14	10000				1.3
Hepatic Congestion 31 1270 1371 1371 1370 1371 1371 1371 1370 1371	Enteric Fever		12'0		17.3	18'3	20.0	9.0	18'5	2'0	14'2	13.6	10.8	14'5
Hepatic Congestion 31 1270 1371 1371 1370 1371 1371 1371 1370 1371	Pyrexia of uncertain origin :	82'3	90'2	168.6	1346	72'2	210'5	73'1	43.7	5'4	42'0	25.5	10.3	73'9
Hepatic Congestion 31 1270 1371 1371 1370 1371	Tubercle of the lungs	1.6	3'4	2'3	2'0						*5	1'0	2'1	7'2
Hepatic Congestion 31 1270 1371 1371 1370 1371	Pneumonia					5.0	5'5	2.2		1'3	1.0			39
Hepatic Congestion 31 1270 1371 1371 1370 1371 1371 1371 1370 1371	Dysentery	21'2	5'1	12'0	16'9	10'9	9.8	15'9	21'6	18'9	25.6	8.6	10'2	14'4
Hepatic Congestion 31 1270 1371 1371 1370 1371	(Abscess		14.3	1					13.1					177
Veneral Disasses 112" 120" 124" 03" 548 49" 05" 826 109" 826 15" 50" 506 69"		3'1	12'0	137	47	12"4	. 6.4	*	6'3	8.1	0'5	9.6	15'7	
IV. DEATH RATE OF THE VRAR			120'5										20.0	69'6
IV. Death Rate Of the Verification 11 12 15 16 204 10 17 11 11 11 11	ALL CAUSES .	683*4	761'3	844'0	714'7	1,148'2	1,254'2	1,000'9	667.8	703'0	701'9	574'8	753'7	829'5
Cholera			-							-			-	
Small-pot 78 3.43 3.61 3.87 4.50 3.26 3.21 1.23 1.09 1.56 2.10 2.76 Malaria 1.57 3.0 1.12 4.1 1.00 1.9 1.53 2.7 2.0 3.3 1.23			2'28		1,21	162	2'04		*10	Town Co.	*27		-	1210
Malaria Pyrexia of uncertain origin Heat-stroke Heat-stroke Circulatory Diseases 78 57 730 230 220 18 10 67 52 109 27 109 26 34 Tubercle of the lungs 78 57 730 230 220 18 10 67 52 109 27 109 26 34 Tubercle of the lungs 78 57 730 230 220 18 10 67 52 109 27 109 26 34 Respiratory Diseases 78 57 14 45 33 25 20 18 49 72 27 09 26 34 Dysentery Darrhea 78 114 57 44 15 30 20 18 49 72 27 09 26 44 Dysentery Darrhea 79 90 82 1002 36 54 100 12 10 10 10 10 10 10 10 10 10 10 10 10 10	Small-pox		***	•••	*15	***	***		.10		***	***	***	*01
Heast-toke	Malaria			10000							2000000			2'76
ALL CAUSES 70		100000		2000		4	***	***		***	***	200		***
ALL CAUSES 70	Circulatory Diseases	'78	***		-30	'30	*20	18	'10	*67		'09	444	25
ALL CAUSES 70	Pneumonia	10000	*57	1.14	'45		*20			641				'39
ALL CAUSES 70	Respiratory Diseases										0.000			109
V.—Percentage in 100 admissions— Influenta Cholera Cho	Diarrhoea		1000		***	414	***	***		***		***		10'
V.—Percentage in 100 admissions— Influenza Cholera			- 2			1								
Influenta	ALL CAUSES .	7.05	9,14	2.00	12'80	11.00	13.49	9'41	7.18	10,10	0.52	5.08	9'44	9.78
Cholera				***	100							-		- 3
Small-pox 123 1'53 40 2'42 1'60 1'60 1'90 2777 29 1'86 2373 1'43 173 174 174 174 175	Cholera	10000		***	*23	'06		***	01 01	200000		10		75
Malaria	Water Street	*23						'04		***	136			'09
Tubercle of the langs 23 45 27 27 11 11 105 16 48 507 18 228 16	Malaria	13.65	8'10	16.07	19"11	40'67	39'90	40'48	20'82	37.64	7'15	19'72	21'90	29'07
Pacumonia	Rheumatic Fever	1.03	*08	10,	'57	'63	'57	.63	.67	*29	1'04:	2'47	1'43	'86
Respiratory Diseases 2'41 1'25 2'43 2'34 2'09 1'12 1'80 2'65 3'75 2'29 2'29 2'55 2'07 Dysentery 3'10 68 1'42 2'36 795 798 1'58 3'23 2'68 3'36 1'50 1'36 1'71 Diarrhea '34 1'88 1'89 1'41 1'97 2'23 2'14 1'97 1'34 1'47 2'80 2'02 2'10 Hepatic Congestion and Inflammation '46 1'58 1'62 '65 1'08 46 '88 '95 1'15 1'25 1'67 2'09 1'06 Venereal Diseases '16'40 15'83 14'71 9'59 4'77 3'96 6'52 12'37 15'61 15'37 8'74 8'84 8'30 VI.—Percentage in 100 deaths— Cholera '10'40 15'83 14'71 9'59 4'77 3'96 6'52 12'37 15'61 15'37 8'74 8'84 8'30 VI.—Percentage in 100 deaths— Cholera '10'40 15'83 14'71 9'59 4'77 3'96 6'52 12'37 15'61 15'37 8'74 8'84 8'30 VI.—Percentage in 100 deaths— Cholera '10'40 15'83 14'71 9'59 4'77 3'96 6'52 12'37 15'61 15'37 8'74 8'84 8'30 VI.—Percentage in 100 deaths— '10'40 15'83 14'71 9'59 4'77 3'96 6'52 12'37 15'61 15'37 8'74 8'84 8'30 VI.—Percentage in 100 deaths— '10'40 15'83 14'71 9'59 4'77 3'96 6'52 12'37 15'61 15'37 8'74 8'84 8'30 VI.—Percentage in 100 deaths— '10'40 15'83 14'71 9'59 4'77 3'96 6'52 12'37 15'61 15'37 8'74 8'84 8'30 VI.—Percentage in 100 deaths— '10'40 11'8 5'6 15'2 11'5 1'2 13'3 17'4 27'4 22'2 28'2 18'3 11'5 10'0 11'5 1	Paeumonia	'11							'58					
Diarrheea '34 1'88 1'89 1'41 1'97 2'23 2'14 1'97 1'34 1'47 2'80 2'02 2'10 1'1			1'28	2'43		2'09	1'12	1.80	2765	*57	2'97	2'29	2'55	2'07
Hepatic Congestion and Inflammation '46 1'58 1'62 '65 1'08 '46 '88 '95 1'15 1'25 1'67 2'69 1'06 Venereal Diseases	Diarrhœa	'34	1.88	1.89	1'41	1'97	2'23	2'14	1'97	1'34	1'47	2 80	2'02	2,10
VI.—Percentage in 100 deaths— Cholera Small-pox Enteric Fever II'I 37'5 28'2 32'3 33'3 34'6 41'2 13'3 17'4 27'4 22'2 28'2 Malaria Pyrexia of uncertain origin Heat-stroke Circulatory Diseases II'I 10'0 2'4 2'5 1'3 1'9 1'2 6'7 13'0 1'6 2'8 5'5 1'3 1'9 1'2 6'7 13'0 1'6 2'4 Pneumonia Respiratory Diseases II'I 10'0 2'5 4'5 1'2 6'7 13'0 1'6 2'4 Pneumonia Respiratory Diseases II'I 10'0 2'5 4'5 1'2 6'7 13'0 1'6 2'4 8'5 1'3 1'5 1'5 1'9 1'5 1'9 1'5 1'9 1'5 1'5 1'9 1'5 1'5 1'9 1'5 1'5 1'5 1'5 1'5 1'5 1'5 1'5 1'5 1'5	Hepatic Congestion and	3333	978	2200	1									
VI.—Percentage in 100 deaths— Cholera				100000000000000000000000000000000000000										
Cholera													1	
Cholera														T
Small-pox 11'1 37'5 28'2 32'3 33'3 34'6 41'2 13'3 17'4 27'4 22'2 28'2 Malaria 24'4 9'3 3'0 11'5 2'5 13'3 4'3 2'8 5'2	Cholara		2510	1	11-8	P-6	1000		214				400	
Pyrexia of uncertain origin Heat-stroke Circulatory Diseases II'I	Small-pox	***	101	***	1'2	***	***	***	1'2	***	***	***	101	3
Pyrexia of uncertain origin Heat-stroke Circulatory Diseases III'I 10'0 2'4 2'5 1'5 1'9 1'2 6'7 13'0 1'6 2'5 Tubercle of the lungs III'I 10'0 2'5 4'5 1'2 6'7 4'3 1'6 2'8 5'6 Pneumonia Pneumoni	Malaria						33.3							28'2
Circulatory Diseases	Heat-stroke	100000		***	in	res"	444		***	***	***		200	401
Pasumonia	Circulatory Diseases	11.1			2'4	2'5	1'5	1'9	1'2	67	13.0	1.6	***	2.2
Hepatic Austress	Pneumonia	2000			3'5 /	3,1	1.2	1.0		***				40
Hepatic Austress	Dysentery							5.8			***	***	28	9
					***	***	***	***		***	***	***	2'8	11
				-	1		,,	30		-00	.30	03	30.1	-

^{*} Including troops on the line of march and with the Field Forces. For complete detail of diseases, see Table LIII. † Worked on the aggregates.

TABLE III.

RATIOS of STATIONS, GROUPS, and ARMIES. For actuals see Table IV.

-	- 1		_	_							_	-, -	na A			-	-	-	or actua				_
,	ngth.	_	11/									MISS	ION R	ATE.	2.	DEAT	TH RA	ATE.					_
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke,	Sec	Tubercle of the	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhora.	Hepatic Abscess.	Hepatic Congestion and Inflammation,	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre,	Genorrhæs.
Rangoon and Port Blair	1,276 {	::			1.6	93'3		71		6.3	1'6	'8	16.5	21.2	2'4	·8		112'1	683'41 7"05}	48.0	36.8	19'6	55*6
GROUP 1.— BURMA COAST AND BAY ISLANDS.	1,276				1'6	93'3	100	7"1	-	6.3		-8	16'5	21'2		-8		112'1	683'4 7'05	† 48·1	36-8	19.6	55-6
Thayetmyo .	467 {		8'57		21'4 6'42 4'7	45'0	227'0	***	11	6.4		47	12'8	4'3	13'8		6'4	116.8	19'27 \$	51'0	of.	19'3	
Meiktila .	214	-			10'7	357	46.4			3.6	10'7	**	7.1	17'9	10.2		10.7	142'9	}	52.8	21.4	28'0	***
Fort Dufferin (Mandalay), Shwebo	280 { 618 {				11.3	22,0			***	3.7		3.5	97	7.14	14.6		3.5	135'9	54377	58.9	27'5	38.8	
Bhamo .	172				4.85	500,3	***			5.8		1'62	11.6		53,3		58	1.62	8.09 }	43°7	1.65	17.4	
																			5	3-4			-
GROUP II BURMA INLAND.	1,751 {		3.38		3'43	61'7	90'2			7'4	3'4	'57	9.7	51	14'3		12'0	120'5	9.14	48.1	33"1	32'0	55.4
											1				1		1				-		-
Forts William, Fulta and Chingri Khal.	1,175{	1.7			5"1	142"1	333,1	60	::	2211	1.7	1'7	16'2	13.6	18-7		7'7	166.0	953'2 } 4'26 }	50°6	44'3	37'4	84'3
Dum-Dum .	320 {			3.1		40.6						6.52	34'4	9'4	3.1	=	21'9	37'5	3959 }	24'0		15.6	31,0
Barrackpore .	260 {				-	257'7	130-8	3.8	3.8	30'7	3.8		23.1	77	19"2		30'7	42'3	3.82}	48.0	3'8	23.1	15'4
GROUPIV.— BENGAL AND ORISSA.	1,756 {	171		-6	3'4	140'7	168-6	5'1	-6	1914	2'3	3'4	20'5	12'0	15'9		13'7	124'1	844'0}	† 45°4	30.5	31'3	62.6
В				***														*****	fam.		16:0		
Dinapore .	626 {	527		1.0	53'4		***		4.8 1.60	1.6	7.6	90		1.60	61'1	3,5		55'9	12785	25.1	15.3	14'4	
Benares .	952		3.5	171	7'4		347.7		12.6	7'4	21	11'6	31'5	25.2	18.9	171		76.7	1118.7}	78.2	15.8	9.5	
Fort.	20.5		3,10		***	f		-		1.02		1 05				1.02			9'45)	3.	***		
Fyzabad .	835-{	6'0	***	6.0	3.28	1,30		***	2'40		274	2'4	13'8	16-8	16.8	1,30		517	935'3 }	53'7	9.6	10'8	31.0
Sitapur .	580 {	1'7			31'0		***		3'7	34'5	17		172	1.42	2'4	3,3		61.1	10,34}	38'7	9'4	8.6	43'2
Lucknow .	1,065-{		6.6	'41	4'48		1360	***	14'1	85	56	·41 66	***	119	10'3	1,33	6.6	54'5	707'2 }	32'9	9'4	***	33.1
Cawnpore .	Jeni		6.57	11.1	7'51				1.88	***		*94	***		***				1878		***		***
GROUP V.— GANGETIC PLAIN AND CHUTIA NAGPUR.	6,641	6.2			17'3		104"	4"3	6'3		2.0	6'3	16'7			1'8		68-5	714'7	40,1	11'3	10'8	46.4

TABLE III-continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

For actuals see Table IV.

-	50									. 25.0	MISSI	ON R	TE.		2. D	EATH	RATI						
Stations and Groups.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	Circulatory Diseases,	Tubercle of the	Pneumonia,	Respiratory Dis-	Dysentery.	Diarrhora.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Venereal Diseases.	ALL CAUSES,	CONSTANTLY SICK RAYE.	Syphilis.	Soft Chancre.	Generrhan.
A		1	1																				Ī
Shahjehanpur .	342 {	20'5		5.8	=	22372	73"1	5.8	2'9	46.8	5.8	3.03	14'6	20'5	20.2	3,0		28.2	962'0}	49'3		14'6	43'9
Bareilly 1	,144 {	22.7		26	3.2	294'6	193'2	14'0	3'5	10'5	0	44	42.8	6.1	32'3	.87	16-6	38.5	6.99}	48'5	3.2	4'4	30%
Rurki .	361 {	16.6			13'9	326.9	102*5	5'5		5'5			8.3	2.8	24'9		5'5	360	Sir6}	55*7	5'5		30.2
Meerut I	,968 {	20'3		1.2	27°4 6°61	1,054'9	5"1	8'1	2.2	6.1	1.0	4.6	24'4	18.8	32.0	1,03	6-6	81.8	1,713'9)	79'5	21.8	16-3	43'7
Delhi	224{			13'4	4.40	1,107*1	35'7		4'46	13'4			13'4	4'5	26.8	:::		133'9	1,964'3 }	78.3	4'5	80-4	49*1
Ambala 2	,295 {	8.3	·4 ·4+		8.3 8.3	160'3	9'2	1'3	4'4	8'3 '44	4	5'7	12.6	8.3	11.8	17	24.8	41'0	7'41 }	35'0	12'6	3.1	25'3
В	1	-	1										3 4		1								
Jullendur	504	20			1798	349*2	31.7		7.9	17'9		6.0	33'7	4'0	19"8		7.0	85'3	5'955	55.6	25-8	13.0	45'6
Ferozepore .	915{	=			0.8	765.0	302.7	6-6	18-6	10,0	2'2	9.8	31.7	4'4	0.8	1,00	197		5.46	95.7	1 5	4'4	26'2
Amritsar	155 {		6.45			774°2 6°45	103,5			6.2	:::		13.0	=	12'9		12'9	***	12'90	52'7	6.3	1279	38.7
Lahore Cantt.	930 {		1.08	1.1	3'23	215	****	3'2	4°3 3°23	5'4	1,08	6.2	32'3	7'5	15.1	2'15	-	***	1,253'8 }	58'0	18.3	14'0	23'7
Sialkot 1	,290-{	63%			20°9 5°43	5271	68.3	3.1	5'4	13'2	1.6	6.5	17.8		39'5	1.22	6.5	***	12'40 }	59'1	6.5	18.6	***
Rawalpindi . 2	1917 {	4'1	1.21	1.7	31.0	1'03		127	1'0	1300	1'4	2,8	27.8	12'7	31.6	-69	6'2	497	824.5 }	47'6	12'0	9.3	23.2
Campbellpore and Autock,	382 {		5.65		36.6	397'9	102.3	5'2	7.9	7'9	2.6	10'5	7.9	23.6	13.1		13.1	57.0	10.47	43'2	10'5	13.1	34'0
GROUP VI UPFER SUB- HIMALAYA.	,428	14'4	·7 ·67	1'4	18'3	466·9	72'2	7*2	4'3	.30	1'3	5'6	24'0	10'9	22.6	1'7		54'8	1,148'2	\$55.5	12.9		30'8
A Nowshera	859{	3'5	5.33		19'8	397'0	513'4	9'3	31°8 4°66	4'7	1'2	9'3	33.8	5'8	46.6		15.1	72'2	1,650'8)	59'4	10.2	14'0	47'7
Peshawar	,663 {	58-9	4.51		31,3	674'7	307'3	8.4	1.80	5'4	1'8	2'4	.00	4'2	34'3	3'0	3.6	31.0	22,52 }	61'7	5'4	3.6	22'9
Multan	715				30.8	700'7	54'5	7.0	2.80	2.6	1'40	2'8	7.0	2.8	15'4	1'40	1'4		6,60}	46"1	12'6		
C Hyderabad .	488{		3,02			612'7		6-1		6.1	2'0	14-3	5.0		20'5		2.0		6.12 }	40'9	4"1		
Karachi !	,168 {				.86		33'4	4'3	3'4	3'4		2,1	14.6	17.1	16'3	1.7	0.0	56.2	3,45	44'7	9.4	12.8	34"2
OROUP VII.— NW. FRON- TIER, INDUS VALLEY, AND NW. RAJ- PUTANA.	.894	20*8	2'04		20'0	500'4	210'5	7'2	10"4	4'9	1'4	5'5	14"1	9.8	28'0	1,03		49'7	13'49}	23.2	8*2	9'4	32'1
Neemuch	286 {			3'5	21°0 6°99	383.3		3'5		280			17'5	10.2	52.4	3.2	7.0	83.9	898*6 }	44'6	7.0	45'5	31'5
Nasirabad	808{			1,3	5'0 2'48	2,21 2,21	2'5	1171	-	6.5	:::	3'7	22'3		53,3	=	7.4	101.2	1,085'4}	53'0	5.0		
Muttra	460 {	10,0	***		4'3 4'35	60.0	3326	4'3	3,3	4'3	=	=	13'0	4'3	13.0	:-	10'9	32.6	771'7 }	25'2		6.2	26'1
Agra and Fatch- garh.		5'3	100000		3.58 3.8	867-8	122'4	6.6	8.7	7'7	3'3	2'2	30.6	1,00	16.4	-	9.8	40'4	9.84	71'3	5"5	77	27'3

[·] Derived from the aggregates.

	ofth.		1						. AD	MISSI	ON R	TE.		2.	DEAT	H RA	TE.						
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	2	Tubercie of the lungs,	Pneumonia,	Respiratory Diseases.	Dysentery.	Diarrheea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre,	Gosorrhea.
ansi	1,017 {				26.2	254'7 '98	66.9	7'9	3'9	3.0		3.0	6.9	147	22.6		5.0	84'6	747'3 } 16'72 }	32'1	3'9	7'9	72"
owgong	329{				***	2340	79'0	9'1	6'1 3'04	2000		12'2	21'3	6.1	9.1		6.1	60.8	872'3 }	41'7	30'4	3.0	27
how and Indore	1,713 {				4-1	342'1	25.1	3'5	4'7	8 2		-6	16.9	21'0	22.8	1'17	12.8	57.8	\$33.0 }	39.1	11'7	8.8	37.4
ROUP VIII.— SOUTH-EAST RAJPUTANA, CENTRAL, NDIA AND GUJARAT.	5,528	3'4			9'9	407'6		63	4'2	8'0		2'5		15'9	21'5	.36	819	65'7	9.41	† 44 ⁷ 4	81	136	44
A tugor	283 {	7'1			14'1	268-6	53.0			3'5	3'5	3.2	7"1	56.5	3'5		141	70'7	756'2}	44'4	38.9	14'1	17
bbulpore	1,013{	16.8		99	3'95	486-7		3.0		3.0	3.0	.09		42.4	22'7	2.0	9'9		1,174'7 }	58.8	1079		43
B .	988 {			1'0	3.04	13'9	***	2.2	1.0	5'5	1.0	1.0	16.2	24'2	6.1	1'3	4.8	58.7	744'9 \ 4'05 } 571'8 }	33'7	16.8	17'2	30
cunderabad .	3,094		*32	1,0	517	40.8	***	1.0	.32	1.0		1'9	11.7	3'9	11'7	'32	4'9	59'2	9'37 \$	25'8	9'7	21'4	28
elgaum	1,030 {	-			3°88 9'8 °52	148.6	43'0	5'2		11,0	1.6	3.6	11'4	11.0	17'1	3'6	6.7	89'1	282.5 £	39'3	10'4	25'4	53
irkee	1,088 {	3.7			10'1	97'4	9.3	3'7		1.8		110	26.8	39'5	1.8	1.8	10'1	68.0	609'4 } 7'35 }	31.2	20*2	16.2	32
hmednagar .	861 {	7'0			17.4	1550		5.8		5.8		7.0	39'5	4.6	32.2	1716	5.8	101,0	800'2 } 10'45 }	5012	13'9	47.6	39"
ROUP IX	10,288 {	3.0	.10	.4	18.2	139'0	43.7	4'5	.19	5.5	1,1	3'9	17.7	21.6	13.1	1.6	6.3	82'6	667-8 } 7-78 }	+ 40.0	14'5	25'4	42
olaba and Khan- dalla.	1,152{			:::	1'7	340'3		276	216	11'3	4°3 *87	1'7	206	23'4	11'3	1'74	8.7	1050	9'55)	4	26.0	36.4	42"
annasore, Cali- cut and Mala- puram.	332 {			::	3.01	3.0	9'0	::		3 01		::	90	3.0	3.0		60	126'5	445'8}	37'4	13'0	33'1	81
ROUP X WESTERN COAST.	1,485 {				1,32	264'6		2'0	2'0	12'1	3*4	1.3	4.0	18.9	9'4	1.32		109'8	10,10 }		22'9	35"7	51
Sellary A	477 {		2'10			1 (1.4	8.4	6.3	63	6.3			46'1	29'4		2'1	10'5	102'7	729.65	44'9	18'9	10.2	73
dangalore	2,258{	=			19'0	41.6	27.0	8*4	44	6'2 '89		1.3	18-6	20'4	15'5	1'3		111'6	701'1 } 4'87 }	49°7	36'3	23'0	52
St. Thomas'	254				3'9	35'4	59'1			11.8		***	15'7	15'7	19.7		11'8	122'0	830.7 }	29'4	27.6	19'7	74
Madras and Poonamallee.		1'5			11'7	39.3	103'3	10,3	2-9	117		4'4 1'46		43'9	1.2	1'5	14.6	143*5	959'0 } 8-78 }	86.6	30'7	35'1	77
SOUTHERN INDIA.	3,671		.27		14'2		43.0	7'9	1.6		3		22.6		11'2	1'4	9.5	117"1	761°9 } 6'27 }	+	32'4	23'4	61

[·] Derived from the aggregates.

TABLE III—continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

For actuals see Table IV.

	· j.										1. A	DMIS	SION	RATE.		2	, Dr.	ATH RA	TE.				-
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of uncertain origin.	Rheumatic Fever,	Heat-stroke.	y Disea	Tubercle of the lungs.	Preumonia.	Respiratory Diseases.	Dysentery.	Diarrhora.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhea.
Ranikhet and }	1,639 {				14'0	65.0	14'0	10'4		15'3		1'8	13'4	17.7	18-3	1'2	8.2	49*4	599'8 }	34'4	7'3	. 9.2	35.0
Chakrata	1,398{	22'2		1'4	4'3	168.1	5.7	6'4		11'4		2°1 1°43	13.6	100	17-9		7'2	57*2	553.6 }	31.7	13'6	6'4	37.2
Lebong	603 {			:::	***	33'2	48'1	8.3		10'0	3.3		21.6	5.0	54'7	1'7	1'7	64*7	562.2 }	38.8	33'2	6.6	24.9
Solon	343 {				20-4	67.1	11.7			5.8	2'9	5.8	20'4	11.7		5*8	5.8	29'2	478°1 } 5'83 }	27.4	5'8	8'7	146
Dagshai	707 {				2'8	31.1	70'7	19-8		11'3		11'3	11.3	5.7	1'4	2.8	7'1	94.8	585.65	37.8	22'6	46-7	25'5
Subathu	470{	2"1			48°9 6°38	129*8	3,1	6.4		8.2	2'1	21	2'1		64	2'1	85.1	66.0	638.3 }	51.0	23'4	10'6	31'9
Jutogh	232 {				4'3	103'4	4'3			43"1		=	21.6		8.6			12'9	4957}	33.5	12'9		
Kuldana	340{				5'9	132'4	20'6	26'5		8'8	2'94	3.0	20.6	11'8			147	47'1	282.3	32'0	20.6	5'9	20'6
Kalabagh and }	85 {		35'3		11.8	23'5		11'8		47'1			35'3	11:8	11'8	11'8	11.8	35'3	600'0 }	22.0	23'5		11.8
Camp }	644				24'8	51,5		3"1		3"1			7.8		217		1.6	31'1	638.2 }	21.6	9.3	6'2	15'5
Camp Barian and }	561 {		3.6		14'3	82'0	7'1	12'5		21'4	1'8	1.8	5'3	17.8	25'0		16'0	42'8	442'1) 8'91)	39'4	12'5	10'7	196
Khairagali.)	352 {		2.8		8.5	187'5		B120000		8.5		5'7	22'7	8.5	100		5'7	31,5	627'8]	31"1	8.2	14'2	-
Cherat	496 {	3.0			30*2	302'4		1000	10'1	60	-	60	2'0		44'4		12'1	18.1	9577)	64'0	6.0	10000	
Quetta	2,347 {				17'9	93,3	11.1	30'3		4.7	-4	2,03	15'3	2.8		1'3		33'7	429.93	25.6	11'5	4'3	17'9
	706{			***	2'13	260'6		127		57	*43	1'4		5'7	1'4		1'4	107.6			2015	41'1	36'8
Maymyo	,,,			***	-	4*25				***	***					1'42			8.20 }				
GROUP XII a,-HILL STATIONS.	10,923 {	3.0	'5		13.6	113.3		14'2	.2	10'3	1'0	3.8 .64		8-6		1'3		50'3		† 35'4		11.6	24"1
													State						100				
Darjecling	346 {				5.0			3.0	***	5'8	2.0	3,0	***	31.8		2'89		86.7	8:67 }	54'2	***	8.7	40'5
Naini Tal					5'71	182'9		***	5'71	57	***	57	7.0	14'6	11'4	11'4		68.6	525.7 }	50'2	22'9	17.1	28.6
Kasauli	205 {	472			8.2	473'2	***		4'9	9'8			19'1	3.1	19.2	14.63		31'8	14.63 }	62'4	9'8	19'5	25'4
Dalhousie	472 { 834 {				10.8	***	***			4*8	1,3	6.0	4.8	2.4	2'4	6.36	4.8	68'3	14'83 \$	42.0	46-8	"	18'0
Murree, and Lower and	338	370			41°4 8°88	177'5	29.6	879		20'7	3,0	8.9	8.9	3,0	8.0	1'20 11'8 2'96		23'7	3.60 \$	4. 9	8.9	8.0	5'9
Upper Topas.) Mount Abu .	139				7'2					14'4		-	72	14'4	21.6	14.4:	28.8	21'6	80581	33'7	72	7'2	7'2
Pachmarhi	154				=	461.0	13.0	13.0		13.0			13.0		64.9	260	32.2	1000	649	61.0	19'5	1850	39.0

[•] Derived from the aggregates.

-	gth.			1100		1.	ADMI	ssion	N RAT	re.		2, D	EATH	RATE			. Co	NSTAN	TLY SICK	RATE			
Stations, GROUPS AND ARMIES,	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of uncertain origin.	Rheamatic Fever.	Heat-stroke.	Circulatory Diseases.	Tuberde of the lungs.	Pacumonia.	Respiratory Diseases,	Dysentery.	Diarrhosa,	Hepatic Abscess.	Hepatic Congestion	Venereal Diseases.	ALL CAUSEL.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhora,
Purandhar .	105 {				57'1	16179	95	95		92.5			57-1	28.6			9.5	5	790'5 }	87.4	9'5	-	
Wellington .	1,045{	1.0	::	::	2'96		3.8	23'0	1.0	19'1	9	::	3176	77	19"1	4.8	1 72	104'3	989'51	75'2	30-6	28-7	45'0
GROUP XIIà.— Hill Convales- cent Depots and Sanitaria,	3,812 {	16	::		10'8		19.3	10'8	. '5	14'7	2'1	2.6		10.3			157	¢6-6	753'7 } 9'44}	† 65'3	26.3	12'9	27.5
Troops, march- ing, India.	1,603 {			-6	11'2	200'2	26'8	3'7	3'7	1°2		5 6	6.5	1973	25.0	6	1*2	66'1	585°21 1°875	2'5	11'2	16.3	38-7
Bazar Valley }	97{					103.1		10'3				20'6	10'3		72"2				463.9 }	11	***		::
Mohmand Field Force .	314{		159*2		9°6	162-4	60.2			33.3		3.5	9.6	10,1	13006			47.8	1,668'8 }	29'5	6:4	9.6	31.8
Deolali Depôt .	367 {					340.6		2.7		5'4			10.0	8'2	2.7			114'4	689'4}	42'6	327	40'9	40'9
EXTRA INDIA. Aden	1,100 {	***			1'8	65'3	195'5	3.6		4'5	3'6		14'5	21.8	20°c	1.8	10'9	20'9	629°1 } 4°55 }	40'7	= 7	8'2	10'0
India .	68,933 {	6.3	1'10	·8	2.76	244'1 '51 8'3	73'9	7'2	3°9 '54	8-9	1'3	3'9 '30 '4	17'4	14'4 '42 1'1	17.7	1'7 '80 '3	8.9	69°6 °04 8 8	839'5) 9'78 45'7)	† 45°7	15'8 '04 2'4		37-8
NORTHERN ARMY	36,676-{	10'8	1.0	1'3	16.6	312'9	100'4	7'0	4*4	1014	1.6	4°7 °40	18'8	11'3	1913	1-8	10'5	58'3	939'5 }	† 49.0	13.8	11'3	337
SOUTHERN ARMY	30,243 {		.53	·2 ·03	12'3	164*2	44.7	78	111	7*2	1'2	2-8	16:4	17.9	13'9	1.6	700	84"1	724'4}	44'3	18'5	21'9	43.6
Lucknow!	2,453	7	.0	7	2"1	1.7	200	-3	*1	-6	-1	'5	-5	1'8	1	14	4	8 3	32.9	32.9	1'2	9	6'2
Ambala1	2,295	74		7	1'5	57	-6	.3	*1	.0	.2	.6	-6	*5	'3	*2	1'4	5'4	35 0	35.0	.3	1'7	3.2
Rawalpindi! .	2,917	*0	10	'1	5'6	9°3	1.3	-6	*2	1'2	*2	'5	1'1	171	18	4	'5	6.6	47 6	47.6	2'2	1'2	3'1
Secunderabadi ,	3,094	0			4'4	-6	2-6	*5	.0	.9	.2	-1	-8	177	-9	-4	'3	10'8	40'7	40'7	2.4	2'4	6.0
Bangalore; .	2,258				3.2	2"1	174	8	.0	-8		72	1'4	1'4	'5	-	.2	156	49.7	49°7	5'7	2'5	7.4
Quetta? .	2,347			-	2'7	2.1	-6	1'9		-3	,,	.3	-8	6	. 7	2	'2	3'7	25.6	25.6	1'4	'3	2'0

[.] Derived from the aggregates.

[†] Worked on the aggregates.

TABLE IV.

ACTUALS of STATIONS, GROUPS, and ARMIES on which the Ratios in Tables I-III have been calculated.

			-			14	-	-	1	. ADS	w I S S D O	NS.		2. Du		-			LT SICE.					-
STATIONS AND GROUPS.	Average annual trength,	Influenza.	Choiera.	Small-pex.	Enteriz Pever.	Malaria,	Pyresia or uncertain origin.	Rheumatic Fever.	Heat-stroke,	Circulatory Diseases.	Tubercle of the langs.	Paeumonia.	Respiratory Diseases.	Dysentery.	Diarrhora.	Hepatic Abscess,	Hepatic Congestion and Inflammation.	Venercal Discases,	ALL CAURES.	Syphile.	Soft Chancre,	Gonorrhona,	Twola.	Other Bateros.
Rangoon and Port Biair .	1,276 {	 	-		9 1 '0§	2,31	100	9		8 1 1'24	1	1000	21	27 1 1.49	3	102	4 737	143	872 9 61'30	670	3'43	71 8-55		1111
GROUP I.—BURNA COAST AND BAY ISLANDS.	1,976 {	111	111		103	2 2.31	105	1.00		8 1 1'24		400	200	1.49	3	103	· 37	145	872 61'35	6170	3'43	71 8-55	,03	111
Thayetmyo	407 }		4 4 93		10 3 1'62 1	*46	2.30	-07	11111	3 '06		-	16		3	11:11	3 19	\$1 5'13	588 9 23 83	1790	6	20 27 28 7	= ,	111 111
Fort Duffetie (Mandalay)	280 {				3 -48	10	13	.04		1 714	3		32 6	30	3		3 32	4*84 40 7*13 84	15°50 170 2 15°50	6	74 241	3'33	.01	111
Shweto	6:8{			-	3 1'35	34 : 19 36 : 1'51	777 9	.04		6 :64 - :07	***	-09	may.		7	111 411	*\$1	10:48	330 5 26'99 118	2 05	303	43 5'80 7 '94	- '03	111.111
GROUP IIBURMA	1.751*{		4 4 03		31.00	108	158	10		13	0	3	17	9 3 81	25	105	21 2'14	211	1 333 65 81°10	\$8,	55	97	4	100
Forts William, Fulta and Chingrikhal, Dum-Dum	1,175 { 320 {	100		104	6	167 5°36 13	261 7'47	7 79		96 11 1'97	***	4.2	19 *65	16 1'23 3	22 "57 1	111	9 1.05	195	1,120 5 59'45 127 4 7'68	 2,38 2,3	44 4°21 	99 42'03 7 54	111 1111	111 111
Barrackpore	260 {	111		-		67	34	1	.03	73	716		69	64	5	.09	8	11	235 1 12'49	'09	-31	- 93	111	111
GROUP IV.—BENGAL AND ORISEA.	1,756*{	9	vis.	1	6	247 8'65	295 8 84	9 89	103	36		- 2	100	31 31 31	23		1.99	318 23 65	1,431 10 79 62	531	55	110		111
B Disapore	616 {	33	1111	1	2.11	63	130		3	109		6	7	11 172	9	2		35	393 8 15'69	'95	9	16 F41	=	111
Henares	131 {	1111		111	3.30	1'54	1'05	9	10	,	714	11	30		17	-	-	1739	1,055	··· ·a3	*20	9 ''86	= .	
Allahabad and Fort	552 { 855 {	5	0)	5	1'42	953	8 97 70	*80	'37 1 2	7	70	2	22 2744	1'57	73	134	3 1	95	784 9 44'85	1'25	9	4'72		11 41
Sitaper	580{	10	-	1 108	15.	81	36		.03	100	1	3	2'44 8 - 18	5	1	-28	7 7 70	373	408 6	760	5	18		
Lucknow	9,453 {	1	1 100		31	419	49	10		131	333	134	28 1'31	54 1 4°33	6	3 1.09	14	159	1,097 33 80 02 819	23	3,31	15'14		
GROUP VGANGETIC PLAIX AND CRUTTA NAGER.	6,641*	43	10	*16	115	6 31 907 2	3'6,	97	13	53	13		1784	112	67	12 6	31 1784	\$197 455 55°23	4.745 85 205'11	75 8-35	72 786	308		Town !

									1,	. An:	K18830	NS.		2, Ds	ATHS.		3. 0	CONSTA	NTLY SICE					
STATIONS AN GROUPS,	•	Aretage angual strength,	Influenza,	Cholera.	Small-pox.	Enteric Fever,	Malaria.	Pyresia of uncertain origin.	Rheumatic Fever,	Heat-stroke,	Circulatory Diseases,	Tabercle of the longs.	Preumonia.	Respiratory Diseases,	Dysentery.	Diarrhora.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Venereal Diseases,	ALL CAUSES,	Syphilis.	Soft Chancre.	Gonorrhera.	Tenia,
A abjehanpur		342{	7	-	28		76 1 2'30	100	36	105	311	1 .	1	***	7.70	-	1		30 2 84	329 4 16'85	***	575	1'9	111
sellly		1,144	25	444	* 3 **29	4 ga	337	7'23	1.03	1	1	1	5		7		1	-	6.78	1,256 8 55'49	4 31		3: 6'as	tox.
orki		361 {	-38			5 3'43	118	37	25		37			3 47	744	9	=	 	13	30,10	30		1160	***
erut		1,968 {	1"25	=	349	54 13 7-84	3,076 1 54 85	10	16	5	1'25	143	1	48	37 2*24		2	****	161	3.373 95 156'46	3.83	33	14*95	4
ы		224		-	3	,04	248 6'8:	.24	-		3	-		ï,		*23	==		4'63	440 5 17°53		2*33	1148	***
bala		2,295 {	19			3'36	368 3 13'05	22 1741	3	10	19	1 08	13	1 1'43	19		43	57 3°29	94 1 12'49	1,530 17 80°25	.63 1 29	3.83		
Bunder .		504{	-04	==	=	3.01	7'40	16	.30	25	9 -8s		363	75	- 08	788	=	4	6.37	483 29 52	2'46	7 72	3'19	100
oacpore .		915 {		=		1"5:	100	277 8-22	6	1,30	79	89	1,03	1"16	-43	24	'04	18	7'37	1,604 5 88'47	26	-45	3.00	100
ritear •		155 {	111	100	=		2.03	:6 '53	===		105	111	111	*04	-	*04	=	.01	99	228 2 8-17	'00	.13	'74	=
hore Cantonmer	nt and	930{	703		711	5'47	500 2 17'47	3'72	79	.05	*25	109	55	'83	35	14 'SI	.13	1,01	8'00	1, 166 15 54 81	2'84	13	377	-17
atot		1,250{	3'01			\$.03 37	68o 16'6a	2'77		7 3	17 17 17 17 17 17 17 17 17 17 17 17 17 1		5 '60	72	15	3105	3 '45	8	6.73	76'18 16 76'18	83	2'92	2'98	7
walpindi .		2,917 {	13	5 10	.30	93 18 16'45	719 27'12	Carl I		- 7	3.28		17 3 1°37		37	3'40	1.30	1'39	19725	2,405 55 13876	6.23	5*60	9"13	10
mpbellpore and	Attock	381 {		02		3'41	4-95	1"51	708	***	- 08	200		10	9	-13	=	714	3.70	413 4 15*49	29	-:55	172	=
DUP VIUPTE	a Sua-	13,428 {	6,00	9	19:	9.46 53 47°03	6,270 15 2507;	969	97	2.39	147	4'57	75 5 7 20	313	14 ⁶ 8 10 ⁶ 3	303	3 38	9'85	99"15	15,418 161 759*09	173 21'95	149	414 59°55	47
A webern .		850{	3 17	3 '01		17 9 9 273	341	441	78	29	-		8	39	5	40		13	6:03	1,418	9	13	3'94	
shawar .		1,063 {	3,30	7 74		53 12 10'43	1,199 40'11 501		14 1°13 5		99	1 1	·51	17	*83	57 1°36 11	33	37	53 6°51 37	3,495 37 100°90 860	75	7	5'47	13
dtan .		715 {	-		*04	3'90	11'13	'97	-;;		109	-48	*05	*24	····	793	.04	·0;	4*18	33'99		-67	2'61	9
c rderabad .		488 { 1,168 {			111 111	7	3°18	39	5 43	4 : 4	129	'08	6	17	14 '48 20 '84	19		7 37	3.32	3 19'94 849 51'20	727 11 2'92	69 15 2.83	9,30	·01
OUP VIL-	NW. Incom NW.	4,894*{	102		-	98	2	1,030	44	- 9	24	3	1	69	45	137	8 5	28	243	6,153	40 5'01	46	157	15

TABLE IV-continued.

ACTUALS of STATIONS, GROUPS, and ARMIES, on which the Ratios in Tables I-III have been calculated.

	1					-			1,	Ари	189109		3,	DEAT	H1.		3. Co	NSTANTL	V SICE,					
STATIONS AND GROUPS.	Aver age annual strength.	Influenza.	Cholera.	Small pox.	Roteric Perce.	Malaria.	Pyresia of uncertain origin.	Rheumatic Fever.	Heat-stroke.	Circulatory Diseases.	Tebercie of the lungs.	Pneamonia.	Respiratory Diseases.	Dysenbery.	Diarrhea.		Hepatic Congestion and Inflammation.	Venercal Diseases.	ALL CAUSES,	Sephille.	Soft Chancre.	Genorrhora.	Tania.	Other Entonos.
B Neemuch	285 {	111	111	1	6 3	8: 2°45		.03		8	111	111	5	3	15		Care.	3'04	957 4 1970	100		1.35		1111
Nasirated	808 {	==	111	1	4 2 3	418 3 16'42	110	. 115	111	5		123	400	75	18	.05	50	8:24	877 9 42'80	No.	3,40	£ 23	***	111
Mettra	460 {	3			18	28 '90	3,00	714	103	719	440		6 .40		115		5	1167	355 3 11'59		3	134 1734	-	700
Agra and Fatchgarh	915{	91	111		3 1 26	794	4'19	75	8	111	Care.		28 1'87	91	211			6 63	65'21		200	3.81	100	111
Jhanei	1,017	111			27 9 4*05	259 1 6-28	c8 1'29	***	103		100	.32		74	23		3 126	86	32.67	200	8	74	· int	1111
Nowgong · · ·	309 {	111		111		27	96 '96	" i.	.03	4		1 129		°08	3	111	714	1'90 	1371	***	103	9	-	111
Mhow and Indore	1.713		111		7	\$86	40	63	19	14	***	i	29	36	39	1 2	22	99	1,427 66 90		-	5-69	7 73	731
GROUP VIII-SE. RAJ- PUTANA, CENTRAL INDIA, AND GUJARAT.	5,528* {	19	100	997	51 18 9'40	2,253 64.78	404	35	23 4 75	44 1 2'99	3	1	100	88 3 5-17	119	3 3	40	363	5.566 53 245°64	and .	75	243		
Saugor	283		***	-	1'03	76		200		16	36		7	10	'03		35	3,01	214 2 13°57	1102	4	5	111	111
Jubbulpore	1,013	1'09		31	7-31	493	43	4		3	31	1	440	43 3 9°04	1'03	15		77	1190 13 59°38	2'17	22	5'24	111	111
ampti	983	-	=	105	1,04	120		222	3	'09	4	.01	'08	14 "53	'38	111	13	7'54	33739	11	1'67	4.64	100	111
B Secunderabad	3,094	10	5		8:	***		800	1		200		51	5°12	19	1'25	15 18g	300	1,750 29 125'93	5:	88	18.22	_	141
Belgaum	1,030	1	190		1	172	1.72	'08		100	-	*15			12	=	3,38	6'70	479 6 26-59	··· 63	3,32	3'83	-	111
Poons	1,931	{ :	4	-	3.00	11.9	3,30	.57	-01	1.12	-40		.81	45	35	2	13	21-31	75'84 663	4'57	4°23 18	13,21	.10	1111
Ahmednagar	1,088	1 7	6	11 1	1725	4'5	72	"59	-	*14		60 6 3	1'35	1'95	18	-20	79	7'62 87	34°28 689	234	41	3'07		11 11
Sec.		1 5	5	-	-63	33.4		.50	-	76		1'90	1.83	1	1.13	16	'51	1 .02	6,870	2*12	3'67	6-13		-
GROUP IXDECCAN	10,188	17		143	33	46 9	0 45	***		5'22		5	***	30,12	5 01	2.83	5,14	95'07	411'27	31.22	23'06	24.46	***	1111
Colaba and Khanda.la	1,132	1 10	=		3 1 73	3035	100	100	3	13	5 1 1 2 1	46	3 1 43	97 1°03	13	110	10	121	8gd 11 62°52		4767	4'16	***************************************	1 165
Cannanore, Calicut and Malapuram.	333	=			124		3		=				3		03		*10	7'93	148	4	Tar.	5,03	111	1111
GROLP XWESTERN COAST.	1,485*	1 :0		11.	147		1.43	-	100	1,23		***	6 1 '57	18 1'11	14	-16	12	165 21°57	75°C4	6'45	5.88	0.33 0.93	100	105

			-	-	7	-		1. A	Decision	MONS,		2,	DEAT	ия.	,	Cor	STAN	TLY SIC	r.		- Indi	-		
STATIONS AND GROUPS.	Average an onal strength.	Informa.	Cholera,	Small-pos.	Enterle Peret.	Malaris.	Pyrexia of uncertain origin.	Rheumatic Fever.	Heat-stroke,	Circulatory Discases,	Tabercle of the lungs.	Pneumenia,	Respiratory Diseases,	Dyseatery.	Diarrhora,	Hepatic Abscess.	Repatic Congestion and	Venereal Diseases,	ALL CARRIN,	Syphine,	Soft Chancre,	Gonotrhons.	Tanka.	ther Extends.
A cilary	477 {	1111	, oc	1111	 	77 3'60	4 718		3	3 '99		3	22 1°35	14 1'37 45	35	33	5 -23	49	348 6 31'43 1,583	9 58	"\$4" 53	35 37-69	.0	
angalore	3,338	11	=	11	7'93	479	3.10	1.79	'01	1'84	11	****		5000	1,10	.30	r'is	35'26	113,18	13'81	5'72	10'72	*96	
t, Thomas' Mount .	254{	-	111 111	111	16	30	74	Ξ,	1111 %	3 14		3	15	30	*11	111	14	98	7'48	7 04	01	19	*07	-
malee, soop XI,-Southern India.	3,671 {	1 73	7 701	-	1°85 52 4 10°03	200	154	3,31	-15	1'45	31	.17	83 6 32	3'14	41	*14 5 3 67	35	430 64°33	59°14 2,797 25 200°22	119	9'68 86 8'98	13'93 225 34'25	200	=======================================
anikhet and Chou- Buttia.	1,039 {	31	1111	109	23 5 5'33	108 3'55 235	23	93		173	 '05	33	74	39 1'54	30	23	14	81 853 80	985 8 50'32 774	1703	15 "\$9	54 5'92 52		
eboog	603	131			1'54	10'41	29	67		6	2	74	130	3 '52	33	1 143	1 13	773 39 5'94	339	9°23 90 3'86	*25 4 	15 2.56	3	
cion	343{	111		-	7 1'05	23	4		.01	3	1 .07	1 18	773	4 .48		9	3	100	164 2 9*41	'26	308	66	100	
Pagahai	707 {				3 1 30	1'04	3,33	1'95		8 1 107		3118	*43	-4	1 "03		5 *38	6) 8 23	414 3 26'75	1,21	13 4'72	18 3'00	713	***
utegh	470{	.00	111	111	7 74	1'97	1 1 100	-3.	111 111	10		105	'03	1	°10		1,40	3 63 3 741	300 4 24'80 113	1°59	715	1*88		
Culdana	340{	-						9			1,10	1 73	7	-82	1111	111	5	16	199 10'89	7	35	732	111	
Cainbagh and Baragail,	85{	111	3	1111	'03	*10		'04		4 "36	=	103	3 9		100		108	3 '03	11:87	'03	-	.01	1111	111
amp Ghariai	551	-04		111	16 : 203	-59				11 1100	***	1			14 "30 14 "47		9	90 '86 34 10'97	248 248 23°54	7 4 50	13	10 49	'05	
Khairagali, Khan Spor	359 }	1 111	1 13		1°18		0	. 4 	-	3 -23		330		2	11		9 '05	11	10'93	3 '21	5	3 07		
Cherat	495	10	-	-	15 1 2 76	6.00	35	- 4		3	35	3	104	9		100	*80	9 9	475 3 31°27	3	.00	171	6	

TABLE IV—continued.

ACTUALS of STATIONS, GROUPS, and ARMIES, on which the ratios in Tables I-III have been calculated.

					- III			11		1. A	DMIS	stows.		2. D	BATH	٠,	3.	CONSTA	NTLY BICE				-	7
STATIONS AND GROUPS.	Average annual strength,	Inflactura.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrraia of uncertain origin.	Rhermatic Ferer.	Heat-struke.	Circulatory Diseases,	Taberde of the lungs,	Preumonia.	Respiratory Diseases,	Dysentery.	Diarrhora.	Abacess.	Hepatic Congestion and Inflammation.	Venereal Diseases,	ALL CAUSES.	Syphilis.	Soft Chancre,	Genorrhora,	Tenla.	Other Entozoa.
Quetta	2,547 {		1111	111	42 5 6'33	7'32	1'40	71		11	1 1 53	-6,	3	9	19	33	8	79	1,000 16 60'20	3,33	10	4*65	13	1.1
Maymyo	905{		-	111	*15	9.07	. and	'58	111	-17	.40	'08		-19	·0:	35	.05	14'45	576 6 43 95	7:61	3,88	3785	104	111
Geour XIIsHitt Stations.	10,933 {	33	6	3	140	1,238 3 47'23	278		6 1 73	113	4.90	31, 20	144	94 8-78	176	14 4 9 08	105	549	6,379	159	127	30'83	35	103
Darpeting	346{	111			" " " " " " " " " " " " " " " " " " "	33 1'28 33	751	,00	-03	21	100	.02	: i.e	11	-		110	2,03	324 3 18:30	3.4		Tr.	1	
Nami Tal	175 {	· 03		11 11	.43	100	148		.33	91		.01	1	т.		3	11	1'04	8.79 238	-6			11	·07
Kassuli	472	2 '04		111	4	10.04	70	3		13	1		9		100	3	8	15	397 397 397			1.0	-	11 11
Dathousie	834 {		=		9 74	115	13	8	.40	4	1	5	4	.13	3	- 31	4	57	369 3 35'74	35	3	1:0.	-	111
Murroe and Lower and Upper Topas,	338{	114		111	3'85	7°73		***		3.02	.39		74	*05	1	*51	*	1°45	305 40'75	"51		71		111
Pachmarhi	139 {		1 111	-		1'28		-	-	44		-	19	"200 8		72.4	111		5'24	"" "01	*01	*********		
Purandhur	154 {	-	-		6 3 1'48		3			10	-16	11 11	6	78		'97		"80 1 3'04	9'53	1				
Wellington	1,045	*04		1111	3796		.13	24	100	3,38		111	33	1,00		5 3	18	109	9°15 1,034 5 78·63	31	30	7'16	1	100
GROUP XIIS.—HILL CONVALENCENT DEPOTS, AND SANITARIA,	3,812 {	-36			41 8 13 12	63:	7:	3 41			1.21			39 1 4.85	\$8	37 5 2	60	254 41°69	3,873 36 248 80	100	49	105	2 179	. 19
Troops, marching, India.	1,603 {		111	10.	'05	321						9	10	31	40	****		106	958			100	10.	111
Bazar Valley Field Force	97 {	1111	-		111					111	111	11.	=		-		1111		45 †*11	***	=	=	***	
Mohmand Field Force .	314 {		\$0 41 		3	g1	19			7					4	=		15	524 50 '37		. :	=		1111
Declali Depôt	307 {					125	=						70	3	, , , ,		==	5'37	35.61	200		1,0	1 000	
Extra India,	1,100	111		=	17	200	3.12	-36		·62	1'57	111	16	24 2 1'57	*06	714	13	23 5'85	692 5 44*79	3		3'%	800	1111

					-			1.	Admission		DEATHS.	. 3.	CONSTANT	TLY SICK.	97,7	H par	3344	
GROUPS AND ARMIES.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enterle Pever,	Malaria.	Pyrexia of uncertain origin.	Heat-stroke,	Circulatory Diseases. Tuberche of the lungs.	Pacamonia. Respiratory Diseases,	Dysentery,	Hepatic Abscess,	Diseases.	ALE CAUSES,	Syphilis,	Soft Chancre, Generrhea,	Tania,	-
† Remaining from 1907 Admissions Total deaths Deaths out of Hospital. Constantly sick. Average duration of a case in days.	68,933			53	1	35	166'59 38	100	60 13 608 93 17 15 4 56'23 23'40 33'85 92'09		999 E,21 19 	7 115 6	ay 630 15 4,801 a 3 	674 72 3,148-47	159 1,087 3 162°66 1	1,107 2, 	359 :	5
HERN ARMY .	36,676	397 12'64 1'94	28 1'42 7 7	6	373 4 69	91 9'83 1 ,966 14	1,252	29 62 8 7 2 3 235 34 8	380 58 9 12 4/99 15/71 229 35 8 4 411/24 7/69	173 683 17 5 15 93 35 42 84 497 10 1 8-63 25 94	34"12 31" 540 41	2 32 55 9 63 23 31 47 2	29 2,541	393 1,795 81 21,907 227	\$07 2 63'88 \$60 1 98'66		320 6	9
			1			_	-		-			1 1	_				-	_
GROUPS AND A	ARMIES,			Jan.	Feb	.	March.	ı. S	May.	June.	2. Con	Aug.	Sept.	Oct.	Nov.	Dec.	Tor	AI
UP 1.—BURMA		AND	-{	Jan.	10 1,	116	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	1,31	6 1,34	1 1	5.3
UP 1.—BURMA	COAST ISLANDS,			1,05	73 73 14	116	1,34	April.	May. 9 1,336 7 66:52 3 1,823	June. 1,269 64'87 1,837	July.	Aug. 1,304 47'45 1,963	Sept. 1,330 56'47	1,226	50"7	6 1,34 3 45°24 3 1,34	1 1, 7,	35
up I.—Burma Bay I	COAST ISLANDS, INLAND		1	1,09	1, 73 1, 120 120 2 2,	116	1,34. 62'06 2,000	April. 1,37 75'3 1,99 79'2 1,64	May. 9 1,336 7 66'52 3 1,823 0 54'66 1,596	June. 1,269 64'87 1,837 65'53	July. 1,290 57'00 1,872 79'86 1,605	Aug. 1,304 47'45 1,963 83'83	1,330 56'47 1,933 90'86	1,226 49°58 1,893	1,31 50°7 1,74 84°1	6 1,34 3 45°2 3 1,34 9 57°6 4 2,26	1 1,5 7; 1 2 1,0	35
II.—BURMA IV.—BENGAI V.—GANGEI	COAST ISLANDS, INLAND LAND OF	RISSA	2 5% 5%	1,09 86°3 1,29 101°3	1, 120 1,	116 '80 317 '38	1,34- 62'06 2,000 111'00	April. 1,37 75°3 1,99 70°2 1,64 65°8 6,96	May. 9 1,336 7 66'52 3 1,823 0 54'66 6 1,596 3 66'52 4 5,966	June. 1,269 64'87 1,837 65'53 1,583 64'87 5,846	July. 1,290 57'00 1,872 79'86 1,603 71'07 5,931	Aug. 1,304 47'45 1,963 83'83	Sept. 1,330 56'47 1,933 90'86 1,669 95'34	1,226 49'58 1,893 82'48 1,687	1,31 50°7 1,74 84°1 1,69 75°1	6 1,34 3 45°26 3 1,34 9 57°6; 4 2,26; 7 90°76 5 6,846	1 1, 5 7; 2 1 2 5 1,0 9; 9; 5 7; 5 7;	5,3
UP I.—BURMA BAY I II.—BURMA IV.—BENGAI V.—GANGEI	COAST ISLANDS, INLAND LAND OF	RISSA.	2	1,05 86-3 1,25 101-3 2,01 96-1 7,66	9 1, 35 73 4 1, 0 120 2 2, 9 88 61 7, 0 241	116 180 317 138 004 175 165	1,34- 62'06 2,000 111'00 1,661 54'29	April. 1,37 75'3 1,99 70'2 1,64 65'8 6,96 281'3	May. 9 1,336 7 66'52 3 1,823 0 54'66 6 1,596 6 5,966 0 255'68 3 11,295	June. 1,269 64'87 1,837 65'53 1,583 64'87 5,846 260'63	July. 1,290 57'00 1,872 79'86 1,603 71'07 5,931 254'58 9,449	Aug. 1,304 47'45 1,963 83'83 1,647 97'68 5,831	Sept. 1,330 56'47 1,933 90'86 1,669 95'34 5,927 256'34 9,537	1,226 49°58 1,893 82°48 1,687 88°06	1,31 50°7 1,74 84°1 1,69 75°1 6,92	6 1,34 3 45°2' 3 1,34 9 57°6; 4 2,26; 7 90°7' 5 6,844 3 218'3' 6 16,62;	1 1, 5 7; 2 1, 0 9; 3, 19; 16; 16; 1	5,35 1,0 1,0 5,5 9,6 9,6
UP I.—BURMA BAY I II.—BURMA IV.—BENGAI V.—GANGET AND (PUR. VI.—UPPER LAYA VII.—NW. INDU AND WEST	COAST ISLANDS, INLAND CHUTIA SUB-F FRON IS VAL	PLAIN NAG-	a min min min min	1,09 86°3 1,29 101°3 2,01 7,60 323°7 19,73 950°7 6,94	1, 120 120 120 120 120 120 120 120 120 120	116 180 317 138 004 175 165 165	1,34- 62'06 2,000 111'00 1,661 54'25 7,894 255'41 19,169 762'01 6,551	April. 1,37 75'3 1,99 79'2 1,64 65'8 6,96 281'3 14,62 69-'2 5,51	May. 9 1,336 7 66'52 3 1,823 0 54'66 1,590 6 1,590 255'08 3 11,295 4 5,906 255'08 11,295 4 4,035	June. 1,269 64'87 1,837 65'53 1,583 64'87 5,846 260'63 9,923 483'83	July. 1,290 57'00 1,872 79'86 1,603 71'07 5,931 254'58 9,449 475'97 3,694	Aug. 1.304 47'45 1,963 83'83 1,647 97'68 5,831 216'48 9,408 595'66 3,587	Sept. 1,330 56'47 1,933 90'86 1,669 95'34 5,927 236'34 9,537 878'54 3,750	1,226 49°58 1,893 82°48 1,687 88°06 6,471 339°63 10,168 988°17	1,31 50°7 1,74 84°1 1,69 75°1 6,92 290°6 11,46 997°1 4,60	6 1,34 45°2' 3 1,34 9 57°6; 4 2,26; 7 90°7' 5 6,84; 3 218 38 16,62; 7 6,166	1 1, 5 7; 2 1,00 9; 5 7; 5 3,19 9,10 9; 5 5 5 5	5,35
UP I.—BURMA BAY I II.—BURMA IV.—BENGAI V.—GANGEI AND (PUR. VI.—UPPER LAYA VII.—NW. INDU AND WEST PUTA VIII.—SOUTH-	COAST ISLANDS, INLAND LAND OF THE FRON SUB-H SUB-H FRON SUB-H SUB-H FRON SUB-H	PLAIN NAG-	a win and and the control of	1,09 86-3 1,29 101'3 2,01'3 2,01'3 7,60 323'7 19,73	1, 120 120 2 2, 120 9 88 11 7, 10 241 10 19, 13 3 832 7 5, 16 215	116 180 317 138 004 175 165 165	1,34- 62'06 2,000 111'00 1,661 54'25 7,894 253'41 19,160 762'01	April. 1,37 75'3 1,99 79'2 1,64 65'8 6,96 281'3 14,62 69.'2 5,51	May. 9 1,336 7 66'52 3 1,823 0 54'66 6 1,596 6 1,596 0 255'68 3 11,295 4 5,966 7 198'48	June. 1,269 64'87 1,837 65'53 1,583 64'87 5,846 260'63 483'83 4,136	July. 1,290 57'00 1,872 79'86 1,603 71'07 5,931 254'58 9,449 475'97 3,694	Aug. 1.304 47'45 1.963 83'83 1,647 97'68 5.831 216'48 9,408 595'66	Sept. 1,330 56'47 1,933 90'86 1,669 95'34 5,927 236'34 9,537 878'54	1,226 49°58 1,893 82°48 1,687 88°06 6,471 339°63 10,168 988°17	1,31 50°7 1,74 84°1 1,69 73°1 6,92 290°6 11,46 997°1 4,60	6 1,34 3 45°2' 3 1,34 9 57°6; 4 2,26; 7 90°7' 5 6,84; 3 218°35' 6 16,62; 7 6,166' 7 6,166'	1 1, 5 7; 2 1, 0 9; 5 3, 19 9, 10 58	55.335 1,10 10 11,0 10 10 10 10 10 10 10 10 10 10 10 10 10
UP I.—BURMA BAY I II.—BURMA IV.—BENGAI V.—GANGE AND (PUR. VI.—UPPER LAYA VII.—NW. INDU AND WEST PUTA VIII.—SOUTH- RAJP	COAST ISLANDS. INLAND ISLANDS. SUB-F. FROM SVAIN NOTERN NA. EASTERN UTANA, INDIA, INDIA,	PLAIN NAG-		1,09 86°3 1,20 101°3 2,01 96°1 7,60 323°7 19,75 950°7 6,94	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	1116 1180 11738 11	1,34- 62'06 2,000 111'00 1,661 54'25 7,894 255'41 19,169 762'01 6,551	April. 1,37 75'3 1,99 79'2 1,64 65'8 6,96 281'3 14,62 69:'2 5,51 207'6 5,72	May. 9 1,336 7 66'52 3 1,823 0 54'66 6 1,596 6 255'68 3 11,293 4 5,966 9 255'68 7 198'48 9 5,450	June. 1,269 64'87 1,837 65'53 1,583 64'87 5,846 260'63 4,136 246'15 5,294	July. 1,290 57'00 1,872 79'86 1,603 71'07 5,931 254'58 9,449 475'97 3,694 195'98 5,369	Aug. 1.304 47'45 1.963 83'83 1,647 97'68 5.831 216'48 9.408 595'66 3.587	Sept. 1,330 56'47 1,933 90'86 1,669 95'34 5.927 256'34 9.537 878'54 3.750 232'99 5.455	1,226 49°58 1,893 82°48 1,687 88°06 6,471 339°63 10,168 988°17 3,962	1,31 50°7 1,74 84°1 1,69 73°1 6,92 290°6 11,46 997°1 4,60	6 1,34 3 45°2' 3 1,34 9 57°6' 4 2,26' 7 90°7' 5 6,84' 3 218'3' 6 16,62' 7 6,160 7 6,160 7 4,990	1 1; 5 7; 2 1,0 2; 5 1,0 2; 5 3,19 3,19 3,19 3,19 3,10 58	55.335

Note.—Constantly sick x 366 = total annual loss of service.

* Derived from the aggregates.

* Remaining + admitted = total treated premaining + admitted + died out of hospital = total cases.

TABLE IV—concluded.

	1. STRENGTH. 2. CONSTANTLY SICK.												
GROUPS AND ARMIES.	Jan.	Feb.	March.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	TOTAL.
GROUP XWESTERN COAST	{ 1,553 78'03	400	1,523		1823								17,819
" XI.—Southern India	3,689							3.750		1 8 3 3	1000		41,048
" XIIa.—HILL STATIONS .	3,176		4,512				17,292 64+'05	17,336 630'78					131,08: 4,636°0)
, XII.6.—HILL CONVALESCENT DEPÔTS, AND SANI- TARIA.		1,233	79*67	3,398		6,091 405'62	5,931 391'36	5,661 344'93	5,546 330°46		-		45,740 2,685.68
INDIA · · · ·	68,118		-		.,,,,,					-		68,078	827,198 37,781°6
NORTHERN ARMY	36,313		10000000	1000000	00000000	1000000		38,247 1,863'9 2	38,195	37,836 2,550*85	10.0000000	1999	440,138
SOUTHERN ARMY	30,502	28,548 1,282°91	31,064		30,676	30,663	30,715	30,905	1055		17 15 200	28,755 1,186°16	362,890

TABLE V.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

(The ratios of sickness and mortality will be found in Table III).

NORTHERN ARMY.

Fyzabad.—Pucca drains exist all over the Cantonment but are not continued right into the river—hence there are many pools left as the river subsides in which mosquitoes breed; the drains are, however, being completed. The water supply is obtained from open wells which are the chief breeding places of mosquitoes. Unused wells have been closed. A piped water supply is badly required. Sanitary improvements in the urinals, washing compartments and latrines, at a cost of R4,435 were effected during the year.

The Cantonment Committee offer no suggestions.

The Principal Medical Officer of the Allahabad and Fyzabad Brigades remarks that "the pucca drains should be extended in order that when the river subsides after the rains, pools would not be left in which mosquitoes can breed. This was made the subject of remarks in a special report on an enquiry into the causes of malarial fever, which was submitted recently. Tanks in the neighbourhood of Cantonments should be either filled in or drained when possible."

The General Officer Commanding the Fyzabad Brigade whose remarks are endorsed by the General Officer Commanding the 8th (Lucknow) Division, states that the drainage of Cantonments is being steadily improved, but the low-lying Mangha land, which he believes is the chief cause of malaria, cannot be dealt with as it covers a very large area and is flooded annually by the Gogra. He adds that incinerators for rubbish and filth are being tried and promise well.

Cawapore.—The drainage of the Cantonments is not altogether satisfactory and there are several nullahs and holes where the water lodges after rain. The water supply is derived entirely from wells which, under certain circumstances, become contaminated, especially those in bazaars and private compounds. The bazaars in Cantonments are becoming congested and would be improved by being opened out in places by new roads, etc. In the pail depot, the floors were made impermeable and sewers were repaired at a cost of R422.

The Cantonment Committee suggest:—(t) the provision of a piped supply of filtered water to the barracks and bazrars with the necessary stand pipes, hydrants, &c.; (2) the opening up of the bazaars, in the more congested parts, by wide roads; and (3) the filling up, as far as practicable, of all holes, depressions or excavations where the water lodges after rain, and the improvement of the drainage in places.

The Principal Medical Officer of the Allahabad and Fyzabad Brigades endorses the recommendations of the Cantonment Committee and adds that a piped water supply is urgently needed.

The General Officer Commanding the Allahabad Brigade concurs in the suggestions made by the Cantonment Committee and considers the following measures necessary, in order of importance:—(1) a piped water supply; (2) the introduction of incinerators and the gradual abolition of the pail depôt which he considers objectionable in several ways, as it is at times very offensive, pollutes the river, and costs money without giving any return as in the case of trenched land. He considers that the excreta from the pail depôt area of the Cantonment should be burnt in incinerators and that where this system cannot be worked, trenching must be resorted to, and the pail depôt abolished as soon as possible, (3) the opening up of congested bazaars by wide roads, a matter which is now receiving attention.

Shahjahanpar.—The drainage is entirely surface and there are several small tanks within Contonments, which were treated with kerosine oil. The floors of the latrines and urmals in barracks require to be made impermeable and those in the barrack rooms, kitchens, etc. relaid; and many of the surface drains require repairs or relaying and some others to be made pucca.

The Cantonment Committee remark that the relaying of the floors in barracks is a Military Works Service and that no funds are available pending a definite decision as to the retention of the Cantonment. They add that repairs to the surface drains are being carried out and the principal main drain is being made pueca.

The Principal Medical Officer of the Bareilly and Garhwal Brigades agrees with the recommendation that the floors of latrines and urinals should be impermeable.

Meerut.—The fall available for drainage is small. There are several large and most insanitary tanks in the Cantonment and some of the drains lead into them. The drainage of the Sadar Bazaar was very defective but the whole system has just been remodelled and relaid. The villages of Buxar Khara, Kankar Knara and Fazilpur are objectionably close to Cantonments, and a project for taking the first-named and its surroundings into Cantonment limits is being matured. Bungalow No. 38 which has been in a ruined state for some time should either be removed or rebuilt. Dairies and cattle sheds should be removed from all regimental lines. A scheme is being worked out to provide Dhobi Ghats, with laundries. An expenditure of R 3.879 was incurred on the completion of the Sadar Bazaar drainage scheme, R441 on anti-malarial measures and R 199 on experimental incinerators.

The Cantonment Committee suggest that steps be taken towards filling up the large tanks on the Volunteer parade ground and in the compound of Bungalow No. 40; and that the question be considered of diverting the surface drainage from the tanks in Cantonments to the Abu Nala.

The Principal Medical Officer of the Division remarks that the surface drainage is defective throughout the station, and that the tanks in the lines and cantonments should, if possible, be filled in or drained. No system of surface drainage exists in the Ammunition lines and the village of Khera near these lines should be destroyed. The presence of cattle pens within the lines is most insanitary and their removal is an urgent necessity. The provision of a Government dairy should receive early attention as the presence of dairies within the lines is objectionable. The Dhobi Ghats should be provided with a drying room, to obviate the practice of removing clothing to insanitary houses; and the R. A. Ghat requires a larger area to deal with waste water. The beef market should be transferred to the unused half of the main market and all markets should be rendered fly proof by the use of gauze.

The General Officer Commanding the Meerut Cavalry Brigade concurs in the Principal Medical Officer's remarks. He states that the cost of filling in the tanks is prohibitive, but steps are being taken to pump them out before next rains when, if the surface drainage can be diverted the rainfall can be dealt with. The presence of dairies in the lines is objectionable but in his opinion less objectionable than that troops, and families should obtain their milk from unsupervised establishments and there are no means of supervision possible other than the present arrangements or the institution of a Central Government dairy situated at some distance from Cantonments, equipped with proper plant and an adequate personnel. He considers the washing arrangements are not satisfactory, as much washing takes place in the fouled water of the Abu nullah and that in the absence of a sufficiency of ghats this cannot be prevented; also that the Cantonment, including the barracks, is over-populated and too crowded for healthy conditions to exist. The barracks, stables latrines, cook-houses and men's living rooms are all crowded together in too small a space and there is little or no ventilation. The smaller houses in Cantonment, are also all blocked together with very small compounds and he would like to see two-thirds of the trees cut down. In view of the high price of water the Cantonment funds are insufficient to provide adequate road watering so that the whole place is enveloped in clouds of dust which must be teeming with unhealthy matter.

Delhi.—The drainage in the Fort is unsatisfactory but new drains are being laid down. The Panchakki (Canal) has been closed at its lower end to prevent its opening into the fort ditch; and the diverting of the two city drains is, it is understood, being considered.

The Cantonment Committee offer no suggestions.

The Principal Medical Officer of the 7th (Meerut) Division remarks that Delhi Fort is notoriously unhealthy owing chiefly to surroundings and faulty drainage, as the moat receives the city surface drainage and has no outlet. There is a small stream which is diverted from the river in flood and later is fed by city drainage only, and the presence of this open stugglishly flowing drain is most insanitary. The surface drainage is generally defective and the numerous hollows forming pools cause an excess of malarial disease. Steps should at once be taken to remedy these evils, and the hollows and water holes filled in as the Fort must always be unhealthy unless a good and effective system of drainage is devised.

The General Officer Commanding the Meerut Cavalry Brigade concurs in the preceding remarks. He adds that the Fort during the autumn months is a regular "death trap" and in his opinion unfitted for occupation by troops until the moat is pumped dry and the surface drainage of Delhi diverted into the Jumna.

TABLE V.—continued.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

Amritsar,—The Durgiana and Sart Ram tanks near the Fort which are very insanitary still exist and a brickyard near the Cantonment affords places for the collection of water. The well used for drinking water is situated near the main drain and is liable to be dangerous at any time. The Gowal Mundi bazaar on the borders of the Cantonment is in an extremely filthy condition and a constant menace to the health of the inhabitants, but it is hoped to improve the place in the future. This bazaar has a latrine so near the Cantonment boundary that it is almost impossible to prevent the natives from committing nuisances on the Cantonment land. The situation of the Cantonment is such that samitary conditions can never be very satisfactory as long as the city of Amritsar is in the condition it is and the most around Fort Govindgarh exists. Between this Fort and the city walls, partly in the Cantonment and partly on its confines the conditions are very bad. In the Durgiana tank both men and animals bathe and the water is always dirty. An open drain which is always ill-smelling and contains pools of stagnant water runs away from it, on the borders of the Cantonment. The most about the Fort always contains water and is a menace to the health of the troops.

The Cantenment Committee remark that the pends and hollows in the Cantenment are being filled up as funds are available, disused wells are kerosined and care is taken to prevent the accumulation of anything that would prove a nidus for malaria. They say that the Cantonment suffers from shortness of funds but still in ordinary years there is very little malaria that could be attributed to any conditions existing in the Cantonment. The moat about the Fort is objectionable, but a proposal is under consideration to procure a small supply of fish to put into it as an experiment. The committee hope before long to close the Gowal Mundi bazaar and to discontinue the practice of killing animals for human consumption there if the proposal made by the civil authorities is agreed to. vis.,—to build a new slaughter house at any selected spot in the Cantonment, free of cost, on the sole privilege that all cattle intended for consumption in the civil lines should be slaughtered there, the present bazaar being used for the slaughter of discased animals only.

The Principal Medical Officer of the Sirhind and Jullundur Brigades suggests the disposal of night soil, road sweepings and litter by means of Raitt's incinerator instead of the present trench system, as the former method is cheaper and more sanitary than the latter which in the rainy season is most unsuitable for Amrissar on account of the very high level of the sub-soil water. He considers that the lattines in four different places in Fort Govindgarh should be grouped and a urinal of the standard type provided. The latrines in cantonments for the use of servants, etc., should also be grouped in convenient places, and provided with a small Raitt's incinerator, those in each compound being closed. The latrines should be of a moveable pattern and the "wet" system adopted of treating the pans, seats, etc. The question of extending the city pipe water supply to the Cantonment should be considered as the present supply from the well near the main drain is always liable to contamination. He thinks it would be well to accept, with the least possible delay, the offer made by the civil authorities to build a new slaughter house as the Gowal Mundi bazaar is still in a very insanitary condition. He concludes by saying that the suggestion to place small fish in the moat is a good one and the experiment might well be extended to the other tanks in the neighbourhood, the "datchicks" which now frequent those places being shot, as otherwise they will destroy many, if not all the fish and render the experiment a failure.

The General Officer Commanding the Juliundur Brigade fully concurs in the Principal Medical Officer's remarks and adds that cooperation by the civil authorities is necessary in the matter of sanitation.

The General Officer Commanding 3rd (Lahore) Division, remarks that the question of a pipe water supply, which is a work of some magnitude, is being gone into. He states that the ditch round the Fort is so deep that its bottom is below the water level, making its drainage into the state of the state of the suggestion of stagnant water is a great source of danger, and the cost of filling up the ditch would be enormous, so the experiment is to be tried of placing small fish in the most. He has agreed to the suggestions made by the civil authorities regarding a new slaughter yard, and the question of having one built some distance from the Gowal Mundi bazaar is under consideration. He agrees with the P. M. O. as to the use of incinerators.

Lahore Cantonment.-The surface drainage is inadequate and more pucca drains are required.

The Cantonment Committee state that the new water supply is very near completion. They suggest that the remaining pits and depressions in and about the Cantonment should be filled, that trees for giving shade are urgently needed and that more care should be taken of roadside trees.

The Principal Medical Officer of the 3rd (Lahore) Division remarks that the most important sanitary requirement is that of an improved surface draininge, as hitherto the matter has only been dealt with piece-meal, without regard to any good general scheme. He is strongly of opinion that though the draining of the station effectively will be an expensive undertaking, the cost should be faced, as the result must be a still further diminution of malarial fevers, and therefore a very considerable saving to Government in the long run.

The General Officer Commanding the Division states that nearly half a lakh of rupees has been already spent on surface drainage and that a great deal more is still required, especially in the vicinity of the Artillery barracks where, after heavy rain, the water lies for several days; the Cantonment being very flat and that an enormous sum would be necessary thoroughly to drain the place. Orders have been issued to give effect to the other minor suggestions of the Cantonment Committee; and funds have been allotted for the construction of a purca drain alongside of the Station Hospital in Amritsar Street.

Sialkot.—A "mosquito brigade" has to some extent dealt with the numerous puddles and small swamps produced by building operations, and others have been dealt with by the units concerned. Nearly all wells in the Cantenment may be regarded as favourable to mosquito breeding and liable to contamination, if not through the soil in all cases, at least in the method of drawing and distribution. The Royal Horse Artillery and 12th Royal Lancers bazaars are overcrowded and the villages to the north are dirty and delapidated. Incineration is the system of conservancy now in vogue, and is rapidly replacing the removal system.

The Cantonment Committee remark as follows:—"The facts connected with the prevalence of malarial and enteric fevers and of cholera in the vicinity of Cantonments point to the following measures as necessary:—

1 .- For the prevention of malaria :-

The concreting of the tops of wells.

The introduction of a piped water supply.

The filling-up of all borrow pits by those who make them, the ash from incinerators being employed for this purpose.

The re-adjustment of the scope of the " Mosquito brigade " -a small working party and tools being provided for dealing with pools.

2.—For the prevention of Cholera and Enteric Fever: -The introduction of a piped water supply. Until this has been obtained, wells should be pinked periodically, and drinking water boiled.

The provision of adequate water-sterilising appliances such as can be used by troops, British and Native, when out of Cantonments, both in peace and war.

The extension of incineration to every environment of the soldier. This strikes at the roots of those diseases by sterilising their primary-foci.

For Enteric Fever only :- Inoculation.

The early discovery of the disease among all classes followed by isolation of acute cases and segregation of convalescents.

The examination of all servants to detect the presence of "bacilli carriers".

The Principal Medical Officer of the Abbottabad and Sialkot Brigades remarks that the most pressing need at present is the introduction of a piped water supply, to prevent the spread of enteric fever, cholera and malarial fever. That water-sterilising apparatus should be supplied to the troops, which they should work in peace so as to acquire familiarity with it, and with the necessity for drinking sterilized

TABLE V.—continued.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

water only; as thus in war, they would be less liable to diseases which at such periods destroy their efficiency; and that portable materials for incineration would assist to the same end, if provided for the use of troops whenever they leave cantonments. He adds that the remaining suggestions of the Cantonment Committee could be carried out by local arrangement.

The General Officer Commanding the Sialkot Brigade states that the exceptionally heavy rain which fell during July and August was the indirect cause of much malarial fever. He adds that estimates have been submitted for a piped water-supply which is very urgently required; and recommends that the question be taken up of supplying water sterilizing apparatus to the troops, as it would be especially useful at manœuvres and on field service.

Rawalpind.—The surface drainage from the Lalkurti bazaar and the Royal Artillery barracks is conducted in pucca drains for a short distance only and then allowed to run into open nullahs, but a scheme of drainage is being devised to remedy this. The river Leb and the continuation of the Royal Artillery nullah and the drain from the Lalkurti Bazaar are the two main defects in sanitation in the vicinity of barracks and cantonments which, under existing circumstances, are literally "encircled by a girdle of filth" and this accounts for the low standard of health. The grouped latrine system is being steadily introduced in the station, with the most marked success from a sanitary point of view; incinerators are attached to each grouped latrine and the excreta are destroyed by fire and rendered quite innocuous.

The Cantonment Committee offer no suggestions.

The P. M. O. of the Division is of opinion that the drain in continuation of the Royal Artillery nullah and that from the Lalkurti bazaar should be made preces; and adds that recommendations to this effect have already been submitted.

The G. O. C. shares the opinion of the P. M. O. in regard to the water channels mentioned by him being made pucca; and considers that more accommodation is required.

Nowshera.—The corrugated iron roofs of the British Infantry huts (Hill scale) render them unfit for occupation during the hot weather and until November. The Nowshera kalari is very insanitary and the civil authorities, on the application of the Cantonment authority, are taking steps to remedy this defect. Litter has been dumped down by corps in places, but on representations being made it has been buried, burnt or spread out.

The Cantonment Committee offer no suggestions.

The P. M. O. of the Division is of opinion that the huts with corrugated iron roofs should not be occupied before 1st November, at the earliest; as such are not sufficient protection before that date. The troops using them should remain in the hills till then, unless they can use other barracks till that date. He considers that orders to prevent the damping of litter and arrangements for the erection of incinerators are matters for local action.

The General Officer Commanding the Nowshera Brigade states that he would like to see more care in the matter of dumping litter in the vicinity of Cantonments, and advocates the speedy erection of incinerators to dispose of bazaar refuse.

The Lieutenant-General Commanding the Division remarks that the sanitary arrangements of Nowshera have much improved during the past five years.

Peshawar.—Theremoval system of conservancy is gradually being done away with and all latrine and urinary excreta are being consumed in incinerators, in the portions of the Cantonment under the Cantonment Committee. The regimental bazaars are a standing menace to health, but the cost of removing them is prohibitive. The present method of excreta disposal by carriage and burial at a distance is open to grave objections and might be met by a system of incineration on the spot.

The Cantonment Committee remark that the chief measures now being carried out for improving the sanitary condition of the station are as follows :-

- (a) The abolition of servants latrines in compounds and the erection of cantonment group latrines in their place. Twenty-three group latrines have now been completed and the remainder will be built in the forthcoming year. This is a most important sanitary improvement, as it does away with private servants latrines which are as a rule most insanitary.
- (b) The introduction of incinerators for disposal of excreta and rubbish. Twenty-five incinerators, large and small, chiefly of a modification of Major Raitt's pattern, have now been installed and others are in process of construction. This method of disposal is undoubtedly suitable to Peshawar and does away with the necessity for filth carts travelling through the cantonment and the consequent disadvantages. As the excreta are emptied straight from latrines on to the incinerators, there is no possibility of flies breeding and thus spreading disease. It has been found that very little smoke is given off by these incinerators when properly attended to, and that there is no perceptible odour from the excreta.
- (c) Making pucca the irrigation channels. This is strongly insisted upon by the medical authorities, as tending to reduce the number of breeding grounds for mosquitoes. The cost of the scheme will be very large; Rs. 3,640 has been expended in the year under review and this work will be continued year by year as funds permit.
- (d) The diminution of irrigation and vegetation on land adjacent to barracks. A quantity of land has been taken back from the Grass Farm and will be allowed to remain uncultivated.

They also make the following suggestions :-

Diminution of irrigation and vegetation; making puccu all kutcha drains; the removal of Grass Farm operations from the vicinity of the Cantonment; the removal or gradual extinction of the regimental bazaar; and the modification of the present system of excreta removal.

The Principal Medical Officer of the Division states that orders for the limitation of irrigation and cultivation have already been given by the Lieutenant-General Commanding. He considers a large extension of masonry surface drains a necessity, and that the work should be undertaken systematically as funds become available. A system of deep drainage is also called for, to relieve the water-logging of certain parts of the station, but this would be a matter far beyond local funds; and he is of opinion that any grouping of servants latrines should be carried out with extreme caution, as inflicting a constant hardship, if applied without great care, and tending to insanitary states than sanitary results.

The General Officer Commanding the Division remarks that all that can be done with the funds available is now being done to improve the sanitary condition of the station. Irrigation has been reduced very largely; drainage is being carried out; much superfluous vegetation has been removed; and incinerators have been introduced in most parts of the Cantonments. He adds that notwithstanding the medical cry for "more improvements", he feels sure that, taken all round, the troops are living in a hundred fold more sanitary surroundings than did their predecessors; and that no measures for further improving Cantonment limits will be neglected.

Agra.—The main drain leading from the barracks and hospital to the city drain is badly constructed and has a very foul smell especially during the hot weather, notwithstanding that sweepers cleanlit twice daily; and this drain as well as many of the surface drains in Cantonments, require relaying. The water-supply was deficient in the hot weather and caused much inconvenience, especially in the hospital. It was remedied by bringing in water from the "Ganges escape canal". It was said that during the rains the pipe water contained the bacillus coli, and all drinking water was boiled till the municipal filters were put in proper order. A proposal was made to the Cantonment Committee that the supply to Cantonments should be separate and continuous but there was a difficulty in giving effect to it for financial reasons. The drainage of the bazaars requires remodelling and more pucca drains should be provided.

TABLE V--continued.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.-contd.

The Cantonment Committee make the following suggestions :-

(1) the removal of the Sullage Farm across the river;

(2) that arrangements be made for pumping out the water from the moat of the Fort;

(3) that surface drains be cleared before the breaking of the monsoon; rank vegetation be cleared throughout the rains; and the growing of grass for hay in compounds and by the Grass Farm, also high standing crops by the latter, be prohibited under Section Ioi, Cantonment Code, 1899;

(4) that tanks and depressions be filled up,—if money is not available at once to complete this work, a certain amount to be set aside yearly for the purpose.

They advocate the removal of the Grass and Dairy Farms from the cantonment; and state that a sum of money to improve the surface drains will be allotted in the next revised budget estimate.

The Principal Medical Officer of the 7th (Meerut) Division remarks that the surface drainage generally is defective and that absorption gardens would assist in this connection; also that tanks and hollows, the breeding places of mosquitoes, should be filled in and the Grass and Dairy Farms removed from cantonments. The main surface drain west of Lawrence road is foul smelling, and the roads in cantonments do not appear to be sufficiently watered. The cantonment slaughter-house is in a bad situation, the slaughter racks are unprotected and there is no fly-proof hanging shed. He considers that the Sullage Farm, situated, as it is, close to the Fort must always be a foul nuisance and a danger to health.

The General Officer Commanding the division states that such measures as are practicable, and for which money is available, will be carried out.

SOUTHERN ARMY.

Nasirabad.—The surface drainage is defective and breeding grounds for flies and mosquitoes exist either within or in the vicinity of cantonments, but steps are being taken to improve matters by enforcing sanitary regulations.

The Senior Medical Officer makes the following suggestions :-

- (1) Improvement of the surface drainage of the cantonment;
- (2) Levelling up the bed of the nullah west of barracks, and construction of a shallow cement drain along the centre of it;
- (3) Gradual levelling up of the deepest parts of the quarries, especially the one between the barracks and the railway station;
- (4) Improvement of the course and levelling up the bed of the nullah between the officers' bungalows and the bazaar, also filling in the shallow tanks in the vicinity;
 - (5) The constant stocking with small fish of the deep tanks;
 - (6) The replacement by a pump of the charsas drawn by bullocks at the Danta well.

The Principal Medical Officer of the 5th (Mhow) Division concurs with the above suggestions.

The General Officer Commanding the Nasirabad Brigade also concurs and is of opinion that the use of incinerators should be extended as much as possible and that a more ample piped water-supply is required.

Neemuch .- The supply of water from the wells is often deficient in the hot weather.

The Cantonment Committee and the Principal Medical Officer of the 5th (Mhow) Division offer no suggestions.

The General Officer Commanding the Nasirabad Brigade remarks that the sanitary conditions are satisfactory and that the general use of incinerators in lieu of trenches is desirable and will be introduced gradually.

Jhansi.—The surface drainage is fairly satisfactory, the nullahs, however, which run through the cantonment allow of the lodgment of water in pools, but the matter is receiving attention. The water-supply is from wells, but a piped water-supply is very desirable and could be obtained in conjunction with the Municipality.

The Cantonment Committee state that as there is no really suitable entrenching land within the present limits of cantonments, the acquisition of the 345 acres already proposed is very desirable.

The Principal Medical Officer of the Jubbulpore and Jhansi Brigades considers that, on the whole, the sanitation of the cantonment is good.

Jubbulpore.—A pond exists in No. 7 compound, outside cantonments and its vicinity, which cannot be drained and is too large to fill up; there is another pond in the Mission compound and borrow pits along the railway boundary, but the two defects last named are outside the Cantonment Committee's jurisdiction. The supply of piped water to the Station Hospital is often deficient in the hot weather. The very insanitary village of Gorakh pore is on the border of cantonments; the trenching grounds are in black cotton soil, which cannot be properly pulverised and flies are bred in large numbers and follow the carts back to barracks. Incinerators are being tried and if not successful, the trenches will be moved to a more suitable site. The fields in the vicinity of barracks are irrigated with liquid sewage from the Shah nullah and manured with the sweepings from the roads and Suddar bazaar, in which flies are also bred, but a promise has been made to stop this insanitary practice. The Shah nullah, which is the main drain of the Suddar, bazaar, is practically an open sewer and is one of the main mosquito breeding grounds in the cantonment; money has been granted to make a masonry drain in the bottom of the nullah but the scheme as now adopted wil, it is feared, entail an annual expenditure after the rains. In the bed of the Pachpuri nullah, which is included in the cantonment, since its enlargement, are many borrow pits which are ideal breeding grounds for mosquitoes, but arrangements to fill up, and drain them, as far as possible, will be made.

The cantonment Committee make no suggestions.

The cantonment Committee make no suggestions.

The Principal Medical Officer of the Jubbulpore and Jhansi Brigades remarks that the majority of the general sanitary defects referred to above, exist from want of funds to remedy them. The deposit of bazaar sweepings in the centre of the cantonment and in the Suddar bazaar is absolutely without excuse, as the danger is positive and no financial consideration—should stand in the way of dealing with it. He considers that the incinerators now at work and others soon to be started will do much good, as they mitigate a danger and by saving expense will provide for other sanitary measures. He adds that Cantonment Committees unfortunately expect incinerators to work wonders and are apt to be disappointed if they do not obviate all evils at a minimum of expense. At the Supply and Transport slaughterhouse, blood and water passes down an open channel in the ground and he thinks that all fluids should be collected in a receptacle and carried away by cart, as decomposing blood in the soil encourages files. The deposit of filth in the trenches not far from the dairy and Station Hospital has been stopped. and Station Hospital has been stopped.

The General Officer Commanding the Jubbulpore Brigade remarks that the Jubbulpore Cantonment funds suffer from its being an expensive station for officers in the way of rents and labour, and that the garrison has been much increased without any proportionate increase of revenue, which leaves it dependent for necessities on grants from Government, so that there is little available for improvements. He hopes that the Local Government may agree to increase the proportion of octroi now received. He adds that the area of cantonments and land revenue is small for the garrison and more land will be taken up for Government buildings; also that the evil of manuring with bazaar rubbish has been stopped, the increased expense being recognised as absolutely necessary.

TABLE V--concluded.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.-concld.

Colaba.—A marsh exists on the north-west side of the British Infantry lines, which is a mosquito-breeding ground. Measures were taken to destroy larvæ and a beginning made to fill up depressions with waste building material.

The Cantonment Committee make no suggestions.

The Principal Medical Officer of the Bombay Brigade remarks that as funds are forthcoming existing defects are dealt with. The chief of these are:—(1) the marshy ground on the foreshore, for which reclaiming is the only remedy; (2) the insanitary chawls; (3) the officers' quarters, which are very old, ill-constructed and obsolete. He considers that an expenditure of a comparatively small sum would make this station the healthiest site on the plains of India, and such expenditure could be met by the disposal of Government lands in Bombay—the Town Barracks for instance—which are useless and insanitary. He concludes by saying that Committees have assembled from time to time and the whole question of the location of troops in Bombay has been discussed for many years back but no result follows; that it is practically certain if the matter were thoroughly taken in hand, the whole of the garrison could be accommodated in Colaba, very much to their benefit and at no cost whatever; on the contrary Government would make money out of it.

The General Officer Commanding the Bombay Brigade states that the British Infantry officers quarters are insanitary and a

The General Officer Commanding the Bombay Brigade states that the British Infantry officers quarters are insanitary and a discredit to Government and should certainly be rebuilt-

Ahmednagar.—The fields round Bhingar and Wadarwali villages are freely used as latrines, and that between the latter village and Northcote road, which the British troops pass daily on their way to the range is particularly offensive, as there are no latrines in this village. The "busti" known as "Old horse-holders lines" between Framji's bungalow and the Section hospital has been razed and the ground cleared, the owner receiving compensation.

The Cantonment Committee suggest that latrines are urgently required in the Wadarwali village, and the Principal Medical Officer endorses the suggestion.

Bellary.—Two large tanks are close to the cantonments and the Fort ditch contains water which is used by the native population, but in view of the small rainfall and the usual scarcity of water, these are a necessity. The water-supply for the troops is obtained from unprotected wells,—the quantity is small in the hot weather, the quality fair; all are liable to contamination from dust. No local action can be taken for want of funds.

The Cantonment Committee suggest.—(a) the protection of No. 2 well from pollution by providing a suitable roof, and (b) the improvement of the Allipore tank catchment area by acquiring two villages and planting forest on the now cultivated area; but add that effect cannot be given to the suggestions unless funds are sanctioned for which estimates will be furnished.

The Principal Medical Officer of the Bangalore and Southern Brigades repeats the suggestion he made last year, vis.:—that the deep well from which the drinking water is obtained should either be satisfactorily covered in or the pump removed from over the mouth to one side.

The General Officer Commanding the Bangalore Brigade concurs with the opinion expressed by the Principal Medical Officer and adds that the question was gone into in greater detail in correspondence between that officer and the Assistant Commanding Royal Engineer.

Madras .- There has been no alteration during the past year in the drainage of the Fort and surroundings. The civil population of the City is now having installed a sewerage system in which it is proposed the Fort should join. The Fort ditch remains a constant source of mosquitoes and smells, but all suggestions to fill it in are met with the objection of great cost. A plan of covering it with aquatic plants to kill the mosquito larvae is under consideration. The Fort contains no native habitations but the usual defects in sanitation exist in the surrounding city and bazaars which are much patronized by the soldiers.

The Cantonment Committee suggest the installation of a complete sewerage system, and also the filling up of the Fort moat.

The Principal Medical Officer of the 9th (Secunderabad) Division remarks that the general health conditions during the year have been fair; and that the proposal to replace the present system of sewage removal by a piped system has been recommended and is under consideration, the introduction of which should be a decided improvement.

The Officer Commanding the Madras Brigade states that the only improvement which can be effected in sanitary surroundings are those involving considerable expenditure, e.g., participation in the local sewerage scheme and the filling in of the Fort ditch,

Thayetmyo.—The latrines and urinaries are too near the cook-houses and barrack rooms, but estimates are being prepared for their removal to a further distance and to make them fly-proof with impervious floors.

The Cantonment Committee are of opinion that the re-siting of the latrines and urinaries is an urgent matter and should be carried out without delay.

The Officer Commanding the Rangoon Brigade remarks that in view of the intended abandonment of the station it seems undesirable to incur any great expense on alterations involving the erection of permanent buildings which can be wanted for a very few years only. He is calling for a site plan showing the position of the barracks in occupation and their subsidiary buildings, so as to see what can be done to remedy the defects, and adds that speaking generally the Cantonment appears well kept.

Maymyo .- The drainage is being improved.

The Cantonment Committe offer no suggestions.

The Principal Medical Officer remarks that increased drainage and incineration are most needed.

The General Officer Commanding the Mandalay Brigade states that though the admissions to hospital for malaria have been more. the health of the men certainly shows an improvement over previous years which he hopes will continue, as the vegetation and swamps are cleared further away from the vicinity of the British Infantry lines. He cordially approves of the proposed use of incinerators in place of septic tanks, if only on the grounds that several useful streams will no longer be polluted.

TABLE VI.

TABLE VII.

INFLUENZA by months, stations, groups, and armies.

CHOLERA by months, stations, groups, and armies.

				10- 4				-	-				-								arm					-
		AD	MISS	IONS	FRO	M I	SPLU	ENZA	IN	EACH	MO	NTH.		A	DMI	SSION	NS FI	ROM	Сно	LERA	IN	EACH	и мо	NTH.		
STATIONS* AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Thayetmyo		-						***										4								4
GROUP II,-BURMA INLAND														-				4								4
Forts William, Fulta and Chingri Khal		-	1					***				1	2										-			
GROUP IV.—BENGAL AND ORISSA												1	2						***							
Dinapore Allahabad and Fort Fyzabad Sitapur Lucknow Cawnpore								5		11	22		33 5 1 4						7		3			1111111	111111	3 7
GROUP V GANGETIC PLAIN AND CHUTIA NAGPUR			2	1		-		5		13	22		43			***			8	-	3					11
Shahjehanpur Bareilly	4 3 8 8	3 6		2		3	20 5	15	1			3 1 1	7 26 6 40 19										11111	11111	11111	
Jullundur Amritsar Lahore Cantonment and Fort Sialkot Rawalpindi Campbellpore and Attock	2 4			6 3	3		22	33		4	111111	4	1 82 12					5	111111				11:1:1	111111	111111	
GROUP VIUPPER SUB-	30	15	6	11	3	5	47	51	12	4	,	9	194					5	1	-	1	2				10
Nowshera	3		3	17	6		5	47	18				3 98	1 : :			-	7								2 7
Hyderabad									=			-			1 1											
GROUP VIL.—NORTH-WEST FRONTIER, INDUS VALLEY, AND NORTH- WESTERN RAJPUTANA .	4	1	3	17	6	,	5	47	18				102					8		1			-		-	10
B Muttra	2 3	3 3	2	3			1.2						5 14	-		::	11			-			11			
GROUP VIII.—SOUTH-EAST- ERN RAJPUTANA, CEN- TRAL INDIA, AND GUJARAT	5	6	2	3	1	-	2		-	-	-		19			-	-		-		-	-	-			_
Saugor A		::	2 7			ï							2 17		=											
B Secunderabad	::4	:::	1 2			:::		==			1 1	:::	4 6		111						111					
CROUP IXDECCAN .	4		12	5	5	1	1			1	2		31			***	***			1		***				

Manage Colores		At	MISS	HONS	FRO	M IN	FLUE	NZA	IN E	CH 3	ION	тн.			3	ADM	13810	NS F	ROM	Сно	LERA	IN E	ACH	MON	ти.	
STATIONS,* GROUPS AND ARMIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	Jane.	July.	August.	September.	October.	November.	December.	TOTAL
A Bellary		-												-		-					1	1				1
Madras and Poonamalee .		1					***						1					***								
GROUP XI.—SOUTHERN INDIA		1											1								1					1
Chakrata Subathu Kalabagh and Baragali Barain Camp and Khairagali Khan Spur Cherat GROUP XII a.—HILL STA-				14	5 1	1	3 1	3	3	2			31		-				1	-	2	1		1	=	3 2 1
Nain: Tal										-			2 2 1 1													
GROUP XIIAHILL CON- VALESCENT DEPOTS, AND SANITARIA	,			-		2	1	1		1			6			9. 11			-							
Troops, marching, India . Mohmand Field Force			-	11							==	1	1 1					50	=	=			=			50
INDIA	44	23	26	51	22	10	60	107	33	21	25	11	433					68	**	3	7	3		1		93
NORTHERN ARMY	39	22	14	46	16	8	59	107	33	20	23	10	397		-			14	11	1	6	3		1		36
SOUTHERN	5	1	12	5		2	1			1	2		34					4		2	1					7

^{*} Stations where neither Influenza nor Cholera occurred are not shown in these tables. For the annual ratios, see Table 111.

TABLE VIII.

TABLE IX.

ENTERIC FEVER by months, stations, groups, and arm es. PYREXIA OF UNCERTAIN ORIGIN by months, stations groups, and armies.

The second second	1000		and	arm	es.						222-22					100	grou	ips,	ana	arm	165.					
		ADN	(1881)	ONS	FROM	ENT	ERIC	Fev	ER I	N EAG	сн м	ONTE			ADM	15510	NS F	ROM		EXIA H MO			RTAL	N OR	GIN	IN
STATIONS* AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Rangoon and Port Blair . GROUP I.—BURMA COAST AND BAY ISLANDS						1						1	2	14	5	6	1	5	3	9	14	13	12	10	13	105
Thayetmyo	1111		,			1	2 3	1 2	1 2	2 1	2 : : :	-	10 1 3 7	92:3	5 4	21	34 2 2 1	8	6	6 1 5	4 3 3 2	11 1 4 5				105 6 13 24 9
GROUP II.—BURMA INLAND.			2		1	1	5	3	3	3	2	1	21	14	9	23	39	11	7	12	12	22	4	2	3	158
Forts William, Fulta and Chingrikhal	1			2		-	-	1	1				6	9 :::	1	6	9 1	13	33	50	96 21	35	9		-	261 1 34
GROUP IV,—BENGAL AND				2			1	1	1				6	9	1	7	10	13	33	53	117	44	9			296
Dinapore Benares Allahabad and Fort Fyzabad Sitapur Lucknow Cawnpore			2 2 3 3	::: 2 2 1 10 4 :::	3 7 18 9		1	1 2 1 2 6	:: :: :: :: :: :: :: :: :: :: :: :: ::	1		7	5 7 7 16 18 35 27	4 5 2	51 41 5	2 3 24 8 3 11 2	11 3 44 9 12 14 8	8 40 6 5 17 7	32 10 59 96 34 5	24 5 48 10 2 28 14	11 ::6 9 5 6 17	3 2 13 14 9 20 37	3 40 1 6 10 30	16 35 3 17	- 113 :: 16	120 24 331 70 56 148 145
GROUP V.—GANGETIC PLAIN AND CHUTIA NAGPUR .	2	2	12	19	28	8	4	12	11	4	6	7	115	11	16	53	101	83	155	131	64	98	90	73	19	894
Shahjehanpur Bareilly Curki Meerut Delhi Ambala		3		6 2	1 2 10 3	7		3 1	2		13		 4 5 54 1 19				4 1 1	3 : 2 : 2 ::	3 2 3 7 4 3	3 3 1 2 4	2 24 8 	4 72 20 	98 1 5	15151	4 8	25 221 37 10 8 21
Jullundur Ferozepore Amritsar Lahore Cantt, and Fort Sialkot Rawalpindi Campbellpore and Attock	3 1	2 7 5	 1 5 	2 :: :: : : : : : : : : : : : : : : : :	1 2 10	3 17	in i i i n n	31.72	2 1 3 26 2	4 13 4	1 5	 2 2 1	9 9 11 27 93 14	6	1 14 1 1 11 2 2	3 17 3 6 4 5	36 21 14 5	13 13 6 21 6	3 31 2 10 9 31 5	38 2 20 96 2	4 30 9 22 2 4	29 9 12 2 8	15 :: 30 :: 9	14 1 4 8	:5:::	16 277 16 102 88 86 62
GROUP VIUPPER SUB-	6	17	14	18	29	30	9	23	38	34	22	6	246	19	33	42	84	77	113	113	103	155	163	45	19	969
Nowshera			10	:: 55	6 13 11	6 8 4		46 .:	101		:::		17 52 22		:::2	2 :: 2	10 5 1	31 103 2	84 165	69 105 9	61 84 13	43 27 1	118 3 3	13 15 4	931	441 511 39
Karachi GROUP VII.—NORTH-WEST FRONTIER, INDUS VALLEY,	_		,					1	4		1		7	8	10	2	5	2	1	3	1	1	4	1		39
AND NORTH-WESTERN RAJPUTANA	1.		12	10	30	18	4	11	10	1			98	10	12	6	21	138	251	186	159	72	128	33	14	1,030

^{*} Stations where neither Enteric Fever nor Pyrexia of uncertain origin occurred are not shown in these tables. For the annual ratios, see Table III.

		ADM	IISSIO	NS FI	ROM	ENT	ERIC	Feve	ER IN	EAC	H MO	NTH.		A	DMIS	SION	S FR			NIA C			TAIN	ORI	UIN I	N
STATIONS AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October,	November.	December.	Towar
В													-				-									
much irabad itra ttra a and Fategarh nsi sgong ow and Indore.	***				3			1 1 1 1	1 2 5 .: 2	5 :: 2	 2 14		6 4 2 9 27 7	 1 1 2 6	 2 1 2 1 10		4 2 : 3 2	37167	 7 7 8 6	 4 9 18 1 4	15 33 4 1 5	39 32 	32 3 21	 46 14 13 	5 3 2	1
OUP VIII.—SOUTH-EAST EN RAJPUTANA, CENTRAL EDIA, AND GUJARAT			1		6	1		6	11	8	16	3	55	10	16	7	"	24	29	36	59	72	56	73	11	
gor · · · · · · · · · · · · · · · · · · ·			1 4 1	2 11 ,	5	101	1 2	4	5 3			 1	4 35 11	2			2	3 2	23 8	6 19	5 2 6	3 3 5	5 2 5	3		
B underabad gaum na kee mednagar	7 2	4	3 5 2	5 2	2		3	24 1 10 8 	18 3 1 2 9	7 2	3	5	80 15 19 11 15	13 2 3 4	10 4	26 10 4 1	17 8 6 7 4	12 58 5	10 3 21 1 6	19 14 5	13 2 1 2	17 3 4 	10 6 10 	15 3 4 2	7 3 4 : :	
OUP IXDECCAN	13	4	15	21	10	3	10	51	41	9	5	8	190	24	17	49	44	35	72	63	31	35	39	27	14	-
laba (Bombay) and Chandalla manore, Calicut and Malapuram							***				1		2		1	1	1	2		==	";	ï		·		
OUP XWESTERN COAST	=				1			1	***		1		3		1	1		2			1	1		1		-
llary : : :	100000	1		::		-:8			7	3		ïï	43		···	5	6	1 2	3	12		8	6	8	6	
B Thomas' Mount		1				2				1			1 8		1		2	2	3	4	2	13	6 16	27		
OUP XI.—SOUTHERN	5	2	2			10	4	6	7	4	1	11	52	1	2	7	9	5	6	17	7	23	28	35	14	
																			-							-
nikhet and Chaubuttia akrata bong	=	=	=	3	4	4	6		2	2			6	5		1 2	4 5	3	2 2	9 4	2 1	1	2	5		L
gshai					16	1 1 2	1	2		1			7 2 23			6	4	3	10	4	6	9	5	3		
ldana	-						1	3					1 2	-					6					***		
labagh and Baragali mp Gharial rian and Khairagali		***		"	6	8	"i						16				1	10	18		2	1		1		ı
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ietta		***							21	6			42	5	1	4	2	5	4	5	4 4	9	5 4	5	1	ı
HOUP XIIA.—HILL STA	-	-	-	9	37	25	1.4	22	27	12	2	1	149	14	2	13	18	37	65	30	33	28	18	17	3	
							17	2	1			1::	3	-	1	1	1		3	4	1	1				1
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randhar	: ::		1000	";		1		1					3		";			1		==		3				-
ROUP XIIAHILL CON-				-					1																7	

^{*} Stations where neither Enteric Fever nor Pyrexia of uncertain origin occurred are not shown in these tables. For the annual ratios, see Table III.

TABLE VIII-concluded.

TABLE IX—concluded.

ENTERIC FEVER by months, stations, groups, and armies.

PYREXIA OF UNCERTAIN ORIGIN by months, stations, groups, and armies.

		ADI	MISSI	ONS	FROM	EN	FERI	FE	PER I	N EA	CH M	ONT	4.		A	DMIS	SION				IA OI		CERT	AIN	ORIG	IN
STATIONS, GROUPS AND ARMIES-	January.	February.	March.	April.	May.	June.	July.	August,	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Troops, marching, India . Mohmand Field Force				2	3	1					7	7	18		7		9	18	1	***		2		9	15	43
Extra India.							1				1		2	,		3	8	11	68	64	28	12	12	8	-	215
INDIA .	31	26	58	86	150	105	56	147	152	79	65	45	1,001	128	123	218	360	470	823	721	639	591	562	335	126	5,096
NORTHERN ARMY	13	19	37	62	128	85	34	69	67	48	31	14	607	48	56	117	232	360	638	522	525	466	433	224	61	3,682
SOUTHERN	18	6	21	22	19	20	22	78	85	31	27	24	373	79	60	101	119	92	184	199	114	123	129	102	50	1,352

[•] Stations where neither Enteric Fever nor Pyrexia of uncertain origin occurred are not shown in these tables. For the annual ratios, see Table III.

TABLE X.

TABLE XI.

MALARIA by months, stations, groups, and armies.

PNEUMONIA by months, stations, groups, and armies.

			an	a ar	mies.		-			_						-			a	nd i	armi	es.	-			-
The same of			ADI	MISSI	ONS F	ROM !	MALA	RIA I	N KA	CH M	ONTH				A	DMIS	SION	S FR	ом І	PNEU	MON	IA II	N EAG	эн м	ONTH	
STATIONS® AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June,	July.	August.	September,	October.	November.	December.	TOTAL.
Rangoon and Port Blair	24	24	19	4	13	7	9	. 7	2		2	7	119	-						-						1
GROUP 1BURMA COAST AND BAY ISLANDS	24	24	19	4	13	7	9	7	2		2	7	119			-				1						
Thayetmyo Meiktila Fort Dufferin (Mandalay) Shwebo Bhamo		4 2	3	3	2	3 1 4 7	2 2 11	2	 3 1 5	1 2 10 3	4	1 2 4	21 7 10 34 36	111 111	111 111				111 111			::		111 111	-	"1 "2
GROUP IL.—BURMA INLAND	3	7	13	7	3	15	15	3	9	16	8	9	108			2	1					-				3
Forts William, Fulta and Chingrikhal . Dum-Dum . Barrackpore .	10 1	7	7	3 2	6,	12 1 2	15 1 4	10 2	5 3 6	17	45 3 26	30 2 6	167 13 67			=======================================	1 1			2				111		4
GROUP IV.—BENGAL AND ORISSA	15	7	7	5	7	15	20	13	14	32	74	38	247				2			2		,				6
B Dinapore Benares Allahabad and Fort Fyzabad Sitapur Lucknow Cawnpore	1 7 2 10	2 1 1 2		 1 1 2 1 8	 2 1 9 16	15 2 1 5 2 7 22	10 2 16 8 10 8	9 2	4 1 42 19 9 23 52	21 23 41 107 27 27 31	5 7 27 84 26 18 30	4 4 15 17 4 11	63 39 140 263 81 120 201	2 4 1 2 1	1 :: 2 :: 2	2 2			 2 1	1 1		2	1 1 2	3	1 2 1 2	6 11 2 3 13 7
GROUP V.—GANGE- TIC PLAIN AND CHUTIA NAGPUR.	20	6	4	13	28	54	54	35	150	277	197	69	907	10	4	4	ı	1	3	2	2	2	4	3	6	42
A Shahjehanpur Barelly . Rurki	21 42 5 3	 2 40 4 2	1 6 42 2 5	46	 5 2 33	2 6 76 8 2	6 12 61 10 5	17 56 4 170 48 21	21 78 23 602 29 108	22 99 48 585 25 115	61 10 283 74	76	2,076 248	1 1 4 7				12:4::						-1.1111	11111	5 9 13
Juliundur	6 18 4 25 25 4	6 9 2 1 24 11	2 15 7 20 20	1 11 1 22 23 4	3 7 6 51	1 25 1 21 40 6	1 20 1 1 19 37 8	4 70 23 38 44 76 22	23 143 38 163 182 123	21 133 26 148 204 180 26	26 121 21 94 76 94 30	82 118 8 41 34 39	176 700 120 500 68., 719	5 38	1 2 	1 1	3	···	 2 1					2	2 1	3 9 6 8 17 4
GROUP VIUPPER SUB-HIMALAYA	157	101	120	116	145	189	182	593	1,553	1,632	957	525	6,270	30	5	6	4	10	5	1			3	3	8	75
A Nowshera Peshawar Multan	23 24 3	4 155	38	4 39 3	13 26 3	5 10 8	2 30 7	9 42 22	32 153 80	96 297 177	78 255 134	72 203 55	341 1,122 501	2 2		1		=	-::						2	8 4 2
Hyderabad Karachi	12 24	14	12	9 2	9 2	13	5 10	14	37 27	62	81 25	31 20	299 186					2	3	1				2		7
GROUP VII.—NW. FRONTIER, INDUS VALLEY AND N W. RAJPUTANA	86	55	55	57	53	40	54	105	329	661	575	381	2,449	5	3	2	2	2	6	,	,			3	2	27

TABLE X-continued.

TABLE XI-concluded.

MALARIA by months, stations, groups, and armies. PNEUMONIA by months, stations, groups, and armies.

6 3 6 6 12 7 7 27 4 109 6 5 1 22 1 1 7 7 22 28 24 77	21 10 14 12 8 93 160 76 21 42 30 160 2 1 6 79 76 48 56 29 25 38 21 2 7 189 94 55 47 58 716 509 314 156 2,23	Total
12 7 7 27 4	93 160 76 21 42 201 160 109 46 79 76 48 56 29 25 38 21 2 7 189 94 55 47 58 716 509 314 156 2,25 9 20 2 4 7 110 118 85 32 46	428 1 1 1
6 5 17 6 6 7 35 61	9 20 2 4 7	76 1
6 7 35 61	110 118 85 32 49	
		240
2 1 4 2 2 15 5 9 20 33 67 8 14 17 11 2 1 4 5	1 3 4 3 4 30 30 38 17 28 13 16 10 8 10	43 1 2 1
47 85 147 182	240 270 200 107 1,43	1,430 9 9 5 2 5 4 1 1 1 1 2 40
18 9 49 33	48 121 49 23 30	302 1 1 2
18 9 49 33		393 1 1 2
3 3 5 4 15 22 11 9		77
1 2		9
18 25 18 17	27 20 9 8 20	200 2 2 t t 6
18 6 20 10 11 15 15 26 2 1 1 3 2 1 2 7	41 52 45 18 23 3 1 1 5 2 7 4 2 5 3 2 2 22 20 6 2 6 2 1 2 11 8 2 4	108 1 I 1 3 3 235 1 1 3 3 235 1 1 3 3 23 7 1 1 1 1 3 3 22 7 1 1 8 61 1 1
	11 15 15 26 2 1 1 3 2 1 2 7 1 4 1 3 3 6 3 3 2 3 1 8 9 6 1 2 2 6 11 5 6 5 7	11 15 15 26 41 52 43 18 2 1 1 3 3 1 1 5 2 1 2 7 7 4 3 2 1 3 3 6 22 20 6 3 2 1 3 3 6 22 20 6 3 1 8 9 6 11 8 2 3 1 1

	-		An	MISSI	ONS F	ROM N	MALA	RIA IN	N EAC	н мо	NTH.				A	DMIS	SION	SFRO	M P	NEUN	IONI	A IN	EACH	и мо	NTH.	
rations,* Groups, and Armies.	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November.	December.	ToTAL.	January.	February.	March.	April.	May.	June,	July.	August.	September.	October.	November.	December.	TOTAL.
rjeeling ini Tal ndour sauli lhousie urree and Lower and Upper Topas ant Abu chmarhi randhar ellington	4		3	4 4	3 3 1 9 3 3 2 2 4 6	2 3 1 4 1 7 3 2 1	1 2 4 3 6 5 13 15	3 1 10 10 10 18 	100 53 133 144 111 66 22 3	3 60 17 38 15 8	41	19 1 6	97								:					
OUP XIIS.— HILL CONVALESCENT DEPOTS, AND SANITARIA	10	9	7	20	33	33	49	65	69	176	124	36	631				,	4	2	1	2					1
oops, marching,	12	7	14	6					0	46	113	114	321	2	2								1	2	2	
ar Valley Field			3					***					10		2	***						***				
mand Field Force				1	47	3			400	107			51			***		1		***		***	***			
dali Depôt .	4		1	11	2	15	14	12	13	28	11	14	125				***							***		***
EXTRA INDIA.	7	7	5	3		2	,			3	7	34	72	-												
INDIA ·	438	311	366	429	569	681	842	1,492	3,392	3,992	2,755	1,557	16,824	65	28	31	17	26	23	15	7	6	12	13	26	26
thern Army .	248	150	190	238	315	388	436	992	2,498	2,9So	1,981	1,050	11,476	45	11	19	13	18	14	10	4	4	8	8	18	17
ithern	178	1.47	159	123	722	290	406	500	835	956	661	383	4,966	17	13	12	4	7	9	5	3	2	3	3	6	8

^{*} Stations where neither Malaria nor Pneumonia occurred are not shown in these tables. For the annual ratios, see Table III.

TABLE XII.

TABLE XIII.

DYSENTERY by months, stations, groups, and armies.

DIARRHŒA by months, stations, groups, and armies.

		A	DWIS	STOR	S FRO	ом (lvers	TER	V 18	FAC	H MC	NTH		,	An	MISSI	ONE	***	w Dr	APP	HCT.		ACM	MOI	Tu	-
	-	-	DAIS	91018			/136/		-	1				-	-	-	UMB	FRU			-		- I	200		-
STATIONS* AND GROUPS.	January.	February.	March.	April.	May.	Jane.	July.	August.	September.	October.	November.	December,	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Rangoon and Port Blair .		***	1	1	2	8	3	4		5	2		27													3
GROUP I.—BURMA COAST			1	1	2	8	3	4	1	5	2		27				1	1								3
Thayetmyo	···		1	2							-		2 5 2 			1	3	1	2	3	2					6 3 3 9 4
	-			-			-			-		-	-		-	-	01	1	3	3	-				-	25
Forts William, Fulta and Chingrikhal Dum-Dum Barrackpore	1		1	1			2	4	5	1		3	16 3 2	2		1 1 1	2	2		4	3	7	2			22 1 5
GROUP IV.—BENGAL AND ORISSA	2		1	1			2	4	6	1		4	21	2	1	3	3	2		4	3	7	3			28
B Dinapore	5	3	5 2	 1 2 1 7	1 1 1 2 1 4 1 1	2 1	3	2 1 2 2 5 2	3 1 1 8	2 2 2 8	3 1 8	4 2 4	11 2 24 14 5 54 2	1 2 2	1	2 2 2		3 1 1 2	4	2 1	8	1-1-1	 2 	1 1 4 1 1 4	1	9 8 18 14 1 6
GROUP V.—GANGETIC PLAIN AND CHUTIA NAGPUR	6	5	8	11	8	3	5	14	13	14	15	10	112	5	2	2	2	7	7	5	11	2	3	11	5	67
A Shahjehanpur	3		1114	1 4 3	1		-	3 5	1 1 9 1	2 1 4	: : : 5 : 3 :		7 7 1 37 1 19	1 1	1	2 2 6 3	1 1 16 2 2	2 4 1 1	4 4 1	3	2 5 : 6 2 ::	6 3 1	3 :: 6 1 3	8	3 3	7 37 9 63 6 27
Juliandur Ferozepore Amritsar Lahore Cantonment and Fort Sialkot Rawalpindi Campbellpore and Attock .			2 2 2	3	 1 5			 1 7	1 2 3 6	1 2 4 3		4 1 3	2 4 7 15 37 9	1 9 3		3	2 2 1 8 11 	I 1 10		 1 2 3 	6	5 2 2	: 488	3 2 9 5 1,		10 9 2 14 51 63 5
GROUP VIUPPER SUB-	5	1	11	14	8	6	5	20	25	18	15	18	146	18	12	22	47	22	19	11	24	21	35	51	21	303
Nowsnera				1 2	2	2	:::	 1	1		1		5 7 2	1 2	2	9 9 2	6 10 2	4 21	56 ::	1-1		1 1 3	5	2 1	5 7	40 57 11
Hyderabad	2				2	2	1 3	4 7	5	1		1	14	3	3	1 4		1 1	2	3	2 1	1 5				10
GROUP VIINW. FRON- TIER, INDUS VALLEY, AND N. W. RAJPUTANA	-		-	3	4	4	5	13	6		1	2	48	6	6	25	18	28	14	5	3	11	6	3	12	137
Neemuch Nasirabad Muttra Agra and Fatehgarh Jhansi Nawgong Mhow and Indore	1 1			***			2 2 1 5	3 4 9 1 7	3 3 5	4 5	4 1 4 3		3 9 2 21 15 2 36	6	1 2	1 1 5	3 4	1 2 2	1111-11	- 4	5 5 3 7 6	3 1 2 2 1	3 2 2 3		3 3 6	15 18 6 15 23 3 39
GROUP VIIISE. Ray PUTANA, CENTRAL INDIA AND GUJARAT			2	9	4		10	24	11	9	12	2	88	9	6	9	11	8		6	26	9	10	"	13	119

		Ap	MISS	ions	PRO	m D	TSEN	TER	Y IN	EACI	н мс	NTH		1	A	DMIS	SION	S FE	ом	DIAR	RHŒ	A IN	EAC	ны	ONT	4.
STATIONS, GROUPS AND ARMIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	Aprill.	May.	June.	July.	August.	September,	October.	November.	December.	Total.
Sangor A	6	1	5 2 1	1 2 2	2 4 2	1 2	3	4 3	3	5 3	9 2	: 4	16 43 14			:41	.4		5 1	3 2	7					1 23 17
Secunderabad	6	4 3	6 4	2 5	4 3	2 :: 4	3 1 2 4 1	22 5 12 2	4 : 5 4 :	6 3 1	3 1 2 1	4 : 2 2 :	75 4 23 43 4	1 1 4	5 ::	4	2 2 2 ::			6	3	3 3 4	2 3	2 2	1 1 7	19 12 33 2 28
GROUP IXDECCAN .	13	11	19	12	16	9	16	48	28	18	19	13	222	8	6	13	10	10	9	27	16	14	7	6	9	135
Colaba and Khandalla . Cannanore, Calicut and Malapuram .			2				2	2	3	2	1	12	27			2					1			4	5	13
GROUP XWESTERN COAST	1		2		1	1	2	2	3	2	2	12	28			2				1	2			4	5	14
Bellary Bangalore		4	5	3	6	3 8	6	1 7	6	1 4	2	==	14 46	3	4	3	·	7	3	1	5	2	2	i	3	35
St. Thomas' Mount	1	5	"1	2	ï	1 2	1 2	6	4	ï			30	·::	***	-		2	***	2		1				5
GROUP XI.—SOUTHERN	3	9	7	6	7	14	9	15	11	6	3	4	94	4	4	3	1	9	3	3	5	3	-2	1	3	41
Ranikhet and Chaubuttia Chakrata Lebong Solon Dagshai Subathu Jutogh Kuldana Kalabagh and Baragali Camp Gharial Barian and Khairagali Khan Spur Cherat Quetta Maymyo GROUP XII a.—Hill Stations Darjeeling Naini Tal Landour Kasauli Dalhousie Murree and Lower and Upper Topas Mount Abu Pachmarhi Purandhur Wellington GROUP XII b.—Hill Con-		1	1	1 in the second	111 3 3	20 3 3	7	9	13	7	4	1	29 14 3 4 4 4 1 10 2 9 9 4 94 94 11 3 1 2 2 8 3 8	3 3 4	3	4	9 5	3 3 1 1 7 7 1 1 1 1 8	36	30	77244	18	13	8		30 25 33 3 1 1 14 14 14 11 12 22 19 1 1 176
VALESCENT DEPSTS, AND SANITARIA	1			4	6	13	10		3	1		1	39		3	3	9	9	8	8	9	2	2	5		581
Troops, Marching, India Bazar Valley Field Force Mohmand Field Force Deolali Depôt Extra India. Aden		1		-	5	1		1	3	4	15	14	31 6 3		36 :: :: 3	4 1	3	39	 1			1	6	8	15	40 7 41 1
INDIA				1		,	1		-			1	-	-	-	-	1	-	1	1	1		1			_
INDIA .	43	35	56	73	82	81	76	158	123	87	91	86	992	59	53	98 1	26 1	57	02 1	04 1	30	91	90 1	17	90	1,217
NORTHERN ARMY	14	7	21	46	39	34	27	53	59	44	38	33	415	29	20	56	90	77	74	56	69	57	59	80	41	708
SOUTHERN ARMY	29	28	35	27	38	46	49	105	64	42	38	39	540	30	24	37	32	41	27	48	61	33	25	29	34	421

TABLE XV.

B.—CHANGE of PERSONNEL, YOUTHFULNESS, RECENT ARRIVAL, and MARRIAGE, in relation to VENEREAL DISEASE and ENTERIC FEVER.

		-								MEN.				
			ARRIVED	IN INDIA."	- 1-	PER C	ENT. OF ST	RENGTH.		Ra	TIO PER 1,0	000.	RATIO PER	
	YEAR				YEAR.	Age.	Length of residence.		Strength.		Admissions		1	
			Men.	Women.		Under 25 years.	Under 5 years.	Married.		All causes.	Venereal Diseases.	Enteric Fever.	Venereal Diseases.	Enteric Fever.
		1						115 3				113	1.000	
1873-79			13,113	575	1878	35	60	7.59	36,475	1,651'3	271'3	8.2	16'43	*51
1879-80			13,542	612	1879	39	61	6.63	59,082	1,871'2	234'8	8.0	12'55	*43
1880-81			13,165	664	1880	41	65	6'36	59,717	1,754'2	249'7	7'9	14'23	'45
1881-82	1.		9,895	349	1881	43	70	5'94	58,728	1,604'6	260'5	5'6	16:23	'35
1882-83			9,748	325	1882	41	72	5'43	57,259	1,444'9	265*2	6.5	18:35	'43
1883-84			 12,525	433	1883	41	75	5,50	55,525	1,335'7	270°3	7'7	20°23	.28
1884-85			11,822	393	1884	45	75	5'05	54,996	1,513'4	293'9	11'7	19*42	'77
1885-86			17,766	508	1885	48	73	4'23	56,967	1,532'7	342'7	1112	22.36	.73
1886-87			11,645	372	1886	52	75	3,93	61,015	1,513'9	389.2	18'1	25'73	1'20
1987-88			11,729	459	1887	52	73	3'84	63,515	1,369'7	361.5	12'7	26'37	*93
1888-89			12,407	505	1888	50	76	3.62	68,887	1,381.7	370%	13.6	26*82	.00
1889-90			12,270	\$32	1889	49	78	3.60	69,266	1,498'0	481'5	22'9	32'14	1'53
1890-91			14,046	542	1890	50	80	3'70	67,823	1,520*2	\$03.2	18.2	33'12	1'22
1891-92			15,456	529	1891	51	79	3.36	67,030	1,379*1	400'7	20'4	29.06	1.48
1892-93			15,894	540	1892	51	80	3,50	68,137	1,517'3	409'9	22.1	27'01	1*46
1893-94			15,090	482	1893	53	79	3,50	70,091	1,414'9	466.0	200	32'94	1743
1894-95			15,957	517	1894	54	81	†	71,082	1,5080	511'4	20'9	33,81	1.38
1855-96			14,346	654	1895	55	83		71,031	1,461'8	522.3	26'3	35'73	1.80
1896-97			14,805	545	1896	56	82		70,484	1,386.7	5116	25'5	36'89	1.84
1897-98			16,227	543	1897	55	84		68,395	1,556'9	4857	32'4	31,50	3,08
1898-99			16,911	648	1898	54	81		67,741	1,436-9	36219	36.9	25'26	2'57
1899-1900	0 .		3,359	168	1899	53	78		67,697	1,148-7	313'4	20.6	27.28	1.79
1900-01			5,958	185	1900	45	69		60,553	1,143'2	298'1	16.0	26'07	1'40
1901-02			18,594	438	1991	42	63		60,838	1,104'3	276.0	12.8	24109	176
1902-03			24,840	961	1902	43	68		60,540	1,078'4	281'4	167	26.00	1*55:
1903-04			15,126	758	1903	51	76		70,445	1,033'4	247'0	19'6	23'90	1'90
1904-05			16,366	820	1904	52	So	-	71,083	90014	198-5	19.6	22'05	2'18
1905-05			15,178	804	1905	52	84		71,343	834'3	453'7	16.1	18'42	1'93.
1905-07			18,636	912	1986	51	84		70,272	870'8	117'3	15.6	13147	179
1907-08			16,083	1,049	1907			-	69,332	7554	89'9	13'1	11'89	1'74
1908-09			17,182	1,130	1908	†	t .	-	68,933	839'5	69.6	14'5	8:30	1'73

[•]In ordinary years the departures plus the deaths nearly balance the arrivals.

TABLE XVIII.

STATISTICS OF OFFICERS.

A.—SICKNESS and MORTALITY among OFFICERS of the BRITISH ARMY in 1908. (From the Medical Returns of the Army.)

	duration	1	Norti Are			thern my.	Ind	lia.•
STRENGTH				,113	,	,002	2,1	88
CASES REMAINING FROM 1907 .			7	23		17		40
			Ratios.	Actuals.	Ratios.	Actuals.	Ratios.	Actuals.
CONSTANTLY SICK			28'3	31'52	23'8	23'81	25'5	55'86
INVALIDS			40.43	45	46'92	47	42'05	92
ADMISSIONS,								
nfluenza			26.1	29	10'0	10	17.8	36
holera			.9				'5	
mall-pox			6.3	7	1.0	1	3'7	8
interic Fever			30'5	34	19'0	19	24'7	5
falaria			159'0	177	86-8	87	125'2	27
Pyrexia of uncertain origin			67'3	75	49'9	50	58'5	12
ubercle of the lungs			1.8		1'0		1'4	28
neumonia · · · ·			2'7	3			1'4	
despiratory Diseases			12'5	14	12'0	12	11'9	2
Dysentery			19'8	22	30'9	31	27'9	6
fiarrhœa			27'0	30	27.0	27	30'6	6
lepatic Abscess					2'0	2	.0	
" Congestion and Inflammation			19'8	22	15'0	15	17*4	3
Cenercal Diseases			4'5	5	2.0	3	3'7	
			722,4	Soi		-0.	668-2	
DEATHS.	ALL CAUSES		72-4	601	580'8	582	608.2	1,460
			*90	-			-46	
holera		•						
mall-pox			*90				1'37	
interic Fever			'90				*46	
alaria		•						
yrexia of uncertain origin								
leat-stroke · · · ·								
irculatory Diseases		-						
ubercle of the lungs			'90	" 1		6	-46	
neumonia		*						
espiratory Diseases		-			2'00	2	191	
ysentery		*		***			3	
liarrhosa					***		'46	***
lepatic Abscess				***	1'00	'	40	
	ALL CAUSES		7'19	8	6.00	7	9.60	2
DEATHS OF	UT OF HOSPITA		NAME OF TAXABLE PARTY.				3*20	

Including officers on the line of march and with the Field Forces.

B.-CAUSES of DEATH among EUROPEAN OFFICERS of the BRITISH and INDIAN ARMIES in 1908. (From non-medical sources.)

	la ye	yond							In	INDI	٠.									
ARMIES.	Strength in India, whether leave or not, on the 1st of	gth in Europe or be on 1st July 1908, wh irlough or sick leave.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of uncertain origin.	Heat-stroke.	Circulatory Diseases.	Tubercle of the lungs.	Paeumonia.	Respiratory Diseases.	Dysentery.	Diarrhota.	Hepatic Abscess.	Тотак.	Deaths in England and other countries.	Deaths at sea,	GRAND TOTAL.	Ratio per 1,000.
BRITISH .	. 2,922	633	1		3		***		***	***	1		2	***	1	21	1	3	25	7'03
INDIAN .	. 3,186	975	3		6				2				1		1	18	4	1	23	5'53

TABLE XVIII-continued.

STATISTICS OF OFFICERS.

C.—CHOLERA by months, stations, groups and armies.

-	lena		Nu	MBER	OF ADS	NAME OF STREET	-	-	CONTRACT		H MONT	-			1		
STATIONS, GROUPS, AND ARMIES.	Average annual strength.	January.	February.	March.	April.	May.	June.	July.	August.	September,	October,	November.	December.	Total Admissions.	Admission rate per 1,000 of strength.	Total deaths.	Death rate per 1,000 of strength.
Rawalpindi	96								1		1		-		10'4		10'42
GROUP VI.—UPPER SUB-HIMA-	434	-	-	1		-			-	-	-	-	-		2'3		-30
ANDIA	2,188		-	-	1	-	-		-			-	-		-3		-46
NORTHERN ARMY	1,113		-		1		-	-	-	-					9		790
SOUTHERN ARMY	1,002			-	-	-	-	-		-		-	-		-		-
THE RESERVE TO SERVE		111	• Stati	ions wb	ere cho	lera did	not oc	cur are	not she	wn in t	his tab	le.	-		1		1

	1 7					SIONS						a arm	_	1	1 5 .	1	8
Stations® Groups an d Armies,	Average annual strength.	January.	February.	March.			1		August.	September.	October,	November,	December.	Total admissions.	Admission rate per 1,000 of strength,	Total deaths.	Death rate per 1,000 of strength.
Mandalay	Ave	. Jan	Feb	: Ma	April.	May.	i June.	i July.	: Aug	Sep :	ii Oct	ii Nov	i Dec	Tot	125'0	Tot	
GROUP IL-BURMA INLAND .	39	***	-					-					_	-	256	_	
Sitapur	16 71 27	=	-			1							-		62°5 14°1 37°0		
GROUP VGANGETIC PLAIN AND CHUTIA NAGPUR	191					-	1				1			3	15'7		
Bareilly Ferozepore Lahore Cantonment and Fort Sialkot Rawalpindi Campbellpore and Attock	32 31 38 42 96 12	=		-	=	-	-	-	-				=======================================	3 3 1	31'2 32'3 26'3 71'4 31'2 83'3		
GROUP VI.—UPPER SUB-HIMA-	434		2		1		1			1	2	2	1	10	23.0		0
Peshawar	45			2	***	2								4	870	1	2174
FRONTIER, INDUS VALLEY, AND NORTH-WESTERN RAJ- PUTANA	148			2		2								•	27'0	1	6.76
Jubbulpore	43 92 46 27				=	-	=	==	=,	Ξ,	=	-,	-	4 1 2	23°3 43°5 21°7 74°1	===	=
GROUP IXDECCAN	343	-	2		1	-	1		1	1		1		8	23'3		
Colaba and Khandalla	37			,							1			2	54'1		
GROUP X-WESTERN COAST .	47			-							1			2	42.6		
Bangalore	88	-												,	11'4		***
GROUP XL-SOUTHERN INDIA .	138									1				,	7"2		-
Ranikhet and Chaubuttia . Chakrata Kuldana Quetta	42 39 8 100	===	=	===	- =		2			=======================================	Ξ,	Ξ,		1 2 4 4	23'8 51'3 500'0 40'0	=	
GROUP XIIa.—HILL STATIONS.	339		-		1	1	3		2		1	1	2	11	32'4		-
Kasauli	6 14 4 36	-				11.11	3	3	2	=-			-	9 2 1	166°7 642°9 500°0 27°8		=
GROUP XIIS.—HILL CONVALES- CENT DEPÔTS AND SANITARIA	127				1		3	4	2	1			1	13	102'4	-	-
Marching	45										1			1	22,5	2	44'44
INDIA -	2,188	1	4	4	4	5	9	4	5	4	5	4	4	54	24'7	3	1.39
NORTHERN ARMY	1,113	-	2	2	2	5	8	3	•		3	,	,	34	30'5	1.	.90
SOUTHERN ARMY	1,002	1	3	1	2		1	"	1	3	2	2	2	19	1970		-

TABLE XVIII—continued.

STATISTICS OF OFFICERS. E.-DETAIL of DISEASES.

	ATT	ACHE	SH OF D TO ROOPS	EURO	RS PEAN	ATT	BRITIS FFICE ACHE NATI ROOF	ERS ED TO VE		ATT/	CHE	SH OF D TO I	EURO	SPEAN	ATT	BRITIS FFICE ACHE NATIV	RS D TO E
DISEASES,		INDIA	•		ELD VICE.		INDI	Α.	DISEASES,	9	INDIA			ELD VICE.‡		India	
	Admissions.	Deaths.	Invalids.	Admission.	Deaths.	Admissions,	Deaths.	Invalids,*		Admissions.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Invalidat
Diphtheria	1		1			2		-	Carcinoma	,							
Enteric fever	54	3	15			29	6		Other general diseases .				2				
German measles .	1	***		***		2			Neuritis	1					-1		
Influenza	39					23			Multiple neuritis	3		1				***	
Measles	6			-		8			Leptomeningitis				***	***	1		
Mumps	3	***		***		1			Abscess of brain .	1	1			***		***	
Scarlet fever	,			***		1			Sanguineous apoplexy	2		1				-	
Small-pox	8				***	4			Hemiplegia	1	***	1				***	***
Cholera	1	1			***	4	3	***	Headache				***	***	1		***
Dengue	12		***	***					Migraine						1		
Dysentery	54	2	5	7		35	1		Neuralgia	15					13		
Malaria	266	1	10	8		258			Neurasthenia	4		5		***	4		
Pyrexia of uncertain origin	127		1	1		65	***	30.1	Conjunctivitis	6					5		
Erysipelas	2	1							Ulcerative keratitis .		***				1		
Septicæmia			1			1	-		Iritis	2						***	
Inflammation of lymph-									Retinitis	1					1		
atic glands Suppuration of lymph-	10	***	L	***		2	***		Amblyopia and am-								
atic glands	1	***			***	***	***		Hemianopia								
Lymphangitis						2			Œdema of eyelids .								
Inflammation of con- nective tissue .	29					7			Inflammation of the external ear	1	-				4		
Abscess of the connec- tive tissue	14					9			Inflammation of the		7.3		-			200	
Boils	24					16		***	Inflammation of the	1	***			-			***
Carbuncles	3					Mirror .		***	internal ear	1							
Onychia	4					1	***	***	Rhinitis	1	***						
Whitlow	1				***				Coryza		***				4		
Ulcer	10		***			3	***		Perichondritis	***					1		
Pneumonia	3	1	2			3			Inflammation of acces- sory sinuses (suppura-			101	1		100		
Rheumatic fever .	7		1			12			tive;	. 1		1			***		
Sore threat	4					7			Inflammation of naso-pharynx]					1		
Tonsillitis	43								Pericarditis						1		
Quinsy	4								Valvular disease of				-	-	11/-	14/1	-14
Tubercle of lungs .	3		4						heart	1	***		***		***		
Tubercle of lymphatic		700		310					Angina pectoris	1	***		***			***	
Tubercle of bladder .	1		-			2			Effects of strain on heart						2		
Gonorrhœa	2					1	***	***	Syncope	3						2	
Syphilis	6			"			"		Disordered action of		-	-	-		10	45	
Ringworm	2		3	***	-	2			Thrombosis of veins	-	***		***		2		***
Hirudo Medicinalis .	1		-						Phlebitis	1	***		-		2		
Debility	18		5			3			Varie	2						"	
Ansemia	2		1			18			Asthma	1		-	-	"			
Gout	1	***							Laryngitis		-	=			6	-	-
Lipoma	1							-	Bronchitis .	17				-	19	-	-
Osteoma	1						***	-	Congestion of lung		-				1		-
	-	-	-				-		11			TOTAL !		-	1000	1000	-

	ATT	ACHE	SH OF ED TO TROOP	FICER EURO S.	S PEAN	ATT	FFICE FACHI NATIV ROOF	RS ED TO E	STATISTICS OF THE PARTY OF THE		ACHE			PEAN	ATT	BRITI FFICE FACHI NATI TROO	ERS ED TO VE
DISEASES.		India	•	SER	ELD VICE.		INDIA		DISTASTS.		India,	•	Fi Sm	ELD RVICE.		INDE	۸.
	Admissions.	Deaths.	Invalids,	Admissions,	Deaths.	Admissions.	Deaths.	Invalids.†		Admissions,	Deaths.	Invalids.	Admissions	Deaths.	Admissions.	Deaths	Invalids-†
Hæmoptysis						2			Hæmaturia	1							
Pleurisy	4		-	1		4		***	Lithuria	1		***	***		2.00		
Stomatitis	1							141	Phimosis	2	***				***		
Caries of dentine .	1							100	Inflammation of the speratic cord .	1		***	-		***		
Inflammation of dental	2			+			1		Hydrocele	3			-		2		
Abscess dental perios-					1000			***	Hæmatocele of tunica vaginalis		***				1		
Ulceration of tongue .						1		***	Orchitis	2	***				2		
Tensillitis	111111111111111111111111111111111111111		1			***	***		Epididymitis	1					3		
Duiesy	***	***				17			Periostitis	2	***			100	2		
aflammation of						1			Chronic abscess of bone	1	***		***	***			
pharynx.						9		***	Necrosis of bones .						1		
Gastritis	17					13			Arthritis	1					1		
Indigestion	7	-				9		-	Synovitis	36		1			26		
Hyperchlorhydria .						1			Dislocation of intra-								
nflammation of intes-								1	articular cartilage . Loose body	3	***				***		
Enteritis	12				***		***				***	,			***	***	
ppendicitis	9		1			13		***	Myalgia	8		***			12		***
Colitis	8	1	1			4		***				***	***			***	
Ilceration of intestines			1			4			Tenosynovitis	3		***	***		***	***	
meal accumulation .		***		200		1	***	***	Abscess of bursae	1	***	***	***	1		***	
lernia	1				***	***			Erythema	***		***	***		1	***	
Narrhoea		***	2	***	***		***		Eczema	***			***		1	***	
Constipation	57	***	1	10	***	33	***			4			***		2	***	
olic	7	***		***		1		***	Impetigo contagiosa . Psoriasis				878	***	2		
roctitis	1	***	***	***		10			Corn	1			***		***	***	
schio-rectal abscess	,	100	***	***			***		Delhi boil	1			***			***	
Aceration of rectum		***	***		***		***		Wan	-			***		3	***	
and anus		***	***			1	***		Caracia I	1			***				***
istula in ano	3	*** "	***				***		Other local diseases	1					***		***
iles	9	***				6			Effects of heat		***	***	1			***	
lepatitis	17	***	4			7			West study				1		***		***
" suppurative .	2	1	1				1		Sun-stroke	9				***		***	***
ongestion of liver .	20	1	3	1		9	***		P. Contract and A	4		'			5	***	***
aundice	28		***			11			Suffocation from stran-				200		1		
holecystitis	5					***			gulation		***					1	***
illiary colic						1			Burns and scalds .				***		1		
allstones	1		***						Abrasions	7	***				8	***	
eritonitis			•••				1		Contusions	67		***		***	31		
cute nephritis	1						1		Wounds	42		1			36		***
Brights' disease	1		1				***		Wounds, gun shot .	71	1			1	4		***
yelitis		***				1			" " in action				12	3			
alculus in kidney .	1					2			Sprains and strains .	56		1			43		
" " pelvis .	1		1			***			Dislocations	17				***	11		
enal colic	3		2						Ruptures	2					3		
ystitis	2					3			Fractures	25	1	4			13		

^{*} Excluding Field Servace. † Information not available. ‡ Bazar Valley and Mohmand Field Forces combined.

TABLE XVIII-concluded.

STATISTICS OF OFFICERS. E.-DETAIL OF DISEASES.

		BRITIS		EUROE		OFFICERS ATTACHED TO NATIVE TROOPS.					CHED		FICER UROP S.		ATT	RITISI FICER ACHEI NATIVI ROOPS	TO E
DISEASES.	1	INDIA.		SERVI			INDIA		DISEASES.	1	INDIA.	-	SERV			INDIA.	
	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Invalids.†		Admissions.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Invalids.†
Fracture of base of skull							1		Venoms of stinging insects.						1		
Laceration of muscles . Traumatic meningeal haemorrhage	,								Venom of dog Wound gunshot suicidal			-	-	-			-
Concussion of brain . Contusion of eye ball .	14		3			10			,, cut throat ,, . Killed, accidental .	-	-	-		-		-,	-
Internal derangement of knee joint Poison, ptomaines .	1 2					-			Not yet diagnosed .				10		-		-
, arsenic . Venoms of snake .		-				1			TOTAL .	1,398	17	92	64		991	18	

Excluding Field Service.
 Information not available.

Bazar Valley and Mohmand Field Forces combined.

B.-WOMEN.

TABLE XIX.

RATIOS AND ACTUALS OF ARMIES.

	Northern Army.	Southern Army.	India.*	
Strength	:,053	1,741	3,676	
	Ratios. Actuals.	Ratios. Actuals.	Ratios. Actuals.	Remaining
Constantly sick	35'2 68'77	25'2 43'88	30'5 112'65	from 1907.
Admissions—				
Influenza Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diarrhora Anæmia and Debility Abertion and other affections connected with pregnancy. Affections connected with and consequent on parturition All other diseases peculiar to women	4'1 \$ 1'0 11'8 22'0 2'0 2'0 2'0 2'0 2'0 2'0 2'0 2'0 2'0 2'1 11'8 2'1	1'1 2 7'5 13 5'7 10 68'4 119 10'9 19 3'4 6 1'7 3 7'5 13 14'4 25 11'5 20 240'1 418 21'3 37 6'3 11	9'7 3 13'8 5 2987 1,10 24'6 9	4 2 2 3 3 3
All Causes	35'3 69 807'4 1,576	19'9 52	7197 2,66	
DEATHS — Cholera Small-pox Enteric Fever	1°02 2°56 3°07	1'15 2	'81 1'89 1'89	Deaths out of hospital,
Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diarrhora Hepatic Abscess Abortion and affections connected with and consequent on parterition.	2°36 3	'57 1 '57 1 '57 1 	"54 '81 	3
ALL CAUSES .	16'39 3	10'34 18	13,23 3	0 1
PERCENTAGE IN 100 ADMISSIONS—				
Influenza Cholera Small-pox Enteric Fever Malaria. Pyrexia of uncertain origin Tubercle of the lungs Pneumosia Respiratory Diseases Dysentery Diarrhosa Ansemia and Debility Abortion and other affections connected with pregnancy. Affections connected with and consequent on parturition All other diseases peculiar to women	9.00	*18 *18 1'20 '92 10'98 1'75 '55 '28 1'20 2'31 1'85 38'36 3'23	*38 *15 1*35 1*84 11*99 2*36 *38 *30 1*35 1*39 1*92 41*50 3*31 1*35 4*66	
Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diarrhora Hepatic Abscess Abortion and affections connected with and consequent on parturition.	188 156 3'1 6'2 	5'6 11'1 5'6 5'6 5'6 5'6 5'6 	6'0 14'0 14'0 12'0 4'0 6'0 2'0	

WOMEN, 1908.

TABLE XX.

CHOLERA by months, stations, groups and armies.

	cth.			· UMBE	R OF A	DM IS ST	20000	ом С	IOLERA	IN EJ	си мо	ONTH.			1,000	1	
STATIONS, GROUPS, AND ARMIES.	Average annual strength.	January.	February.	March.	April.	May.	June,	July.	August.	September,	October.	November,	December.	Total Admissions.	10.0	Total deaths.	per 1,000 of strength.
Campbellpore and Attock .	24		-	-				1			200				41'7	,	41.67
GROUP VI-UPPER SUB- HIMALAYA	697						-	1					-		114	1	1'43
Bellary	37		-						1	-				f	270	1	27'03
Madras and Poonamallee .	78			-										1	12'8		
GROUP XI.—SOUTHERN INDIA	302			-	-	-			a					2	66	1	3'31
Murree and Lower and Upper Topas	74			-		1		-	1			1 1		1	13'5	1	13'51
GROUP-XIIb:-HILL CONVA- LESCENT DEPOTS AND SANITARIA	324		-		-	1			-		-				3.1	,	3,00
INDIA	3,696	7 -		1	-	1	-	1	2		-	-		4	rı	3	-81
		-															1
NORTHERN ARMY	1,952			-	-	1	-	1	***	-		-	-	2	ro	2	1'02
SOUTHERN	1,741								2	-	-	-	-	2	12		*57
I Kindy			1											- 1	4		

^{*} Stations where cholera did not occur are not shown in this table.

WOMEN, 1908.

TABLE XXI.

ENTERIC FEVER by months, stations, groups, and armies.

		-	314121	110 1	BYB	· oy ·	ngnini	,	10713,	group	s, and	ar min	,				_
	len		Numbi	ER OF	ADMISS	IONS F	ком Е	NTERIO	C FEVE	R IN E	ACH M	ONTH.			ngth.		David
STATIONS,* GROUPS, AND ARMIES,	Average annual strength.	January.	February.	March.	April.	May.	June.	July.	August.	September,	October.	November.	December.	Total Admissions.	Admission rate per	Total deaths.	Death rate per 1,000 of strength,
Rangoon and Port Blair	83				100						***	1		1	12'0		-
GROUP I—BURMA COAST	83						-					1		1	12'0		
Thayetmyo	19			***						1	***			. 1	52'6		
GROUP II—BURMA INLAND .	52				****					1					1972		-
Fyzabad	42	***		100	***	1		***		***	***	***		1	23.8	***	-
GROUP V.—GANGETIC PLAIN AND CHUTIA NAGPUR .	321					1	14.1			***			***	1	3.1	141	
Shahjehanpur	14				441	***	***	1		***				1	71'4		(me)
Meerut	123	***		***	***	***				244		3	***	3	24'4	1	813
Ambala	111				***	***	han.	1	***					1	0,0	1	9701
Ferozepore	55				***	***	1	441			***		***	1	18'2	***	-
Sialkot	58		5	-901	***		***	200		***			***	5	86.2	1	17'24
Rawalpindi	154	***	***	***		407	1	100			1		***	4	41'7	1	***
GROUP VIUPPER SUB-HIMA-	697		5	***	1		2				2	4		16	23'0	4	41/67
Nowshera	-			1	-					-	-	-		-	68-2	-	574
Multan	29		***		***			***		***			***	3	34'5	***	-
GROUP VII N. W. FRONTIER INDUS VALLEY AND N. W.								-									-
RAJPUTNA	250	100		1	***	141		411		1	1	-1	***	1	16'0	1	22,33
GROUP VIII.—SOUTH-EASTERN RAJPUTANA, CENTRALINDIA, AND GUJARAT	241				-					1				1	41	,	4715
Secunderabad	158				+4+	111				-	,			1	6.3	-	-
Kirkee	122		***		***	-	***		1				141	1	8.5	***	-
Ahmednagar	36		1		144	g	***		***	***				1	=7.8	***	
GROUP IXDECCAN	506		1		***		***	***	1		1	***		3	5'3	***	-
Bangalore	165	1				.,		1		,				2	1,31		
GROUP XI-SOUTHERN INDIA		1								1				1 2	6.6		
Ranikhet and Chaubuttia	101		***	***	1/2	1							***	1	9.9		
Dagshai	56			***		***	***	1	***				***	1	17'9		-
Subath	24			***		1	484	***	***					- 1	417		
Businessad Whater and	21				***	1	411				***			1	476	***	
Cherat	33			***	***	1		1		2	***	***	***	4	121.5	***	-
Quetta	19	***		***	***	***	1	***		1	***	***		2	105'3		263
GROUP XIIaHILL STATIONS	73			***	***	4	2	2	1	3				12	20'9	1	1'75
Dalho-sie Murree and Lower and Upper Topas	98							-			,			1	10'2	-	-
GROUP XIIb,-HILL CON-	74				1	2	2	2						7	04.6		1375
INDIA .	3,696	1	6	1	1 2	7	7	6	2		5			8 49	21'5	7	3'07
NORTHERN ARMY	1,952	-	5	-	2	6	7	6	-	-	-			-	-	6	
SOUTHERN ,	1,741	1	1			191	1		2	3	1	5		10	20.0	1	57
2000			Station	s where	Enter	c Feve	r did no	ot occur	200.00	t show	n in thi	e table		-	-		

C.-CHILDREN.

TABLE XXII.

RATIOS AND ACTUALS OF ARMIES.

			Northe			thern		India.*	
			Army	r.	An	ny.		India.*	
Strength			3,00	07		1,808		5,819‡	
			Ratios.	Actuals.	Ratios.	Actuals.	Ratios.	Actuals.	Remaining
Constantly sick • • •			17'1	51'27	15'5	43'53	16'3	94'80	from 1907.
Admissions—									
Influenza Cholera Small-pox Measles Whooping Cough Enteric Fever Malaria Pyrexia of uncertain origin Tubercular Diseases Respiratory Diseases Dysentery Diarrhosa Eye Diseases		*************	1'3 '7 2'0 37.2 3'3 4'0 64'8 24'3 2'7 42'9 677 60'2 21'0	4 2 6 112 10 12 195 73 8 129 20 181 63	27:8 93 3:2 59:1 19:6 1:4 34:5 9:6 43:4 50:9	3 2 78 26 9 166 55 4 97 27 122 143	77 79 1,4 32,7 6,22 3,6 6,20 22,0 21,1 3,8,3 8,1 5,21,1 3,5,4	4 5 8 190 36 21 301 128 12 226 47 303 206	 2 11 5 4
	ALL CAUSES .		464*6	1,307	435*2	1,222	450"1	2,619	47
DEATHS-									Deaths of hospite
Cholera Small-pox Diphtheria Enteric Fever Malaria Pyroxia of uncertain origin Tubercular Diseases Convulsions Respiratory Diseases Teething Dysentery Diarrhoea Ansemia, Debility, and Premature	birth		'67 '33 1'33 '33 3'66 '33 1'67 4'32 5'32 2'00 2'00 7'32 6'98	2 1 4 1 1: 1: 5 13 16 6 6 6 22 21	'36 '36 '71 1'07 2'85 3'92 1'78 3'20 8'55 3'20	1 2 38 11 5 9 24	'52 '17 '69 '34 2'23 '17 1'37 3'61 4'64 1'89 2'58 7'91 5'16	3 1 4 2 13 1 8 21 27 11 15 40 30	
	ALL CAUSES		59'20	178	40.60	114	50':8	292	
PERCENTAGE IN 100 ADMISSIONS—									
Influenza Cholera Small-pox Measles Whooping Cough Enteric Fever Malaria Pyrexia of uncertain origin Tubercular Diseases Respiratory Diseases Dysentery Diarrhoca Eye Diseases		***************************************	'29 '14 '43 S'05 '7: '86 13'96 5'32 '55; 9'22 1'4; 12'96 4'51	5 5 5 5 5 5 3 7 7 3	6 2 13 4 7 2	25 125 138 138 138 133 158 158 159 159 159 159 159 159 159 159 159 159		115 199 131 725 137 180 1378 489 46 863 179 1157 787	
PERCENTAGE IN 100 DEATHS-				13					
Cholera Small-pox Diphtheria Enteric Fever Malaria Pyrexia of uncertain origin Tubercular Diseases Convulsions Respiratory Diseases Teething Dysentery Diarrheea Ansomia, Debility, and Premature	birth		1.1 6 2'2 6 2'2 6 2'8 7'3 9'0 3'4 3'4 11'8		2	19 179 179 179 179 179 179 179 179 179		1'0 '3 1'4 '7 4'5 '3 2'7 7'2 9'2 3'8 5'1 15'8 10'3	

[•] For complete detail of diseases, see Table LIII. ‡ Including 4 on the line of march.

TABLE XXIII.

CHOLERA by months, stations, groups and armies.

-	2								LERA I		H MON	-			8		_
STATIONS, GROUPS, AND ARMIES.	Average annual strength,	January.	February.	March.	April.	May.	June.	July.	August	September,	October.	November.	December.	Total Admissions,	Admission rate per 1,000 of strength.	Total deaths.	Death rate per 1,000 of strength.
Rawalpiodi	225				-	2				-	-			2	8'9	2	8.89
GROUP VIUPPER SUB-	1,031					2								2	1.9	2	1'94
Madras and Poonamalice	139									3				3	21.6		7'19
GROUP XL-SOUTHERN INDIA.	529									3				3	5'7	,	1-89
INDIA	5,819								-	-				3		3	-52
NORTHERN ARMY	3,007				-			-		-				1	.7		'67
SOUTHERN ARMY	2,808		-		-	***	-		-		3		-	1	3 1-1		36.

TABLE XXIV.

ENTERIC FEVER by months, stations, groups and armies.

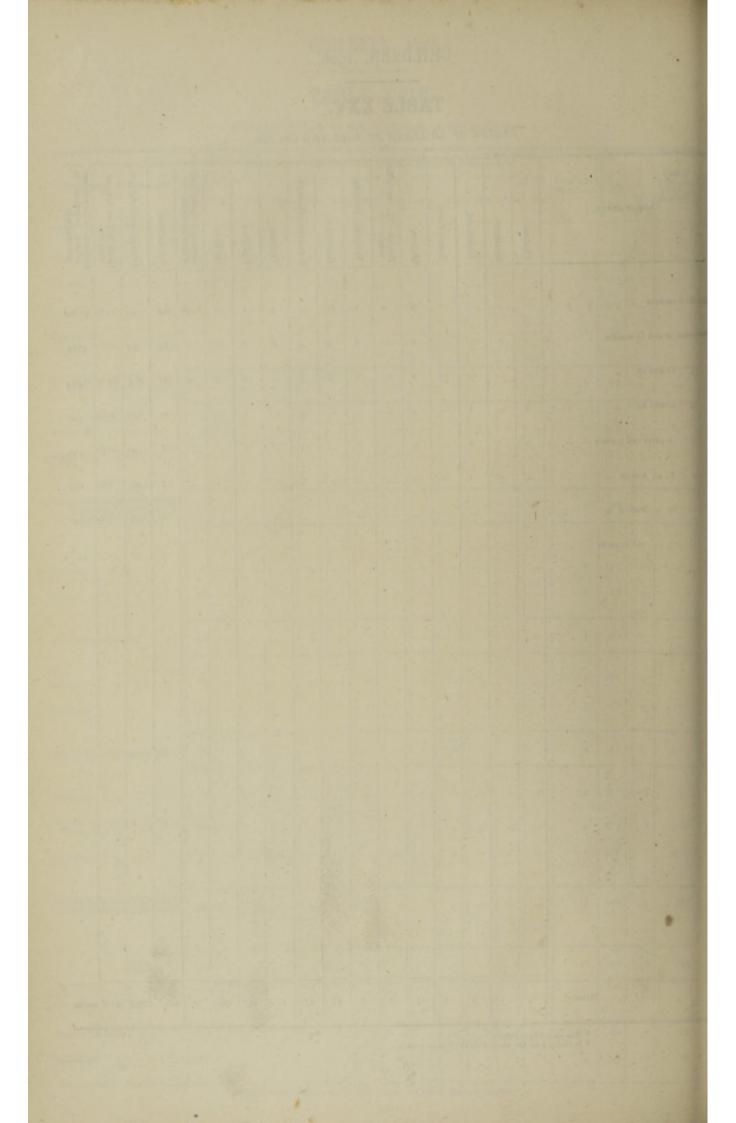
	lanua		Numb	ER OF	ADMISS	HONS F	ROM E	NTERIC	FEVE	R IN EA	сн мо	NTH.			rate	the.	Death
STATIONS, GROUPS, AND ARMIES.	Average annual strength.	Jan.	Feb.	Mar.	Apl.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total ad- missions.	Admission ra per 1,000 strength.	Total deaths.	rate per 1,000 of strength.
Meerut	181												***	,	5'3		-
Ferozepore	89				100	1					***			1	11.3		
Sialkot	84		3											3	35'7		
Rawal pindi	225													,	8.0		-
GROUP VI.—UPPER SUB-HIMA-	1,031		3		1	1					1	1		7	6.8		
Nasirabad	43													1.	23'3		-
Jhansi	74		-	-		-					1		-		13'5		
GROUP VIII.—SOUTH-EASTERN RAJEUTANA, CENTRAL IN- BIA, AND GUJARAT.	345			-						1	1			2	58		-
					-												
Belgaum	74						-					1		1	13.2		
Kirkee	216					***		***	***	1	***	***	***	,	4.6		
GROUP IN.—DECCAN	906									1		1	-	2	2.3		
Bellary	62		1					***					-	1	16.1		
Bangalore	291	***					***		***	***	***	2	1	3	10,3		***
GROUP XI.—SOUTHERN INDIA .	529		1									2	1	4	7.6		
Dalhousie	98					1		1	1			-		3	30.6	-	
Murree and Lower and Upper Topas	127						1	1						,	15'7	1	787
Purandhar	21			-	-	1					-				47'6	1	47-62
GROUP XIIà.—HILL CONVALES- CENT DEPÔTS AND SANITARIA	548		-			2		2				1		6	10,0	2	365
INDIA .	5,819		4		1	3	1	2	1	2	2	4	1	21	3.6	2	'34
*													1	K			
NORTHERN ARMY	3,007		3		1	2	1	2	1		1	,		12	4'0		'33
SOUTHERN	2,808		,			1				2	1	3	1	9	2.3	1	'36

TABLE XXV.

DEATHS OF CHILDREN BY AGES AND CAUSES.

AGE AT DEATH.	Cholera.	Small-pox.	Diphtheria.	Enteric Pever.	Malaria,	Pyrexia of uncertain origin.	Tubercular Diseases.	Convulsions.	Respiratory Diseases.	Teething.	Dysentery.	Diarrhosa.	Anemia, Debility and Premature birth.	ALL CAUSES,	Average ansual strength.	Death rate per 1,000 of strength.	Liability. (The previous column expressed in percentages).
Jader 6 months				1	3	1	1	13	11	3		18	25*	124		212.60	46.80
detween 6 and 12 months			***		2		4	3	1	8	7	19	2	72			25.89
, 12 and 18 ,,		***			,		1	5	5		2	9	2	39	607	64'25	
, 18 and 24 ,,	2		1		2				3		2			21	624	33.65	
2 years and 5 years	1		2		3		2		3					28	1,506	18'57	
, 5 ,, and 10 ,,					1	***			1		1			7	1,199	5.84	
,, 10 ,, and 15 ,,											1			1	551	1.81	.40
15 and upwards		-	-	-	***							***	***		131		
TOTAL .	3	1	4	2	13	,	8	21	27	31	15	46	30	292	5,819†	50'18	100,00

Seventeen Immaturity.
 Ircludes four not classed on the line of march.



II.-NATIVE TROOPS, 1908,

TABLE H.

STATIONS by ARMIES.

STATIONS.	Height above the sea- hevel in feet.*	Authority for height.†	STATIONS.	Height above the sea- level in feet.*	Authority for height.†	STATIONS.	Height above the sea- level in feet.*	Authority for height.†
	14,200 2,229 715 571 6,111 342 171 1,600 1,279 444 645 1,610 6,473 316 5,000 12,000 3,650 2,430 1,000 827 900 6,371 7,036 7,678 4,250 706 6,260 400 0,3819 2,619 739 6,400 1,100 1,170 1,170	L. B. G. L. S. G. M. B. G. L. S. G. M. H. L. S. G. M. H. L. S. G. M. H. L. S. G. S.	Southern Army—contd. Agar Ahmedabad Ahmedabad Ahmedagar Ajmir Aliraipore Aurangabad Baghdad Bangalore Baroda Beawar Belgaum Bellary Bhamo Bhuj Bolarum Bousbay (Colaba) Bushire Camp Lovedale Cannanore Chabbar Chabba	1,611 170 2,125 1,627 1,865 1,465 2,473 1,483 351 1,483 351 1,483 351 1,890 20 47 47 47 47 48 470 1,122 8,76 4,522 1,017 3,050 1,182 8,76 1,523 1,017 3,050 1,800 1,800 1,800 1,800 1,800 1,800 1,800 1,903 2,81 1,800 5,073 1,800 1,800 1,903 2,81 1,603 3,900 1,837 5,090 1,933 4,450 1,903 1,933 4,450 1,903 1,933 4,450 1,903 1,933 1,617 1,909 8,51 1,721 1,613 7,216 1,721 1	S. G	Southern Army—concid. Sirdarpore Sistabaldi St. Thomas' Mount Setna Todgarh Trichinopoly Trivandrum Udaipur Extra India not in the Indian Command. Colombe Singapore Tientsin Lutai Shan hai Kwan Tongshan Tongshan Tongshan Tongshan Tongshan Tongshan	1,659 1,236 250 1,049 2,855 274 1,950	S. G. "" M. D. S. G. M. D. S. G.

^{*} These are usually the heights above sea-level of the survey-marks or of the mercury-surface in barometer-disterns in the stations.

† S. G. = Surveyor-General of India; M. H. I. = Dr. Macnamara's "Himalayan India"; M. D. = Meteorological Department; I. B. = Intellig ace
Branch of the Division of the Chief of the Staff; M. O. = Medical Officers in charge of Station Hospitals in their Sanitary Reports.

NATIVE TROOPS, 1908.

TABLE XXVI.

RATIOS of ARMIES.

The ratios of admissions and deaths to strength are taken from Table XXVIII. The actuals will be found in Table XXIX.

A STATE OF THE STA	13000	RATIO PE	R 1,000 OF THE AVERAGE	STRENGTH.
		Northern Army.	Southern Army.	Army of India.*
AVERAGE ANNUAL STRENGTH		62,141	50,822	126,975
CONSTANTLY SICK RATE OF EACH MONTH-		A STATE OF THE STATE OF	The same of the same	Campberly and
January February	: :	24'7	21.2	18.6 22.0
March		18'7	18'2	17.8
April	1 1	19'4	18.0	18.6
June		23.2	17-7	20'9
July August	: :	22'1	10'0	20'2
September	5 6	31'8	25'2	27'7
November		36-2	26.0	297
The state of the s		30.3	23'5	25'4
OF THE YE.	AR -	26'0	21.4	22.8
Influenza		2.6	4'4	1.8
Cholera Small-pox Enteric Fever	: :	1,6	1.3	1'4
Enteric Fever	100	4'0 368'2	1.8	2.8
Malta Fever	3	3 1	186.3	*2
Pyrexia of uncertain origin Plague	2 6	15.3	19'9	16.2
Tubercle of the lungs Pneumonia		3.6	2'6	3.0
Respiratory Diseases	1	17'2	22'6	20°2
Dysentery Diarrhosa	: 1	43'0	35.8	30'5
Hepatic (Abscess		7'9	1	-71
Scurvy Venereal Diseases		1'2	272	1'5
ALL CAUS		796.6	598*7	674'4
-DEATH RATE OF THE YEAR-	KS .	1900	390 /	-744
Cholera Small-pox		1'24	'55	'91
Enteric Fever	: :	*02 *76	'04 '51	*02 *57
Malaria Malta Fever		-84	*39	'58
Pyrexia of uncertain origin	: :	113	*e6 *28	.00
Circulatory Diseases		'21	*16	117
Tubercle of the lungs	: :	2,00	171	2,50
Respiratory Diseases Dysentery		*34 *13	30	*29
Diarrhoea		'02	113	'22 '06
Hepatic Abscess Anzemia and Debility	: :	*03 *05	*20	13
ALL CAUS	£5 .	8.69	6.30	7'41
-Percentage in 100 Admissions-		'33	*74	.56
Cholera Small-pox		*21 *07	74 16 22	120
Enteric Fever	: :	'51	'31	*41
Malaria Malta Fever	1 :	46*23	31,11	39'47
Pyrexia of uncertain origin Plague	: :	1'92	3,35	2'40
Tubercle of the lungs		'45	'43	'44
Pneumonia	: :	1'99 2'16	1°69 3°77	3'00
Dysentery	: :	5'40	5'07	5'86 1'30
Hepatic { Abscess Congestion and Inflammation .	1 :	*01	*02	101
Scurvy	: :	10	111	111
Venereal Diseases		1*01	2.10	2,30
-PERCENTAGE IN 100 DEATHS- Cholera		14125	875	11,33
Small-pox Enteric Fever	1 1	8°70	*62 8*12	776
Malaria Malta Fever	: :	9.63	6.52	7'20
Pyrexia of uncertain origin	1 1	1'48	'94	1.17
Plague Circulatory Diseases	1 1	2'41	4°38 2°50	1'40 2'34
Tubercle of the lungs	: :	5'74 34'97	5°00 27°19	5°62 29°65
Respiratory Diseases	: :	3'89	4.69	3'91
				2.02
Dysensery Diarricea Hepatic Abscess	: :	1'48	1.88	185

TABLE XXVII.

RATIOS of GEOGRAPHICAL GROUPS.

The ratios of admissions and deaths to strength are taken from Table XXVIII. The actuals will be found in Table XXIX.

i he ratios of admissions :	and dearn	s to stren	gth are to			10000000		he actuals		200000000	able XX	IX.	-
		. 11		IV R	ATIO PER						-	200	-
	Burma Coast and Bay Islands.	Burma Inland.	Assam.		Gange- tic Plain and Chutia Nagpur.	Hima-	VII NW. Frontier, Indus Valley, and NW. Raj- putana.	VIII SE. Rajpu- tana, Central India, and Gujarat.	Dec- can.	West- ern Coast,	South- ern India.	Hill Stations.	Army of India,*
I.—AVERAGE ANNUAL STRENGTH . II.—CONSTANTLY SICK RATE OF EACH	1,286	2,823	923	2,219	5,972	21,426	17,733	12,114	17,631	1,707	4,623	23,465	126,975
MONTH— January February March April May June July August September October November December	14'9 19'6 16'8 15'0 19'1 24'3 23'7 21'7 22'8 16'7 22'3 16'9	32'7 25'2 32'3 27'2 23'7 24'1 28'8 27'5 23'8 27'9 26'8 28'1 27'3	15'1 15'9 17'3 21'6 20'5 22'5 23'7 24'0 32'4 27'9 32'4 27'9 24'9	34'6 18'2 18'3 19'1 17'6 19'1 31'6 33'9 33'9 33'3 35'2 30'1	14'2 14'2 12'7 14'2 20'1 15'0 14'3 21'6 25'4 31'7 31'2 24'2	21'3 16'1 13'9 16'5 19'6 19'8 17'9 31'4 38'4 35'2 29'2 23'2	31.6 29.3 25.0 23.3 25.9 30.5 27.2 27.6 36.2 44.5 47.7 37.9	19°1 19°4 16°6 16°8 16°4 14°6 15°5 20°4 28°9 31°1 30°3 24°2 21°3	18'9 15'9 16'4 18'4 19'5 16'6 17'6 20'4 21'3 21'6 21'8	45'5 30'6 30'2 28'9 25'2 28'7 26'3 27'4 32'8 30'0 39'4 43'8 34'0	33'8 25'5 19'7 18'7 14'6 17'9 23'5 23'7 20'6 19'2 14'9 20'8	23'3 22'6 19'3 18'3 18'9 21'6 21'4 26'0 29'2 26'3 27'7 24'7 23'4	22'0 18'6 17'8 18'6 19'6 20'9 20'2 23'0 27'7 29'6 29'7 29'4 22'8
III.—Admission Rate of the Year— Influenza				'5	'2	17	3'3	I'o	9'2	1.8	"2	4'8	3'8
Cholera Small-pox Enteric Fever Malaria Malta Fever Pyrexia of uncertain origin Plague Tubercle of the lungs Pneumonia Respiratory Diseases	112'8 112'8 116 2'3 28 0	3'5 '4 1'1 6'4 20'5	2'2 445'4 9'8 8'7 26'0	25.7 25.7 5.4 9.9 29.7	2'7 1'3 22 252'2 7'5 5'5 13'9	334'3 334'3 7 22'4 '1 2'9 14'1 11'7	1'5 '2 4'2 544'3 '1 7'8 '1 3'9 21'3 22'8	"5 1'2 288'8 '2 2'6 3'0 12'3 18'2	1'9 3'0 2'4 106'9 23'1 1'0 1'4 6'6 16'4	1'2 2'3 300'5 12'9 1'2 2'9 5'9 72'1	2'4 '2 '4 155'3 17'7 2'2 1'9 7'8 17'1	1'8 '2 3'7 230'3 '1 18'9 '1 3'9 15'5 24'8	1'4 '8 266'2 '2 16'2 '3 3'0 12'8 20'2
Dysentery	3,1	18.1-	33.6	2,3	55'4 2'2 '2	30.2	13.8	9.9	30.7	70'3	350	33,3	39.2
Hepatic Congestion and Inflammation Scurvy Venereal Diseases	.8	13'5	23'8	2°3 7°7 16°7	12.5 .8 .3	'7 '5 13'9	7 23 87	'5 2'5 17'0	.7 .0 23'7	1'8 6'4 53'3	'4 25'0	1°1 2°0 13°7	'7 1'5 15'2
ALL CAUSES .	633.3	6610	881.0	730'5	6036	7037	1,115'6	686.9	485.3	920.3	550.7	624'8	674'4
IV.—DEATH RATE OF THE YEAR— Cholera Small-pox Enteric Fever Malaria Malta Fever Pyrexia of uncertain origin Plague Circulatory Diseases Tubercle of the ungs Pneumonia Respiratory Diseases Dysentery Diarrhoea Hepatic Abscess Anæmia and Debility ALL CAUSES	78	1742 355 35 2748	2°17 1°08 2°17 5°42	'45 '45 '180 2 25 1 35	1°34 .84 	'61 '05 '98 '36 '05 '23 '37 '2'75 '37 '2'75 '37 '14 '05	1'41 '51 '68 '17 '66 '11 3'89 '23 '23 '23 '66 '11 \$'85	'08 '08 '58 '58 '58 ' '17 '41 1'49 '17 '25 '17 ' '08 5'20	799 706 745 747 77 706 734 723 723 723 723 723 722	1'76 2'34 '5) '59 1'76 '59 1'47 9'37	1'95 '22 1'30 '22 1'30 '22 '65 1'51 '87 '87 '22 9'30	1'41 1'07 '94 '17 '26 '85 2'56 '47 '17 '04 '13 9'89	'91 '02 '57 '58 '09 '11 '17 '42 2'20 '29 '22 '06 '02 '13 T'41
V.—PERCENTAGE IN 100 ADMISSIONS— Influenza Cholera Small-pox Enteric Fever Malaria Malta Fever Pyrexia of uncertain origin Plague Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diarrhoza Hepatic Abscess Hepatic Congestion Inflammation Scurvy Venereal Diseases	20°66 17'84 25 '37 4'43 13'16 '49	"32 34*83 "34 "05 "16 "96 3*11 3'43 2'73 "	"25 " "50"61 " "98 2"95 3"81 2"21 " "2"70	"12 32'88 "3'52 "74 1'36 4'07 11'10 "31 "31 "31 1'05 2'28	'03 '44 '22 '03 41'78 ' '1'25 '92 2'30 1'86 9'18 '918 '03 '03	'24 '11 '15 '74 47'50 '10 3'19 '01 '42 2'00 1'66 5'61 '71 '01 '11 '07 1'98	'29 '14 '02 '02 '879 '01 '70 '35 1'91 2'04 4'78 1'23 '01 '07 '20 '78	'14' '07 '17 42'04 '04 '37 '43 1'79 2'64 3'49 1'01 '07 '36 2'48	1'90 '40 '62 '52 '22'03 '-22'03 '-21 '28 1'36 3'39 6'32 1'11 '05 '15 '12 4'88	119 113 125 32:65 11:40 11:40 11:83 7:64 7:83 7:64 11:85 11:9 170 5:79	'04 '42 '04 '04 '3774 '39 '35 1'39 '35 0'25 1'25 '12 '08 ' 4'63	-77 -29 -03 -59 37-82 -02 -03 -02 -03 -248 -248 -31 -188 -33 -31	'56 '20 '12 '12 '13 '47 '33 '47 '04 '199 '5'80 '1'50 '01 '11 '22 2'26
VI.—PERCENTAGE IN 100 DEATHS— Cholera Small-pox Enteric Fever Malaria Malta Fever Pyrexia of uncertain origin Plague Circulatory Diseases Tubercle of the lungs Pneumonia Respiratory Diseases Dysennery Diserbora	3,73	28°6	40°0	6'7 6'7 26'7 33'3 20'0	17'0 10'6 4'3 42'6	8°2 '6 13°2 7'5 '6 3°1 5°0 37°1 5°0 1°9 '6	15'9 5'7 7'6 1'9 6 1'3 43'9 2'5 2'5	1'6 1'6 11'1 11'1 3'2 7'9 28'6 3'2 4'8 3'2	15"2 1"1 8"7 3"3 "1"1 6"5 4"3 2"2 15"2 3"3 4"3	18-5 25'0 6-3 6-3 18-6 6-3 12-5	20'9 2'3 14'0 2'3 7'0 16'3 9'3 9'3	14'2 10'8 9'5 1'7 2'6 8'6 25'9 4'7 1'7	12'33 '32 7'76 7'86 1'17 1'49 2'34 5'63 29'65 3'93 2'98 '85
Hepatic Abscess Anæmia and Debility	=		=	-		1.3	1.3	1.6	2'2		23	1'3	1.70

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TABLE XXVIII.

RATIOS of STATIONS, GROUPS, and ARMIES. For actuals see Table XXIX.

111111111111111111111111111111111111111	Mth.	-				1. A	DMIS	SION	KATE							2. D	EATH	RAT	E.						
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Malta Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the langs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhea.	Hepatic Abscess.	Hepatic Congestion and Inflammation,	Scurvy.	Anaemia and Debi- lity.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre,	Gonorrhora.
100 m	1000									1											720				
et Blair	279{					276'0		32'3			3.6		28'7	8976 3°58	10.8		3.6		35.1	28.7	709.7 }	17'9	7'2	10-8	10
agoon	1,007 {	171				90,4		135"1	-		1.0	3.0	27.8	81'4	1.0				18.9	8.9	1,00 }	18.0		6.0	3
OUP IBUR-	1,286 {	-				1306		112'8	-		1.6	2'3	28.0	83'2					20"2	13'2	632.2}	187	1.6	7'0	1
	1						-														100	1			
eiktila	606 {				3.3	146.9		6.6			177	8.3	9.6	31.4	8.3		-	***	11.6	19'8	541.3}	29'7	9.9	3'3	
et Dufferin	1,353 {				1.2	194'4		4'4		3'0	1'5	5.5	29'6	117	15'5				7.4	13,3	606'1 }	23'7	2'2	44	1
amo .	864 {				2'3	344'9			1,10	2,3	=	6'9 4'63	13'9	34'7	25'9			111	26-6	9'3	9:26 } 831:0 }	31.5	5'8	2'3	1.
OUP H.— }	2,823{				21	230'3		3.2	·4 ·35		177	6.4	20'5	22.7	18"1		::		14'2	13.2	661.0}	27.3	5'0	3.2	1
anipur	551{		3.63			346.6		16'3				12'7	21'8	50'8	32'7				20'0	27.2	834'81	23.6	16'3	1.8	
diya	50{	=				480°0							60'0								86000}	20'0		- 11	1
ibrugarh	322 {				=	611-8		=		3.1		3.1	280	9.3	=		=	11	3.1	21'7	965-8}	21.7	9'3	6.3	
ASSAM}	923 {		2'2		:::	446.4		9'8		1.1		8.7	26'0	33.6	19.3		==		13.0	23'8	881'9) 5'42)	22'8	13.0	3.3	-
ort William .	650	-		11	1.2	129.2		70'8		3.1	1'54		26'2	56%				13'8	47*7	35'4	686°2} 4'62}			21'5	
dipore	741 {	1.3			1.3	1,32				2.7	9'4	10'8	47"	47'2					27.0				419	2.7	1
arrackpore	688 {		=	=	=	366-3	=	1.2		2.0		4'4		143'9			::	8.7	17.4	4'4	941'9 } 8'72 }	30.2		1.2	
	140		=	::		228.0		42'9			14'3	14'3	28,0	64'3	==			=		71	907"1}	35'7	71	-	1
ROUP IV }	2,219		-	-	9	240"		25'7	-	2.7	5'4	99	29";	81"1	2*1		2'3	7.7	:8'4	16.7	730'5 }	27'9	4'5	.7.7	-

NATIVE TROOPS, 1908.

TABLE XXVIII—continued.

RATIOS of STATIONS, GROUPS, and ARMIES. For actuals see Table XXIX.

	gth.					1.	Апм	15510	N RA	TR.					1/0		2.	DEA	TH R	ATE.	T		-		
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Malta Fever.	Pyrex is of uncertain origin.	Piague.	Circulatory Disease*	Tubercle of the	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhosa.	Hepatic Abscess.	Hepatic Congestion	Scurvy.	Anemia and Debility.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhaa,
B. Dinapore	620{			3'2		330-6				1'6	1.01	24'2	11.3	22.6					6.2	6.5	627'4)	21.0	1.6	1000	
Benares	484{					146.7				41	8.3	6.3	26'9	51'7	6.5			***	6.3	12'4	502.1	20'7	2*1	4"1	6.2
Allahabad	1,096{			1.8		313.0		8.5		2.7	1.8	4.6 2.74	4.0	105.8	3.6				246	16.4	800.3 }	22.8	5'5	5'5	5'5
Fyzabad	1,106 {					556.0						127	10-8	34'4	27			13	11.8	18.1	489.2)	17*2	11'8	2.7	3.0
Lucknow	1,692 {			1.8		153'1		20'1		-6		18'3 4'73	10.0	62.1		-		112	1.5	16.2	7.68	14'2	5'3	2'4	8'9
Campore	816 {	1.3	980	1'2		366.4		2'5			1,53	1,53	13'5	39"2				1,3	5 53.3	14'7	834.6 }	30	2'5	3'7	8-6
Fatchgarh	158 {		=		***	200,0				63	6.3	6.33	63	6.3	12'7	63	-		38.0	10'0	12'66 }	25'3		6-3	12'7
GROUP V.—GAN- GETIC PLAIN AND CUUTIA NAGPUR.	5.972 {	-2	2'7			252*2	Z	7.5		1,3	5'5		11.5	55'4	3.3		-3	.8	12'4	15"2	603.63	20'1	5'4	3.3	6.5
A.							31		and the same				1		1						1100		1	- 10	110
Bareilly	1,088					322.6	***	37	***	-	1.8	7'4	6.4	60'7	2'8	***	18	***	6.4	11'0	1,84 }	17.5		5'5	5'5
Rurki	756			1,33		115.1	***	51.6			1'3	9°3 2°65	4.0	13.2	***				23'8	100	374'3 1	11.9		-	***
Dehra Dun	2,916	3.8	·7		24°3 4°40	52014		42'5		·34	3.8	12'0	17%	48'4	3.8			1'0	3.1	35'7	9,56}	44*2	12.7	147	8.2
Meerat	1,613	=	-			385'0		9'9	***	*62	5'0 'G2	3,10	81	48.4	6.8	***	1,0		9,3	30,1	851.8}	27'3	8"1	11.5	3.0
Delhi	1,109	-		3.6	***	601'4					1.8	3'61	10'8	32.2	19.8				16:2	12'6	0,02}	21.6	3.6	3.6	5'4
Ambala	1,64 {		.61		1'8	78.3	6-7	6.1		1.8	61	7.0	7'9	44'0		***			8.5	10.2	4,80}	18'8	4'9		5.2
B. Juliundur	1,661 {			-6	1'2	35812	***	1.5		***	3.0	15'1	6°6 60	33'7	2.0			1'2	3.0	6.0	6,03}	17'5	1000		3.6
Ferozepere	1,825 {	9,3	°5		4'9			60		3.1	3,3	14'2 3'83	9'9	47 .6	6.0		2.7		13.1	13.7	792'4 }	21'9	6.0		3.8
Lahore Cantonment	1,641 {		1.8			3,02	1'2	44'5				14'6 4'27	122	46.6	2'4				12.8	2,0	10,30}	17"1	.0	1000	1.8
Amritsa	121{		***			429.8		***		8:26		41'3		82'6						16.5	24.79 }	16.2		0000	65
Sialkot	1,789		.20		1'68	220'2		14'5	***	***		28.2	***	36.0	3'9				15'1	9"5	10.00 }		4'5		4'5
Jhelum	2,929 {	5,0	·68		311	396%		1.0		34	*68	2'73	15.0	*68	34			1.0	17.4		7'851				3.8
Rawalpindi .	2,242		200	***	1.8		-	77.2				11.6	15.6	.45	4'9	***	***		11,5	7'1	6'24 }			100	2'2
Attock	[88]		11.36			454'5				-	11'4	1174		45'5	68'2		-		11'4	22'7	11.36	227		0000	-
GROUP VI) UPPER SUB- HIMALAYA.	21,426	1'7	·8	.02	3	334'3	'7	.02		·5	37		37	39'5	5.0		7	'5	.69	13'9	7'42}	53.5	46	4'5 4	
A Mardan	823 {	10.0	1'3			228'4					8.2	37'7	31'6						7'3		583'2} '3'37}		1000	27	96
Nowshera Peshawar	3,434 {	4'5			*29	265'6 '29 647'2 1'24	-	58		2'0	2'5	2.8 2.62	-	55°6 58°5	11'5	.3	-4		32'0	10'3 1,	1278)	33'4	4"1 2	13 3	57
	1		- 59	-		1'24	1	41	-1	and .		59	***	41			***		**	***	10.72				

	th.					1.	ADM	rissio	N RA	TE.						2	. Dz	ATH	RATE.						
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Malta Fever.	Pyrexia of uncertain origin.	Plague,	Circulatory Diseases.	Tubercle of the lungs.	Paeumonia.	Respiratory Diseases.	Dysentery.	Diarrhosa.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anaemia and Debi-	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK	Syphilis.	Soft Chancre.	Consultan
t Jamrud .	86 {		::			279'1		116					11.6	81*4	23°3					33.3	662'8	11.6	1175	-	
at	2,822 {				53	492'9 1'06		4-6		1'1	3'5	20'6	21.6	55"3	14'5		1'8		29*8	5.3	1,058·8 } 6'73 }	3276	2'1		
	107 {					1,112°1						18·7 9 35	2810	121.2	18.7				2810		1.747°71 9°351	37"4			-
ardesabad .	2,105 {	2.0	1,00			472'2		5'2		1'9	15	16.6	20 9	46'1	128			*5	1174	5'7	6'18 }	31.8	2'4	1'9	
Ismail Khan	2,475 {				3'7	1,111'5 '40		12-9			4'0	34°3 6°07	28'3	54'9	26.8		-8	2'9	11'0		1,881'2 }	38.0	172		-
	59 {			::		898*3						16.02	84'7	50'8		***	::		16.9		16:95)	33 9			
inda	57 {					1,245%			11			17.5		210'5	87'7	101	-		17'5		1,894°7 } }	35.1			-
Zam	58 {					448'3					***		17'2	69.0		***				17'2	965'5}	17.2		1000	1
an · ·	1,481 {	= -	::	.7	4'7	452'4 1'35		12'2			2.7	18'2 4'73	8.1	33.1	7.4			.7	6.8	6.8	758'9) 7'431	20'3	200	2'7	
B.	181 {				111	1,033'1				5'52		5'5 5'52	22'1	204'4	71'8			-	16-6	1	1,502°2 } 22°09 }	166			
	70 {	-11-				228-6		57 1			143	42'0		71'4				14 "3	1173		828'6 } 14'29 [14'3	4'3		
		-																							
C.	392 {				26	563'8						45'9 7'63	20'4					2%	23-0	35.7	,081°6 }	35.7	7.7	15'3	
erabad	602{		3'32			32379	::	8-3	***			150	15.0	39'9					11.6		588°01 9°971	1976	1'7		
schi	555{	::		***	1'8	475'7		7.2			5*4	12.6	52 3 3 60	48.6	27.0		1'3		14'4		5'415	32'4	5'4	9.0	100
OUP VII.—N. /, FRONTIER, IDUS VALLEY, IDUS	17,733{	3,3	1'5			544'3	.,	7-8	-	.90	3'9	21.3	22'8	53'3	13.8	106	.7	2"3	18.8	8.7	1,1156} 8-85}	32'4	3"1	200	100000000000000000000000000000000000000

TABLE XXVIII—continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

For actuals see Table XXIX.

		gtþ.		714		INO.			I. AI	DMIS	SION	RATE				1 41	- 1	2. Di	ATH	RATE						
STATION AND GROUPS	8	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Malta Fever.	Pyrexia of uncertain ocigin.	Plague.	Circulatory Diseases.	Tubercle of the	Pneumonia,	Respiratory Diseases.	Dysentery.	Diarrhea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Soury.	Anaemia and Debility.	Venereal Diseases.		CONSTANTLY SICK	Syphilis.	Soft Chancre.	Considera
Shuj 4 .		225 {				=	168-9			11		8.9		13'3	26.7						31'1	444'4} 8'89}	13.3	17'8	8'9	
Rajkot .		239{			=	8.4 4.18	246'0		4'2	***	8'4			46°0	4'2				25-1	4'2	20'9	564'9} 4'18}	25'1	8.4	4'2	
Decsa .		656 {					146'3		1.2			7.6	137	25'9	4.6	1'5			1'5	7.6	6.1	557'0} 7'62}	19'8	1.2	3'0	
Ahmedabad		448 {					415'2				4'5		201	22.3	55.8	8.0		4'5		6.7	22'3	977'7}	35'7	11'2	11'9	
Baroda		637 {					701'7		3.1		1.6	11.0	20'4	19.8	39*2	14'1	::		20'4	1.6	22'0	1,172'7 } 4'71 }	31'4	11.0	9'4	
В				-																						-
Alirajpore		10 {					::	=				-							-	11	==	:: }	-			
Sirdarpore		58 {	::				690		34'5	-			17'2		-					17'2		482'8}	17.2			
Cherwara		107 {					9.3		=			-	93.2	74.8			==	=		9.3		495'3 t 9'35 j	28'0		::	
Kotra Udaipur		37 {			-		108.1		-	=			81'1	54'1	27'0							5676}	27.0	=		-
Fodgarh		16{					187-5					***								,		187'5				
Erinpura		571{	7.0		-		136-6		1.8			3.2	15.8		24'5 1'75					10.2		707'5}	21'0	5'3		ı
Neemuch		389{					4613				51	10.3	10.3		20'6	2.6		216	::		23'1	344'5 }	12.0	7'7		The Party of the P
Deoli .		595 {					26'8				1.68		11.7	8'4	67				=	1'7	20*1	3,30 }	6.7	3'4	8:4	
Beawar		23 }	=	-			43*5	==					43'5	=	43'5					1 1		130'41	-			-
Nusirabad		566	=				535'3				-	1.43		24'7	14"1	3010		=	14"1	35'3	10.0	1,086.6 }	38.9		:	
Aimir		542 9	=				107%			-		3'50	22'1	35'1	1'8	9.2		1.8	::	1'8		9 22 5	14'8	3'7		
Jaipur		40	=		-		3500						25.0	=				-	11		==	450'0)	25.0		11	
Agra		731	-				151'5				1'33		19°2 5°47		260	2"7				4'1	16'4	377°6 } 8'21 }	17-8	27	68	

	gth.							1. A	DMIS	SION	RATE					2. I	DEAT	H RA	TE.						
STATIONS AND GROUPS.	Average annual strength,	Influenza.	Cholera.	Small-pox.	Enteric Pever.	Malaria.	Malta Ferer.	Pyrexia of uncertain	Plague.	Circulatory Diseases.	Tubercle of the langs.	Poeumonia,	Respiratory Diseases.	Dysentery.	Diarrheas.	Hepatic Abscess.	Hepatic Congestion and Inflammation,	Scurvy.	Anæmia and Debi-	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK	Syphilis.	Soft Chancre.	-
valior	29 {							-	481												34'5)				I
unsi .	2,536{				3.2	515'6		7'0		**	1.6	7.0	9.0	23.6	9.0				8'2	246	986.33	22.3	8.6	9.4	4
wgong	728{	11'0			1'4	215'7		5'5		5.2	4'1	15'1	8.3	19'2	5'5				467	19.3	627°7) 5°49 }	23'4	6.9	Г4	
ona	405 {				25 2.47	84'0		4'9		4'9		4'9	12'3	9.9	7'4				2.2	2'5	335°8} 4'94}	12'3			
u	364{					68.7						27	35'7	5'5 2'75			2.7		16.5	2'7	302,5}	11'0			1
ore	666{				1'5	223'7	3.0				4'5	16.5	150	9,0	6.0	=			19'5	240	674'2}	24'0	3.0	10.2	1
ore	124{					145'3	::				8.0	32.4	64-6		=			=	160	160	685'5 }	24.5	8.0		
ow	1,340{		*75			268-7		=			1.2	4.5	14'9	8.3	****		7	1'5	6.0	11.0	5,881 926.65	2019	5'2	-	
TH-EASTERN PUTANA, KTRAL INDIA, GUJARAT .	12,114	1.0	-os	.22	1,3	288-8 '58		2.6		1'3	3.0	1213	18:2	23'9		::		2.2	10.6	170	686'9} 5'20}	21'3		479	
Α .														1	1		-								
	- (_												-								ı
gor	1,166-{	=	0.0		3'4	364'5	=			9	1.7	6.9	3"1	18'9	9		17		4'3	6.0	661,5 }	19'7	3'4		
10000	33 {		0.00	30°3	3'4		100		2000	- 50		-			-					2000					
na				30°3	1'72	363.6						30,3	606	60°6	30°3					30'3	787'9 }		30'3		
bulpore .	33 {			30"3	1'72	363.6						30*3	60 6	60.6	30°3				80	30'3	787'9 } }	30.3	30'3	3.3	
bulpore .	33 {	 10'7 		30°3 5 6°3 1°37	1'72	363.6		15.5		1.6		30°3 7'5 '54	606	60.6	30°3		····		 8°0 	30'3	1'72 } 7879 } } 656'3 } 3'22 } 538'5 }	30'3	30°3 5°9 	3,3	
bulpore . spti baldi	33 { 1,865 { 637 { 36 {	10'7		30°3	1'72 2'1 1'6 1'57	363°6 219°2 161°7 83°3		15.5		1.6		30°3 7'5 754 4'7	606	61.7	30°3				 8°0 7°8 	30'3	1'72 { 7879 } 656'3 } 3'22 } 538'3 } 4'71 }	30°3	5'9	3'3	
bulpore . baldi B	33 { 1,865 { 637 { 36 { 1,514 {	107		30°3	1'72	363°6 219°2 161°7 83°3		15'5		1.6	3'1	30°3 7°5 4°7 2°6 2°6	60 6	 66°6 1 9°2 °66	 30°3 5°4 1°6 				 8.0 7.8 	30'3	1'72 { 7879 } } 696'3 } 3'22 } 538'3 } 471 } 194'4 } }	30'3 20'4 22'0	5'9	3.1	
bulpore . baldi B angabad .	33 { 1,865 { 637 { 637 { 1,514 { 1,692 { 1,692 { 1,692 { 1,692 { 1,692 { 1,692 { 1,693	107		30°3 '5 6°3 1°37	1'72	363.6		15'5		116.1157	3'1	30°3 7'5 54 4'7 2'6 11'0	606 6 6 7 51 6 3	 61-7 1 9'2 '66	30'3	7		277	 8°0 7°8 2°6 	16.6	1'72 { 7879 } 696'3 } 3'22 } 538'3 } 471 } 194'4 } 492'1 } 1'98 }	30°3 20°4 22°0	30'3 5'9 14'7	3'2 3'1 5'3	
bulpore . baldi . B angabad . mednagar .	33 { 1,865 { 637 { 36 { 1,514 { 1,092 { 1,760	107		30°3	172 271 176 178 178 374 374	363°6 219°2 161°7 83°3 57°7 78°4		1575		1.6	3'1	30°3 7°5 °54 4°7 2°6 11°0	60 6 6 6 7 5 1 10 7 7 5 1 10 7 7 5 1 10 7 10 7 1	 66°6 1 1 9°2 °66	 30'3 5'4 1'6 	7	75	27	 8'0 7'8	30°3 16°6 11°0 16°5	1'72 { 7879 } } 696'3 } 3'22 } 538'3 } 471 } 194'4 } }	30'3 20'4 22'0 19'8	30°3 5'9 4°0 4°0 4°0	3'2	
bulpore . baldi . B angabad . mednagar . underabad .	33 { 1,865 { 637 { 637 { 1,514 { 1,052 { 1,760 { 3,440 {	10'7		30°3 5 6°3 1°37 22°5	172 27 16 1757 178 374 372 29	363°6 219°2 161°7 83°3 57°7 78°4 39°8 '58		15'5 26'7 19'2 19'2 19'3		1.6	3'1	2.6	60 6 6 6 6 7 5 1 10 7 7 5 1 6 7 3	660°6 1 1 9°2 9°5 68°6 '29	330'3 5'4 1'6 4'6 10'2 6'4	77		27	 8'0 7'8 1'8 8'0 10'8	30°3 16°6 11°0 22°9 22°7	1'72 { 7879 } 655'3 } 3'22 } 538'3 } 4'71 } 194'4 } 198' } 371'8 } 1'83 } 369'9 } 7'39 } 429'1 } 9'00 }	30°3 20°4 22°0 19°8 17°4	30°3 5'9 14'7 4'0 4'0	3'2 3'1 5'3 6'4	1
nngabad .	33 { 1,865 { 637 { 36 { 1,514 { 1,092 { 1,760	10'7		30°3	1'72 2'1 1'6 1'57 1'8 1'8	363°6 219°2 161°7 83°3 57°7 78°4		15'5 26'7 19'2 29'0 57		1.6	3'1	30°3 7'5 '54 4'7 2'6 11'0 '9	60 6 6 7 5 1 6 7 5 1 6 7 5 1 6 7 5 1 6 7 5 1 6 7 5 1 6 7 5 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7 1 7	660°6 1 1 9°2 °66 13.7 68°6 68°6 68°6 68°6	 30'3 5'4 1'6 1'6 	77	······································	27	 8'0 7'8 2'6 1'8 	30°3 16°6 11°0 22°9 9°1	1'72 { 7879 } } 656'3 } 3'22 } 538'5 } 4'71 } 194'4 } } 1'98 } 371'8 } 1'98 } 369'9 } 7'39 }	30'3 20'4 22'0 19'8 17'4 15'9 17'4	30°3 5'9 14'7 4'0 40' 6'4	3'1 3'1 5'3 6'4	

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TABLE XXVIII—continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

For actuals see Table XXIX.

	4						1. An	MISSI	ON B	ATE.						2.	DEAT	TH R	ATE.			-	-	-	
STATIONS AND GROUPS,	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria,	Malta Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the lungs.	Paeumonia.	Respiratory Diseases	Dysentery.	Diarrhea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anzemia and Debi- lity.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonorrhopa.
Poona Kirkee	2,322 { 1,693 {	37'2		3.0	5°2 '43 1°2 '59	23'3	:: ::	45'7 63'2	6'5 2'15 1'2	1'3	1'7 '43 		14'2 52'6	17'7	3'0		2'2	1'2	6'5	36'6	420°3 } 4'31 } 629°1 } 7'09 }		17'2		
GROUP IX }	17,631 {	9°2	1'9	300	2'4	106-0		23'1	1'0	1.23	174	6-6	16:4	30'7	5'4	-2			61	23.7	485'3 }	19.3	***		
Bombay	648{			1'5	4°63	509°3 4°63	***	3.1	3'1		***	3.09	1'54	3'09	23'1	***	1'5	7.7	4.0	100	21.60 }	1	12'3	****	
Santa Cruz	652 {	4*6		1.3	2'8	257°0 1°53		3'1	***	8'5	1'5	3 1	14'2	19'9	2.8		3.1	9'2	3'1	71'2	3'07 \$	31'3	11'4	***	***
Trivandrum.	351					35-7		***						357						23.6	232'11	17'9	1000	***	***
GROUP X}	1,707 {	18		1'2	273	300'5		12'9	1'2		2.0	1			17'0		1'8	64	5'3	53'3		340			18-
A				T	Ī				1	1	1	1					1					-		1	
Bellary · ·	411{		14'5			19'5	***	24'3			2'4	97	4'9	19'5			2'4		12'2	17'0	379'6 }	21'9	2'4	2.4	127
Bangalore	3,229 {			.3		214'3		18.3	3'1	-31	.31	9'6	18.0	40-6	7'1		*3		31	29'1	5.67	22'3	12'1	0.0	81
· B Trichinopoly ·	369 {	,,,,	10-8		111	27'1	***				10'8		5'4	13-6	13.6					21'7	241'21	8-1			-
St. Tiomas' }	496 {		8.13		2'0	8'1		2612			2.03	2'0		14"	60				6.0	14'1	13.22) 208.41 2.02)	121	10'1	2.0	370
Madras	118{		8-5 8-47		8.2	42'4							110'2	93'2	8.2		100		8.2	33'9	9661 }	50'8	8-5		25.4
																-			1				7		
GROUP XI.— SOUTHERN INDIA.	4,623{		2°4 1°95			155'5		17.7	2,30	-6 '22	1.9		17 1	35.0	6.0	-6			10'4	260	9'30}	20"8	10'2	6.7	9.1
Maymyo	841 {			-	7"1	176'0		1119		8.3	2°4 2°38		28'5	38°e	16.6				1.10	29'7	719'4 }	32'1	4.8	16%	7
Kohima	176 {				5°7 5°68	204'5	***				::		45'5	21,1	11'4				56.8	56.3	5568}	28'4	39'8	57	11.
Shillong	759	197	8 1'3			338.2		1,3			4'0		11'9	27'7	5'3			1'3	7'9	26'4	798'4	26'4	7'9	26	157
Gangtok	127		7.0		-	1260	-	53.6					102'4	23'6		***				15'7	692'9 }	23.6			15"
Chumbi (includ- ing Pharijong) (libet),	25					400							40'0								160.0}	3'3			11
Gyantse	73{					109'6				27.4	-	54°8 27°40	68.5	41.1		::				417	479'5 }	27*4		137	27'
Almora .	630	1 ::			1,20	207'9		47-6		1'39	1.6	2000		,32.8	6.3				20.6	60'3		23.8		254	
-			_	1	-	-			-	1					-	-									-

	gth.	-					1. A	DMISSI	ON I	RATE							2. Di	EATH	RATE						
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera,	Small-pox.	Enteric Fever.	Malaria.	Malta Fever.	Pyrexia of uncertain origin.	Plague.	- 9	Tubercle of the lungs.	Paeumonia.	Respiratory Diseases.	Dysentery.	Diarrhea.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anaemia and Debi- lity.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre.	Gonocrhona.
Vaini Tal .	119 {					142'8					16'8		16'8	25.2	25.2				8'4	16.8	462'2}	168		8.4	8
anadowne	2 859 {	'3	1*4		3.2	135'4	***	50			3'8	17"1	4'2		10.8	35			5'9	5'2	406'1 }	17.5			
imla	356{					868°0 5'62		2.8		5'6	56	28	44'9	95'5			278		16-9	36.2	1278'1 } 8'43 }	30'9	140	8'4	14
utogh · ·	202-{		***			113,0						9'9 4'95	9.0	44'6	5'0				9'9	9.9	351.25	19.8	979		
Oharmsala	1,453 {	3'4			2"1	957				-69	7.6 2.75	7°6 3°44	8.3	9.6	7-6		1'4		6'2	1176	311.85	11'0	3'4	1'4	6
lakloh · ·	1,413 {	33'3	***			168'4				71	4'2	1'42	9'2	14'9	7'1			.7	5'7	6.4	429761 6°373	15.0	2.8	7	
Chairagali	57 {	***				3158		87.7				35'1	35'1				17'5				666.71	35'1			
Baragali	61{					65:6		131'1						32'8	32-8				32.8	16'4	852.2 }	16.4	16'4		
Calabagh	62 {					112'9							16.1	32.3	16'1				48.4		677'4}	32.3		***	
Chitral	178{		***			16'9	5'6					28°1	11 2	5.6			11'2	56	16'9		213.25	11'2			
Cila Drosh - •	681 {		::		1'5	214'4 14'68	1'5	4°4 1°47		4'4		14.7	16.5	147	11'7		4*4		11.7	5'9	484'6)	29.4	4'4		
talakand	764{					251'4		1.3		2.6		30.1	40-5	39'3	1'3		1*3	6.	15'7	5°2	791'9 }	28'8	276		
largai	320 {				3.13	1759'4		3'1	3"1		6.3	34°4 6°25	21.0	31'3					6'3	6.3	1668.8 }		63		
hakdara	467 {		-	2"1	2'1	15460		2'1			2'1	12'8	15'0	19.3	8.6				8.6	8-6	1833'0}	35'4		3.1	
bhottabad	3,340{		10'8		12'0	329'9		.go		1'2	2'7		39.8	27.8	13,3		1"2		13'2	17'4	839°2 } 18°56 }		1'2	78	
herat	26 {	***				76.9					38'5	38.2		115'4					38.5		423"1 }				1
ort Lockhart .	154					564'9	6.2					26'0	32'5	19.5	6.2				26.0	13.0	928-6 }			6.2	1
langu -	454 {					85'9					88	8.8	15'4	26'4	2'2				3.3	19'8	458.1	19.8	13'2	6-6	
fir Ali Khel .	96 {					8750					-	20'8 10'42		1250			10'4		20'8	***	1,375°0 \ 20'83 j	31.5	***		
ort Sandeman .	472{	=	2'12		2'12	275'4	11 1		-	1 : 1	8.5	8'47	27'5	33,3 30,6	2'1		6.4	4'2	72.0	25'4	750°0 } 16'95 } 866'8 }		16'9		
lindu Bagh . Iusa Khel	30{	-			=	433.0	-		-	-			***	200,5	-	-	-				733'3}	33'3			
The Colfesia	30{			-							***	-		365.7	-						1,400'0	33'3			1
	30 {		==			933.3						2004	***	344					40.8	***	1,020,4	33.3			١
lurgha	49{					714'3			***		***	20'4		142'9							1	40'8			1

TABLE XXVIII—continued.

RATIOS of STATIONS, GROUPS, and ARMIES.

For actuals see Table XXIX.

-	gth.						1. /	DMIS	SION	RAT	E.		-				2. I	DEAT	H RAT	E.					-
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera,	Small-pox.	Enteric Ferer.	Malaria.	Malta Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the	Paeumonia,	Respiratory Diseases,	Dysentery.	Diarrhea.	Repatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anamia and Debi- lity.	Veneroal Discasor.	ALL CAUSES,	CONSTANTLY SICK RATE.	Syphilis.	Soft Chancre,	Gonorhea,
Loralai	1,017 {	23.6				237"0		-			=	31'5	37'4	9.8	29'5		1'0		541	3.0	659.8 }	15'7		::	3'9
Gumbaz	32 {					231.3	***		***			31.2		93.8	***		***			***	781.2}	31.5			
Quetta	4,862 }	4'3	***		3'1	106'7		35-8		2'5	68	16'0	36.8	43'0	19.8		1'0	3'5	16.0	12'1	524.1 }	19'3	4'9	1.3	60
Robat	202 {	-				74'3			***				39%	79'2	3976		=	79'2	29'7 4'95		589'1 }	19*8			
Pishin	31{		32'3			32'3							32'3								32.31				
Shelabagh	81 {					49'4		37'0		***		-	61.7	37'0				12'3		12'3	543'2}	12'3			12'3
Chaman	641 {			16	1.6	9'4		32*8		1.6		47	7'8	17"2	1.6			1.6	3,1	1'6	181'0)	9*4	16		
Mount Abu	80-{					1037'5							50'0	37"5			***		-		1387'5 }	37*5			-
Ootacamund .	177				-			5.6				22'6		5'6			56	-		16'9	135.6 }		16.0		
							-			-											- 1	11.3			-
Camp Lovedale .	38 {		:::									25.0								26.3	389.2}	26°3			26'3
HILL STA-	23,465{	4'8	1.8		3'7	236'3		18.0		1.20	3'9	15'5	24'8	33"2	11.8	.04	11	2.0	15'0	13.7	9,89 }	23'4	3'9	3'4	53
	-																								-
Marching India .	8,640 {		1'4		*2	126.5	***	28			1'5	35		27'3	6.7		3		4°1 '23	5.0	297'5 }	57		1'2	
Bazar Valley Field Force,	333{	=	::	3'0		21'0						33.0	60	15.0						60	192'2 }	3.0	3.0	30	
Mohmand Field Force.	1,185 {	*8	4'22			92°0 '84						14'3	6.8	54'0	24'5				=	2'5	512'2 } 35'44 }	16-9		-8	-8
EXTRA INDIA.																							N		
(a) In the Indian Command.															1										
Chabbar	52{					1019'2				-		38·5 38·46		269'2	76'9				57'7		1615'4} 76'92}	57"7			=
Jask	65 {		:::		-	76°9	-			***				276°9 15°38	=			107*7	==	-	615'41	30'\$			
Muscat	20 {					550'0				50'0		50'00	=	500	::					1 1	20,00 }	500			
Bushire	67 {												29'9						-		104,25		-		-
Baghdad	36{											55.26						=			55.6}			0000	
Aden	679{			-		35'3		1281			1'5	2,02	13'3	39'8	42'7			10.3	36'8	2'9	570'0 }		-	1'5	1'5
	-				1												-			-0.0			1	-	-

	ongth.				1. /	ADMISS	ION	RATE.						2, 1	DEAT	H RA	TE.			-					
STATIONS AND ARMIES,	Average annual strength.	Influenza.	Cholcra,	Small-pox.	Enteric Pever.	Malaria,	Malta Fover.	Pyrexia of uncertain origin.	Flague.	Circulatory Diseases.	Tubercle of the lungs,	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhera,	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anzemia and Debi-	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK	Syphilis,	Soft Chancre.	Gonorrhoa.
Khormaksar .	85 {	::		==		1163		34'9					69'8	34'9				=		11.6	720'9}	23.3	=		11.6
Perim	36 {	:-			::	55 6		=	==		=		=	916°7	27.8		:::	::	138*9	=	1,305'6 }	27*8	=		::
(8) Not in the Indian Com- mand:—			-				0															1		4 14	
Colombo	762 {					77'4					1.3	1'3	84'0	94'5	24'0		1.3	26	66	19'7	268,5 }	18'4	10.2	1,3	7'9
Singapore	778 {				26	810	==	10,3		1,50		2.0	21'9	126'0	64	::	1'3	1'3	36.0	11.6	658:11	36.0	64	1.3	3.3
Tien-tsin .]	650 {	-				1.2		20'0			9'2	10.8	36'9	15'4	1.2		::		1'5	15'4	510'8}	40.0	6.5	1.5	77
Lutai	61 {	65.6	-		=	=	=	16'4	::	16'4		-	16.4	-	16'4			-:	-	16.4	312.1}	16.4	16.4		=
Shan-hai Kwan.	114{	26'3	=			8.8		8.8			526	=	17'5	=			=		::	35"1	2456} 1754}	43'9	17'5	17'5	
Toogshan .J	38{		::					::				::	26.3	:::	::	=				26.3	421'1 }	26'3		26'3	
Hong Kong }	1,451	55'8			·7 ···	82'0		32'4			·7	7.6 27.6	102'7	28.9	6.0		7 69		5'5	20'0	782'2 4'82	35"8	7.6	2.8	9.6
ARMY OF	126,975 {	3.8	1'4	-8	2'8	266.5	'2	16*2	.3	1'2	3'0	12,8	20.2	39.5	8*8	'I.	·7 ·02	1.2	13,1	15'2	674'4} 7'41}	22'8	4'9	4'3	6.0
INDIA	121,603 {	3,5	1'3	·8	2'9	275'0	12	16'3	'3 '12	112	3°0 43	12'9	18'9	38'9	86	·02	'7 '01	1'5	12'3	15'3	678'4 } 7'28 }	22'6	4'9	4'4	61
NORTHERN ARMY	62,141 {	2.6	1'6		4'0	363.2	.3	15,3		.51	3.6		17'2	43'0		'03		1'2	13'7	12'8	796.6}	26.0	4'1	3.2	2.3
SOUTHERN ,,	50,822 {	4'4	.22	1'3	1.8	:86'3		100	'6 '28	1.6		10'1	*30		9.0		.02	2'2	13.0	20'1	538.4 }	21'4	6.2	5'9	7.7

• See foot note at the end of Table XXIX.

TABLE XXIX.

ACTUALS of STATIONS, GROUPS, and ARMIES, on which the ratios in Tables XXVI-XXVIII have been calculated.

	th.			100		0		1. 4	ADM	18810	NS.						2. 1	DEATI	HS.				-	-
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Enteric Fever.	Malaria	Malta Fever.	Pyrexia of uncertain origin.	Plague.	Greulatory Diseases	Tubercle of the lungs."	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhora, 1	Heepatic Abacess.	Hepatic Congettion and Inflamation.	Scurvy.	Anzemia and Debi- lity.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK,	Syphilis.	Soft Chancre.	Gonorrhona.
Port Blair	279{				77		0					8	25 1	3	***		***		8	198	} 5	2		3
Rangoon	1,007 {				91		136					28	82		***		***	19	9	615	} 19			3
GROUP I.—BURMA COAST AND BAY ISLANDS.	1,:86 {				:68	***	145			2	3	36	107	4	11			26	17	813	} 24	2 :-	9	6
Meiktila	606		-	2	89		4			1	5	6	19	5				7	12	328	} 18	6		4
Fort Dufferin	1,353{			2	263	***				2	7 3	40	15	21				10	18	820 6	} 32	3		9 ::
3hamo	864{			. 2	298 2		=	1	2		6 4		30	25				23	8	718	} 27	5		-
GROUP II.—BURMA	2,823{	1		6	650		10	:		3	18		64	51				40	38	1,866	} 77	14	10	14
Manipur	351 {	1:1			191	**				::	7 2		28	18					15	460 S	} 13	9		5
šadiya	50 {			-	24		-						::	-						43	} .	-		-
Dibrugach	322 {				197	***			1			9		-			=		7	311	} 7	3		2
GROUP III.—Assau .	923{	-	2.2		412 1		9		-		8 2	24	31	18				12	22	814	} 21	12		7:
Fort William	650 {			1	84	***	46	40.	2	;	9	17	37				9	31	23	446	} 18	6	14	3
Alipore	741 {	1		1	165	***	4		2	7 2	8	35	35			'		20	10	400	18	2		6
Barrackpore :	688 {				252				2	2 1	3 2	10 2	99						3	648	21			
Buxa	+ 140 {				32							-1	9			1		-	-	127	- 5	1		
GROUP IV.—BENGAL }	2,219 {				533		57		6	12 4	22	66	180	5		5	17	e:	37	1,021	62	10	17	10

	i			-		I. ADMIS	SIONS. 2. I	DEATHS.	
	trengt	7777		15 1	516				
STATIONS AND GROUPS.	Average annual strength.	Influenza. Cholera. Small-pox. Enteric Fever.	Malaria, Malta Fever,	Pyrexia od uncertain origin. Plague.	Tubercle of the langs, Pacumonia,	Respiratory Diseases Dysentery.	Diarrhea. Hepatic Abscess. Hepatic Congestion and Inflammation.	Antenia and Debility. Venercal Diseases, ALL CAUSES.	CONSTANTLY SICK, Syphilis, Soft Chasere, Generitors,
					11				
Dinapore	620 {		205	100	1 1 15		4	4 4 389	} 13
Benares	484 {			10000	2 4 3	13 2	5 3	3 6 243	
Allahabad	1,096 {	1 2	243		3 2 5		THE RESERVE TO SECURE	27 18 877	} 25 6 6 6
Fyzabad	1,106 {	1 1	250		14	11972	8 3 1 2	13 20 541	
Lucknow	1,692 {	3	259	34	1 1 31	18 10		2 28 732	} 24 9 4 15
Campore	816 5	1 14 1	299		. 24 14	11 3	2 1	19 12 681	1 25 2 3 7
Fatehgarh	158		79		1 1 1	1000	2 1	6 3 142	2 1 2
GROUP VGAN-) GETIC PLAIN AND CHUTIA NAGPUR.	5.972 {	1 16 8 1	1,506	45	8 33 83	", "	1 13 1 2 5	74 91 3,603 1 47	} 120 32 20 3
A		1111			11		11111		
Bareilly	1,088 {	1 1	351	400	2 8			7 12 654	
Rurki	755 {	2	87	39	7 2	3 1		18 283	} • = = =
Dehra Dun	2,916 {	11 2 1 71	1,809		3 5	52 14	1 11 1 3	9 104 3,151	} 129 37 43 24
Meerut	1,613{		621	16	8 6	13 7	8 11 3 1	15 47 1,374	} 44 13 18 16
Delhi	1,109	- 4-	667			12 3	22	18 14 1,065	} 24 4 6
Ambala	1,647 {	1 2 3	120 11	10 3		1 7		14 18 685 8	} 31 8 1 9
В									
Juliandar	1,661 {	1 2	595		5 25	11 50	3 2	5 10 1,073	} = =
Ferozepore	1,826{	17 1 4 9	800	11 1 2	400	18 87		24 25 1.447	} 40 11 7 7
Lahore Cantonment .	1,641 {	3 1 1	208 2	73		20 77	.41-	21 5 852	} 28 1
Amritsar	121{		52	= = =		1 10		s 98	} = = = =
Sialkot	1,789{	1 1 12	394 1	26		21 66	7 1	27 17 1,075 18	38 8 8
Jhelum	2,929 {	6 2 2 9	1,160	3 4		44 85		51 26 2,144 2 23	} 62 10 5 11
Rawaipindi	2,242 {	6 4 4	249 1	173 1	Total and	35 56		25 16 1,096 14	40
Attock	88 {		40		1 1			2 80	} 2 2
GROUP VIUPPER }	21.4263	35 17 23 111	7,162 15	10000	1 63 302 5 8 59	251 54C 8 3		235 298 15,077	5.407
A									3 3 23
Mardan	823 {	9 1 1	188	*** *** *	7 19 44	26 18 1 1 71 191		6 29 480 11	} 131 16 1 4
Nowshera	3,434	10 1	1		2 9			1 29	1

TABLE XXIX-continued.

ACTUALS of STATIONS, GROUPS, and ARMIES, on which the ratios in Tables XXVI-XXVIII have been calculated.

-	th.										1. A	DMISS	ions			DR	ATHS.			1			
STATIONS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox. Enteric Fever.	Malaria.	Malta Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the langs.	Pneumonia.	Respiratory Diseases	Dysentery.	Diarrhea. Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurvy.	Anaemia and Debility.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhona.
Peshawar	2,426{	11	6 7	15	1,570 3		14				55 7	60	142	28		5	39	25	2,736	} s1	10	6	9
Fort Jamrud	86	111			24					***				2			***	11	57	} :		11	
Kohat	2,822	1	1	15	1,391	***	13		3	10	58 9	61	136	41 :		6	84	15	2,988	} 92	6		
Thal	107				119						2		13	2			3	-	187	1 +		11	-
Edwardesabad	2,105	6	6 4	18	994		11		4		35 4		97	27 -			24	12	2,545 13	} 67		4 ::	
Dera Ismail Khan	2,475	1		9	2,751		31 2	1	1	16	85	70	136	66	2	7	27		4,650	} 94			
Jatta	59				53		=				1 1	5						111	84		***		
Drazinda	57				71		=					11	1:	5					105	} =		11	
Fort Zam	58-				26			11		=										} :		11	
Multan	1,481	1 :		1 7	670		18			4	27		40	11		1	10	10	1,124	} 30	3	*:	3
						-			No. of Concession, Name of Street, or other Persons, Name of Street, or other Persons, Name of Street, Name of														
B																					100		
Jandola	181	-		-	187		::		1		1	4		13			3		290	} 3	=	-	

	ıgth.										ı. AD	MISSI	ons.			-	2. D	RATH	s.				
STATIONS AND GROUPS,	Average annual strength.	Influenza.	Cholera.	Enteric Fever.	Malaria.	Malta Fever.	Pyrexis of uncertain origin.	Plague,	Circulatory Diseaser.	Tubercle of the lungs	Pneumonia.	Respiratory Diseases	Dysentery.	Hepatic Abscess.	Hepatic Congestion and Inflammation.	Scurry.	Anzemia and Debility.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhoea.
Sibi	70{										3 1	::	5			1	1	2	58		1		
C Jacobabad	392 {				221	11				4	18		25			1	9	14	424 3	} 14		6	5
Hyderabad	602 {				195	***	5			'	9 2	9	24 1			4	7	7	354 6	} 12	1	6	
Karachi	555{		0000	1	264	***	4	:-		3	7	29 2	27 1	5	'	1	8		597 3	} 18	3	5	3
GROUP VII.—NW. FRONTIER, INDUS VALLEY, AND NORTH-WESTERN RAJPUTANA.	17,733	58		3 75	9,652	2	139		16	69	377	404	946 2	44 2	13	40	333	155	19 783	574	55	36	64
A Bhuj	225 {				38	::			-	2 1		3						7	100	} 3	4	2	
Rajkot	239{			. 2	59				2	::		11				6			135	6		1	
Deesa	656			4	96		'			5	9 2	17		1				4	366	} 13		2	
Ahmedahad	448 {				186			-	2		9	10	25	4	2		3	10	438 2	} 16	5	5	
Baroda	637 {		-		447			-	-	7	13	19	25	9		13			747	20	7	6	'
В									-													-	
Alirajpore	10 {				::		=						000000000000000000000000000000000000000				-		=				=
Sirdarpore	58 {				1				-		10	8							53	1			
Kotra	37 {		1		4						3		1	-					21	3		-	
Udaipur	11{									::						-			=			-	
Todgarh	16 {	-			3														3 }			-	
Erinpura	389				18		-	-	2		4	3	8	-				9	134	12			6
Deoli	596 {			4	16				1		7		4					12	127	5	2	5	5
Beawar	23 {				1					-				-		-			3 }		.,.	-	
Nasirabad	566 {	11	-		303					1 2	12	14	1 5		1	8	20	6	615 241 }	22		-	5
-				1	-					2	3	-	-		1		-	-	51		-	1	-

TABLE XXIX—continued.

ACTUALS of STATIONS, GROUPS, and ARMIES, on which the ratios in Tables XXVI-XXVIII have been calculated,

				ength									1. 4	DMIS	HONS.			2.	DEAT	rus.						
	AND ROUPS.			Average annual strength	Influenza.	Cholera. Small-pox.	Enteric Fever.	Malaria.	Malta Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Discases.	Tubercle of the lungs.	Pneumonia.	Respiratory Discuses.	Dysentery.	Diarrhoea. Hepatic Abscess.	Hepatic Congestion and Inflammation,	Scurvy.	Anzenia and Debility.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Gonorrhora.
lipur				40 {			-	14		::			-	1		-			-		=	18	} .			
gra				731 {				111				2 1		14	4	19	2				12	276 6			5	
walior				29 {								***				-					=	1	}			
nansi				2,556 {			2 9	1,318		18			4	18	23		23 .			21	63	2,521	} 57	22	24	
owgong				728{	8			137		4		4		11 2			4			34	14	457	} 17			
oona			•	405 }	1		1	34	***		***	2 ::					3			6	1	136				
gar .				364 {		-	. 1	149					3		13	1 6	4			13	16	449	5 4		7	
ehore ndore				124		9000	-	18				-			8					2		85	5			
								360	***		-		2		20		11	" 1	2	8	16	853	1 28	7		
ROUP V	m.–s	South	H-)	1,340 }	-	11		***						***			2			128		4		68	***	
EASTE ANA, INDIA,	CE	NTR/	AL C	12,114	1:		614	3,498		31		16	36	149	220	3	34		30	1	205	63	}258		59	
BAT.			-		1		1			1		1														
	A		10	1 41	1																					
Saugor	•			1,165	1 ::	1		425			-	10000					1 1					771	} 23			
Sutna				33	{ :		1										1					26	} .			
Jubbulpe	ore			1,965	1 2	0	1 4	409						14	20	115	10			15	31	1,224	} 38		6	
Kampti							4 1	103		1)	,	1	2	3	4					5	7		} 14	3	2	
			17	637			1 1			15	10		***	***	***	***						3	,			
Sitabald	di .		11	36	1 :							4		***			-						3			-
				-								1					1								1	
							-					-		1			11									
Aurang	Babad	,		1,514	1 .		34	210			9	5	1	4	13	14	7 1			4	25	745	} 30	6	8	
							-	***		-		-														
Ahmedn	nagar			1,092	1:		2	63						12		13			3		25	406	} 19		7	10
Bolarum			6	1,760	5		6	138		5		-		6			18			14	16	651	} 28	7		
Douglati				1									***	3		***			-					-	***	10
Secunde	rabad			3,440	8	. 13 -	3 11	137			5	12		21 4			22 1			37	78	1,476	} 60	22	15	

	gtb.					. ADM	188103	rs.	2. Di	ATHS.				-
STATIONS AND GROUPS,	Average annual strength.	Influenza. Cholera. Small-pox. Enteric Fever.	Malaria. Malta Fever.	Pyrexta of uncer-; tain origin.	Piague. Circulatory Discases. Tubercle of the lungs.	Pacumonia.	Respiratory Diseases.	Dysentery, Diarrhora, Hepatic Abscess,	Hepatic Congestion and Inflammation.	Ansensia and Debi-	Venereal Diseases.	ALL CAUSES. CONSTANTLY SICK.	Syphilis. Soft Chancre.	Gonorrhora.
Belgaum	1,950		146	2	1 1 2	18	38	24 3		1 9	97	826 } 4	13 6	18
Satara	113{		6				,	2			5	41 }	3	2
Poona	2,322 {	7 12	54	186	15 3 4 5 1	13	33	41 7		1 15	8	976 } 4	7 40 14	4 31
Kirkee	1,693 {	63 2	179	107	2 2	16	89	17 15 I		2 2	41	1,065 } 3	3	19
GROUP IX.—DECCAN	17,631 {	163 34 53 43 14 1 8	1,883	408	18 27 24 6 4 2	116	290 3	541 95	13 1	0 1.8	418	8,557	132 119	
Bombay	648{	1 3	330	2	2 4 4	8 2	88	27 15	1	5 3	46	726 } 2	8 11	CA COL
Santa Cruz	652 {	3 1	168	2		2	30	84 13	3	6 2	17	630 } 1		2 2
Cannanore	351		13	18	3			7 1	0	. 4	25	202 } 1		100
Trivandrum	56		2		1:1:			2	100000000000000000000000000000000000000		3	13 }		2
GROUP XWEST-	1,707	3 2 4	513	22	2 7 5	10	123	120 29		1 9	91	1,571	3 21 38	
A Bellary	411 {	6 5	8	10	10 3 3	4 3	2 58	8		5 37	7	,		
Bangalore .		4	10		6 1 1	4		5 5	-		 S	2,085 7	39 29	
Trichinopoly	369-	3										89 }	3	7
St. Thomas' Mount .	496		-4 ::	1.3	1			7 3		3	7	148	5	1
Madras	118		5				13	It 1		'	4	114 }	6'	3
GROUP XI.—SOUTH-	4,623	1 11 1 2	719	82		1 63	79	162 32	3 2	48		2,592 43 } 9	5 47 3	42
														I
Маутуо	841 {	6	148	10			24	32 14			25	605 } 2	4 15	5 6
Kohima	176 {	===:			= ===			9 2	:			98 }		2
Shillong	100		1		= = 3	2	9	21 4	0.000	6	20	606 }20	6 :	12
Gangtok		1	*** ***	3	===		13	3	:			}	3 = =	2
Chumbi (including Pharijong) (Tibet).	25						'	====	:	=		1}	1 1 1	
Gyantse	73{		s		. 2	4 2	. 5	3			3	35 }		2
Almora	630	= = 7	131	30	1			15 4	0.000	. 13	18	464 } 1	1 1 10	18
Martin						72								-

TABLE XXIX—continued.

ACTUALS of STATIONS, GROUPS, and ARMIES, on which the ratios in Tables XXVI-XXVIII have been calculated.

ACTUALS	1										-		1. AD	м188	IONS		2.	DEA	THS.						-	-
STATIONS AND GROUPS.		Average annual strength.	Influenza.	Small-pox.	Enteric Fever.	Malaria.	Malta Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the lungs-	Pacumonia.	Respiratory Diseases.	Dysentery.	Diarrhea.	Henatic Congestion	and Inflammation.	Scurvy.	Anzenia and Debility.	Venereal Diseases.	ALL CAUSES.	Concernance Spring		Syphilis.	Soft Chancre.	Genorrhæa.
Naini Tal		119	1000			17	101		1 1		2		2	3	3 .	-				2	55	}	2			1
Lansdowne .		2,859 {	1	4 2	10	387			-	1	11 6	49	12		31 .	-,			17		1,161	} 5	90	1		13
Simla		356 {				309				2	2		16	34		-	-	=	6		455	} '	1	5	3	5
Jutogh		202{		1		23					::	2 1									71 2	}	4	2		
Dharmsala .		1,453	5		. 3	139					11 4	11 5		14				***	9	16	453	3	16	5	2	9
Bakleh	1	1,413	47			238						2 2	13	21		-		1	s	9	607	}:	12	4	1	4
Khairagali .		57-{				28			5								'	=	==		38	-	2	11		
Baragali .	1	61				4			8			=	::		B 200 B 10		=				52	*				
Kalabagh .		62				,					=	::					=		3	::	42	1	2			
Chitral		178-				3					=	5			a record in	-					38	-	2			-
Kila Drosh .		681				146			3	. 3	=	10	11 2	10		-	3			4	330	} :	10	3		
Malakand .		764			-	215				2		23	31	30	1			5	12		605	} =	12	2	***	2
Dargai		320-		**	1	371						11 2	7	10							534	}	12	2		
Chakdara .		467				722						6	7	9	4				4	4	856	} '	17		'	3
Abbettabad .		3,340		36	40	1,102			7	4	9	70 11	133	93	41		4	1	44		2,803 62	}!3	13	4	26	28
Cherat		26	1 :-										::						'			} .		-		
Fort I ockhart .		154	{ :			87		-				4	5		1	-					143	*	3	-		
Hangu		454	{			35	-	-			4	*	7	12	1					9	208	}	9	6	3	

	th.	7	TEP BY THE			1. A	DMISSI	ONS.				2,	DEAT	HS.					
STATIONS AND GROUPS.	Average annual strength,	Influenza. Cholera. Small-pox. Enteric Fever.	Malaria. Malta Fever.	Pyrexia of uncertain origin.	Plague.	Circumtory decaded.	Pneumenia.	Respiratory Diseases.	Dysentery.	Diarrhora, Hepatic Abreess,	Hepatic Congestion and Inflammation.	Scurvy.	Anaemia and Debilley.	Venereal Discases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis,	Soft Chancre.	Genorrhæa.
Mir Ali Khel	95{		.84	5 4 4 4 4 4 4 4 4			2 1	4	12 1			1	2		132	} 3			
Fort Sandeman .	472 {	1 1	130			4	21 4	13	47 1		3	2	34	12	354 8	} 16	8		4
Hindu Bagh	30 {							:	4				2		26	} 1			
Musa Khel	30 {		15						6						22	} .			
Kila Saifulla	30{		28				::		11						42	} .	***		
Murgha	49 {	*** *** ***	35						7				2		50	} 2			t
Loralai	1,017 {	24	241				32 4	38	10	30		2	55	4	671 S	} 16			4
Gumbaz	32 {			100000			1	***	3		-		-		25	} ,			
Quetta	4,862{	21 3 15	519		2	12 33	78 20	179	200	96	5	17	82	59	2,548 46	} 94	24	6	29
Robat	202-{		15					8	16	8	=	16	6		119	} +		-::	
Pishin	31{	= 7.5.5	:					1			111				3	}			
Shelabagh	81 {		4 ::					5	3	10		1			44	} .			
Chaman	641 {	1 1	6				3	5			-		2		116	} 6	1		::
Mount Abu	80{		83					+	3							} 3		=	
Ootacamund	177						4							3	24	} 2	3		
Camp Lovedale	38{						2	::		- :				1		} '	::		
GROUP XII.—HILL	23.465{	113 43 5 87 3 33 25	5,545	3 443	3	35 92 6 20	364 60	582	778	26	26	48	352 3	321	14,660	}550	92	80	149
Marching India .	8,640 {	5 12 1 2	1,090			5 13	77 3	84	236	58		2	35 2	43	2,570	} 40	8	10	25
Bazar Valley Field Force. Mohmand Field Force.	333 {	112	7			13	11	8	5 64	29				3	64 2 607	} .	1	1	
EXTRA INDIA.	1,185{	5	1				17		***		7 8 50			3	42	} 20		-	
mand:-	52 {		53				2 2		14	4	200		3		84	} 3			
Jask	65 {		5				-	1	18			7			40 2	1 2			

TABLE XXIX-continued.

ACTUALS of STATIONS, GROUPS, and ARMIES, on which the ratios in Tibles XXVI-XXVIII have been calculated.

	igth.										1. A	DMISS	ions.		2,	DE	ATH	5.							
STATIONS AND ARMIES.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enterio Fever.	Malaria.	Malta Fever.	Pyrexia of uncertain origin.	Plague.	Circulatory Diseases.	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhora.	Hepatic Abscess.	and fuffammation.	Seurvy.	Ancemia and Debi- lity.	Venereal Diseases.	ALL CAUSES.	CONSTANTLY SICK.	Syphilis.	Soft Chancre.	Connections
uscat	20 {									,	2	2 2		1		100010					18	} :			
shire	67 {		-										2								7	}			
ghdad	36 ;							-				2 2				100			-		2 2				
len	679 {					24		87		4	1 1	4 2	9	27	29			7	25	2	387	} 17		1	
ormaksar	86 {												6	3							62	} 2			
rim	36{					2								33		_			5		47	}.		1111	
Not in the Indian Command :			1000																						
dombo	762 {	11			2	63		8			'	2	64	72 98	***	-		2	28	15	433 1 512	5 "	5	1	
0 1 to 100	650 {							13		1	6	7	24	10					1	10	2	28			
en-tsin .	61 {	4								1											13	1 .			
utai	114	3									6		2							4	28	1 5	2	2	
ongshan .	38 {	***										***	1					-	=		16	} :			
ong Kong-South	1,451 -{	81				119	***	47				4	149	42	10		1		8	29	7,135	} 52		4:	
†Remaining from		4	3	- 1	8 25	45	1	6 3		1	36	270	135	8	4 1	0 4	3	11	75		2,734	1			
Admission s Total deaths Deaths out of hospital	126,975	48	2 17.	103	350	33,797	2	3 2,05	36	147	378	1,623	2,570	5,019	91,11	5 11	93	191	1,538	1,934	85,637	2,899	625	541	2
Total deaths .				1	73	74		11	14			279	37	21	8 3	8 2	2		16	2	941		2		
hospital		-			-					8		1				-					59	1			
†Remaining from		4		7	25	437		31		7	22	269	132	8:	10	4	3	11	65		2,653	1			
Admissions .	121,603	393	162	102	347	33-438	2;	1,986	36	146	364	1,574	2,302	4,72	1,050	11	90	188	1,496	1,810	82,497	2,751	592	529	7
Total deaths . Deaths out of	1	2	171	3	73	73		11	14	21	52	274	36	28	8 8	3 2	1		15	2	885		2		
hospital .			2						-	8						-					38	1			
ORTHERN ARMY	62,141	16.	102	35	251 47	22,582	20	953	3	59	221 31	984 184	1,071	2,67	48	4 2	50	75	851	795	49,500 540	} 1,613	254	219	3
OUTHERN ARMY	50,822	12.	4 43	66	94	9,400		3 1,010	33	82	130	513	1,147	1,812	504	7	37	111	610	10,33	30,427		330	300	3
Contra Akai	20000		23	2	26	20	100	2	1.4	5	16	87	15	20	1	-	1	***	10	***	320	1,089			3

As far as returns have been received.
 † Remaining + admitted = total treated.
 ‡ Including troops in Extra India not in the Indian Command and Field Forces.
 § Excluding troops in Extra India not in the Indian Command and Field Forces.

			1.	AVERAG	E STREN	IGTH.	2. C	ONSTANT	TLY SICK				
GROUPS AND ARMIES,	January.	February.	March.	April.	May.	June.	July.	August.	September.	October,	November.	December.	Tor.
L-BURMA COAST AND BAY	1,612	971	1,194	1,200	1,202	1,029	1 1	1,244	1,317	1,438	1,568	1,600	15,
I.—BURMA INLAND	1,225	3,098 78	3,061	2,900	2,914 69	2,526	2,713	2,983	2,982	3,011	3,212	3,244	33,
I.—Assam	1,123	1,004	927	78S	779 16	S00 18	845	875	896 25	987 32	1,038	1,006	11,
V.—BENGAL AND ORISSA	2,511	2,747 50	2,407	1,889	1,814	1,881	1,866 59	1,888 64	1,878 74	2,430 81	2,699 95	2,626 79	26,
/GANGETIC PLAIN AND { CHUTIA NAGPUR.	7,100	6,988	5,998 76	5,221	5,530	4.998 75	5.178 74	5,324	5,714 145	7,062	6,532 204	6,031	71,
I,-Upper Sub-Himalaya .	25,830 550	25,68o 430	24,110 335	19,354 319	18,911 370	18,826 372	18,484	18,862 376	18,998 597	20,226 777	23,054	23,775 695	257. 5.
.—NORTH-WESTERN FRONTIER, (INDUS VALLEY, AND NORTH- WESTERN RAJPUTANA.	677	19,266	18,578 465	15,783 368	17,041	16,573 595	16,176	16,313 450	16,809	17,649 786	18,098 864	19,061 722	212,
.—SOUTH-EASTERN RAJPUT- ANA, CENTRAL INDIA, AND GUJARAT.	310	15,106	13,491	10,414	10,469	9,793	10,076	207	10,537 304	12,116 377	13,283	13,705	145
Deccan {	344	19,628	16,829 276	15,016	14.330 280	15,524	297	17,100	17,482	428	20,093 434	20,310	4
(,-Western Coast	60	52	57	46	1,586	46	1,560	45	1,645	73	2,134	93	20,
I.—SOUTHERN INDIA	4,228 143 23,850	3,653 93 22,575	3,602	3.592	3,835	4,353 78 23,024	120	5,285 125 23,420	5,333 105 23,326	5,400 111 24,134	107	5,500 82 23,968	281
-HILL STATIONS	556	510	463	444	417	497	481	610	682	635	683	591	6
MY OF INDIA* .{	142,484 3,135	144,655 2,697	130,285	2,145	123,935	114,218 2,387	113,401	115,310	117,487 3,258	129,293	137,651	139,565	1,523,
													*
At	138,630 3,044	137,150 2,596	125,640 2,199	1,993	108,778 2,066	108,541 2,166	109,555 2,167	2,522	3,142	3,709	133,909 3,948	135,813 3,428	1,459,
THERN ARMY	72,014	69,330	65,907	58,186 1,126	57 - 337	57,327 1,348	56,125	57,058	58,184	62,554	65,336	66,348	745.2
THERN ARMY	53,675	54,830	51,247	44,894 815	44,211	44,636	47,330	49,047	49,757	55,039	57,505	57,646	609,8

Including troops in Extra India not in the Indian Command and Field Forces.
 Excluding troops in Extra India not in the Indian Command and Field Forces.

TABLE XXX.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

The ratios of sickness and mortality will be found in Table XXVIII.

NORTHERN ARMY.

Abbottabad.—All the nullahs running through the Cantonments require properly cemented drains to prevent the formation of stagnant pools; and two ponds—one in Cantonments and the other on the border line—require to be drained. Defects in accommodation still exist in the ith and ith Gurkha Rifles lines. The trenching system of the town of Abbottabad is now much improved and the Municipal authorities have under consideration the question of the construction of a number of incinerators of the "Rait" pattern, of which one has been constructed and is working satisfactorily. Arrangements are being made to construct more incinerators, sufficient for the use of the whole station. Washing places are required near the cook-houses of the ith, ith and ith Gurkha Rifles lines, and the floors of cook-houses in all the lines should be cemented. An expenditure of Rs. 5,026 was incurred during the year on the improvement of the drainage, construction of an incinerator, etc. improvement of the drainage, construction of an incinerator, etc.

The Cantonment Committee make the following suggestions:—(1) to take in a portion of the land, as far as the link road, which is at present used for cultivation; (2) to construct cemented stone drains in all the main nullais in Cantonments; (3) to drain the ponds above referred to; (4) to cement the floors in all the battery and regimental cook-houses; (5) to construct a hospital for the treatment of sick British officers, as at present there are no quarters whatsoever available for their treatment when suffering from an infectious or contagious disease.

The defects which they consider require to be remedied in the order of urgency are:—(1) the deficient accommodation in the barracks of the 3th and 3th Gurkha Rifles; (2) the want of ventilation and fire-places in the married quarters of the 3th Gurkha Rifles; (3) the deficient accommodation in the 3th and 3th Gurkha Rifles hospitals, as there are only 30 beds in each hospital instead of 50; (4) the cementing of the floors in all the Battery and regimental cook-houses; (5) the want of cemented drains in all the nullahs; (6) the drainage of the ponds referred to by the medical officer in the preceding paragraph; (7) the want of washing-up places near the cook-houses in the 3th, 3th and 3th Gurkha Rifles lines; (8) the need of quarters for the treatment of sick British officers.

The Principal Medical Officer of the Abbottabad and Sialkot Brigades concurs with the suggestions made for remedying the defects, but differs in regard to the order of urgency.

The Principal Medical Officer of the Abbottabad and Sialkot Brigades concurs with the suggestions made for remedying the defects, but differs in regard to the order of urgency.

The General Officer Commanding the Abbottabad Brigade makes the following remarks:—(1) Proposals for taking in the land, now used for rice cultivation, were submitted in October last and are now under the consideration of the General Officer Commanding the Division; (2) the construction of stone drains in the nullah between the \$\frac{2}{3}\$th Gurkha Riffes lines has already been commenced; and the General Officer Commanding the Division has noted the question of allotting funds for the other drains; (3) the question of the drainage of the ponds in Cantonments has been the subject of much consideration and correspondence and whether it is or is not insanitary was discussed (with much difference of opinion) and the cost of draining or filling it up, estimated at Rs. 3,000. The final pronouncement on the subject was an intimation from the Commanding Royal Engineer, 2nd (Rawalpindi) Division that "under the circumstances it cantonment Magistrate reported as follows:—"The tank in the civil lines supplies water for watering the City streets and Municipal gardens. When the Chief Commissioner agreed to the area known as "Malikpura" being included in Cantonments, he made it a condition that this tank should not be interfered with. The General Officer Countaining the Brigade was forced to agree to this condition, and I feel sure the Civil authorities will stick out for their rights in the matter". He considers the cementing of the floors in the cook which, to the best of his knowledge, has cemented floors. The question being a general one, he is submitting proposals separately and also on the proposal for the construction of a hospital for British officers. In regard to the defects brought to notice he agrees as to the urgency of the measure for providing additional accommodation in the \$\frac{1}{2}\therefore the provision of free places was san

Barrackpore.—The chief defect of the drainage of Cantonments is the branch of the main drain which runs North and South near the Native Infantry lines. The drains of the Grass Farm are also a defect, and the farm being so close to the barracks is also considered undesirable as the top-dressing and trenching of bazaar rubbish breed flies. The drains in the Suddar bazaar are still imperfect and serveral drain into tanks, which is most objectionable, but money will be allotted during 1909-1910 for their improvement. The bazaar itself is still overcrowded in some mobullahs, and its gradual opening out is progressing as funds permit. No action has been taken to remedy the defect in regard to the Mistry ghat, a portion of the North Barrackpore Municipality and in the vicinity of the Cantonment which is very overcrowded and unhealthy, but the subject will receive the consideration of the Committee,

The Cantonment Committeee suggest that the branch of the main drain should be made pucca throughout its whole length, as at present the water accumulates in it and so affords a breeding place for mosquitoes. They say that an allotment will be made from the Cantonment fund, when the money is available, for the construction of this drain, and the Military Works Department will be asked to have their portion constructed, as only a portion of this main drain comes under the control of the Cantonment authorities. The drains of the Grass Farm which lead into the branch of the main drain should be made pucca, and until this is done they should be properly dressed and kept free from over-growth, as at present they afford breeding grounds for mosquitoes during wet weather. Trenching and top dressing on the Farm should not be permitted as it is situated too close to barracks and consequently fills the barracks with flies as the trenching this year was carried out in a most unsatisfactory manner. They state that improvements in the drainage of the Suddar bazaar cannot be carried out for want of funds; that further opening out is imperatively necessary, and funds only are required to be allotted for compensation. They consider that the Municipal Commissioners should take systematic steps to prevent further building in the vicinity of Cantonments, and thin out existing thickly populated areas; that more regard should be paid to the sanitation, and the trenching grounds should be removed as far off as possible.

The Principal Medical Officer of the Presidency and Assam Brigades states that the health of the station has improved, but

The Principal Medical Officer of the Presidency and Assam Brigades states that the health of the station has improved, but that there is still much room for improvement in the drainage, and that there should be more pucca drains to carry off the surface

The General Officer Commanding the Presidency Brigade remarks that the Military Works Service is starting to make pucces a portion of the main drain, and the Captonment Committee are prepared to complete their portion of it. He proposes to communicate with the Commissioner in regard to the limitation of further building and the overcrowding; and considers that most of the requirements are purely a question of funds being provided.

Cawnpore.—The drainage of the Cantonment is not altogether satisfactory and there are several nullahs and holes where the water lodges after rain. The Native Cavalry lines are not well drained and there is a large excavated hole behind them where water lodges. The water supply is derived entirely from wells which, under certain circumstances, become contaminated, especially those in bazaars and private compounds. The bazaars in Cantonments are becoming congested and would be improved by being

TABLE XXX -- continued.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

The Cantonment Committee suggest the provision of a piped supply of filtered water to the barracks and bazaar with the necessary stand pipes, hydrants, etc., the opening up of the bazaar in the more congested parts by wide roads; and the filling up as far as practicable, of all holes, depressions or excavations where the water lodges after rain, and the improvement of the drainage in places.

The Principal Medical Officer of the Allahabad and Fyzabad Brigades endorses the recommendations of the Cantonment Committee and adds that the piped water supply is urgently needed.

The General Officer Commanding the Allahabad Brigade concurs in the suggestions made by the Cantonment Committee and considers that for the improvement of the place a piped water supply is needed and that incinerators should be introduced, the pail depôt being gradually abolished, as he considers it objectionable in several ways; it is at times very offensive, pollutes the river, and costs moment without giving any return as in the case of trenched land. He recommends that the excreta from the pail depôt area of the Cantonment should be burnt in incinerators, and where this system cannot be worked trenching must be resorted to. He adds that the suggestion for the opening up of congested bazaars by wide roads is now receiving attention.

Dargai.-No sanitary report.

Debra Dun.—The river Tons forms large swampy areas which are the breeding grounds for mosquitoes. An analysis of the water supply for the old cantonment (Birpur and Gangora) shows contamination, and the Divisional Sanitary Officer's report and suggestions for its improvement are awaited. The village of Gharigaon in the middle of cantonments is an insanitary area and a danger to the health of cantonments. The present pattern of urinary is unsatisfactory, but a new pattern is being tried. There are many nullahs covered with scrub, and these are often fouled by villagers and travellers. An expenditure of R308 was incurred during the year on the provision of

The Cantonment Committee state that the introduction of incineration throughout the cantonments is indicated, as the local conditions are unfavourable for trenching.

The Principal Medical Officer of the Bareilly and Gharwal Brigades remarks that, in his opinion, incineration is the best method of disposing of night soil, but he does not recommend that a change be made until the result of the experiments which are now being made with four incinerators is definitely known.

The General Officer Commanding Garhwal Brigade states that it would not be safe to clean the nullahs of scrub as the sides would fall in, he adds that incinerators are only in an experimental stage, and their introduction will depend on the results of trials; which, however, have had to be discontinued at Ghangora for want of funds to pay for stable litter.

Delhi.—The drainage in the Fort is unsatisfactory, but new drains are being laid down. The Panchakki nahr (canal) has been closed at its lower end to prevent its opening into the Fort ditch; and the diverting of the two city drains is, it is understood, being considered.

The Cantonment Committee offer no suggestions.

The Principal Medical Officer of the 7th (Meerut) Division remarks that Delhi Fort is notoriously unhealthy owing chiefly to surroundings and faulty drainage, as the most receives the city surface drainage and has no outlet. There is a small stream which is diverted from the river in flood and later is fed by city drainage only, and the presence of this open, sluggishly flowing drain is most insanitary. The surface drainage is generally defective, and the numerous hollows forming pools cause an excess of malarial disease. Steps should at once be taken to remedy these evils, and the hollows and water holes filled in as the Fort must always be unhealthy unless a good and effective system of drainage is devised. The surface drainage in the 35th Sikh lines is unsatisfactory and wants improving.

The General Officer Commanding the Meerut Cavalry Brigade concurs in the preceding remarks. He adds that the Fort during the autumn months is a regular " death trap " and in his opinion unfitted for occupation by troops until the moat is pumped dry and the surface drainage of Delhi diverted into the Jumna.

Dera Ismail Khan.— Owing to the flat nature of the ground, the small fall to the river level in the wet and rainy season, and the stiff clay of which the Cantenment is composed, it is and always will be difficult to drain the surface of storm water. Permanent drains with carefully regulated gradients are still required in many places. The water supply is sufficient in quantity, but being derived from shallow wells, is always liable to contamination. There is no bazaar within the cantonment, and the sanitary condition of the large native city close to cantonments is bad, although much has been done of late years to improve it. The latrines and urinaries are all moveable; the removal system is in use and the night soil is trenched. One incinerator of Raitt's pattern has been installed, and it is proposed to add two more shortly. A well regulated Suddar bazaar, which would render the Cantonments independent of the City during periods of prevalence of infectious diseases, is required. An expenditure of Rs. 1,704 was incurred on the construction of a Dhobi ghat and one incinerator.

The Cantonment Committee report that :-

- (a) The seating acccommodation in existing latrines is insufficient, and in many cases the pans provided are earthenware.
- (b) Many of the drains should be made permanent,—it is understood that the most necessary ones are being taken in hand this year by the Military Works Department. Those from the Cavalry lines end in a depression close to a well and require to be graded.
- (c) They consider the provision of a good Suddar bazar is very necessary as when the City is placed out of bounds, owing to the prevalence of infectious disease, the troops experience much inconvenience. As a remedy they suggest that the present syce lines of the Native Cavalry, situated in a central position, be purchased, improved and converted into a Suddar bazaar, the syces being accommodated to the west of the cavalry lines.
- (d) The washing of the clothes of troops is carried out in a back-water of the river, which for many months is a stagnant pond, getting very foul before the river rises. They suggest that ghats for each unit be provided at an approximate cost of Rs. 3,000 to 4,000.

The Principal Medical Officer of the Derajat and Bannu Brigades remarks as follows :-

- (1) That the system of kutcha drains with built drain-guides at intervals has proved not only inefficient in the soil and conditions at this station but objectionable. Although much has been done to improve the drainage of the Cavalry and Battery lines, more is urgently required.
 - (2) The levels of some of the new drains at the Fort require correction as they do not flow properly,
- (3) The new Dhob?'s ghat for officers is working satisfactorily, and the idea of providing a similar advantage to the men is an excellent one.
- (4) The proposed new Cantonment bazaar is in a good position, and the scheme should be both sanitarily and financially a
- (5) The incinerator is working only moderately well, and he considers that a trained sweeper might be asked for from Rawalpindi to show the people how to work it.
- (6) The spaces cleared behind the butts continue open and unobstructed owing to the thoroughness with which the grass roots were extracted and shows that the tall Pampas grass is easily eradicated if properly dealt with.
 - (7) The Gharaban has been finally closed.
 - (8) The covering of the wells in the lines of units should be proceeded with whenever funds permit.

The General Officer Commanding the Derajat Brigade states that all the measures under consideration are very desirable, but financial considerations make it improbable that many of them can be thoroughly carried out within a reasonable time. The provision of a really adequate system of bricked drains would mean a very heavy expenditure, while owing to the nature of the soil and the slight fall of the ground unbricked drains are very ineffective and objectionable; their gradual replacement as funds permit by bricked drains is most desirable. He considers that the provision of a Suddar bazaar also is an extremely desirable measure and should prove a productive one if vendors

TABLE XXX—continued.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

will take up the proposed accommodation and that enquiries on this point are in progress. He hopes that some improvement in the income of the cantonment will accrue from improved rents of land when the Paharpur canal water reaches the station and also from the exploiting of the river-side belt of trees.

Fatehgarh.—All holes, etc., within cantonments have been filled up as far as possible. The latrines used in the Fort are obsolete and insanitary, but the matter is at present under consideration.

The Cantonment Committee offer no suggestions.

The Principal Medical Officer of the 7th (Mecrut) Division remarks that the surface drainage generally requires looking to, and many hollows throughout the lines should be filled in. An old-fashioned and foul-smelling latrine at present in use in the Fort should be abolished.

The General Officer Commanding the Division offers no remarks.

Jandola .- No sanitary report.

Kila Drosh.-No sanitary report.

Manipur.—The cantonment is drained as well as is possible, until the pucca drains, now under consideration, are put in. The water supply, which is derived mainly from wells and tanks, is good, except in the hot weather, especially in April, May and June. The barracks in the Fort are very poor, being constructed of mud laths, and they require complete reconstruction. An expenditure of Rs. 578 was incurred during the year on minor works of improvement.

The Cantonment Committee, the Principal Medical Officer of the Presidency and Assam Brigades and the General Officer Command-

Mardan.—The land in the neighbourhood of the ard squadron lines and riding schools requires attention, and the surface drainage should be improved. Many pits which have been dug for procuring earth for repairing the riding schools, should be filled in, as anopheles breed in them. The bazaar lying between the 4th Troop lines and the wood sarai is insanitary; the houses are badly built, dark and imperfectly ventilated.

The Cantonment Committee make no suggestions.

The Principal Medical Officer of the 1st (Peshawar) Division remarks that steps should be taken locally to fill up the "borrow pits" referred to above, before the mosquitoe season, and a Station Order prohibiting the digging of such pits in, or adjacent to, the Lines should be issued. If the houses complained of are considered insanitary by the Cantonment authorities, their powers should be exercised to have the defects removed by the owners.

The Lieutenant General Commanding, 1st (Peshawar) Division offers no remarks.

Nowshera Cavalty Cantonment.—There are no jheels or marshes and places where water lodges are being ploughed and levelled. The water supply is of good quality, but somewhat deficient during the hot weather. The Nowshera Kalan, which is about two miles from the cantonment is very insanitary after rain, but the Civil authorities have been approached on the subject and are going to improve the place. An expenditure of Rs. 2,300 was incurred during the year on levelling and ploughing broken ground where water lodges.

The Principal Medical Officer of the 1st (Peshawar) Division remarks that the provision of a more liberal scale of coal for the pumping engine is an urgent sanitary necessity; and if not already done, a special representation on the subject should be made.

The Lieutenant-General Commanding 1st (Peshawar) Division states that the water supply arrangements are receiving attention.

Peshawar.—The irrigation water channels are being gradually made pucca as funds permit. The removal system is being gradually done away with and all latrine and urinary excreta are being consumed in incinerators, in the portions of the Cantonment under the Cantonment Committee. The present method of excreta disposal by carriage and burial at a distance is open to grave objections and might be met by a system of incineration on the spot. An expenditure of Rs. 5.940 was incurred on pucca irrigation water channels,

The Cantonment Committee remark that the chief measures now being carried out for improving the sanitary condition of the station are as follows:

(a) The abolition of servants latrines' in compounds and the erection of cantonment group latrines in their place. Twenty-three group latrines have now been completed, and the remainder will be built in the forthcoming year. This is a most important sanitary improvement, as it does away with private servants' latrines which are, as a rule, most insanitary.

(b) The introduction of incinerators for disposal of excreta and rubbish. Twenty-five incinerators, large and small, chiefly of a modification of Major Raint's pattern, have now been installed, and others are in process of construction. This method of disposal is undoubtedly suitable to Peshawar and does away with the necessity of filth carts travelling through the Cantonment and the consequent disadvantages.

(c) Making pucca the irrigation channels. This is strongly insisted upon by the medical authorities, as tending to reduce the numbers reeding grounds for mosquitoes. The cost of the entire scheme will be very large; R3,640 has been expended in the year under of breeding grounds for mosquitoes. The cost of the entire scheme review, and this work will be continued year by year as funds permit.

(d) The diminution of irrigation and vegetation on land adjacent to barracks; a quantity of land has been taken back from the Grass Farm and will be allowed to remain uncultivated.

They also make the following suggestions :-

Diminution of irrigation and vegetation; making pucca all kutcha drains; the removal of Grass Farm operations from the vicinity of the Cantonment; the removal of gradual extinction of the regimental bazaar; the rebuilding of the lines of the 53rd Sikhs and 59th Scinde Rifles; and the modification of the present system of excreta removal.

The Principal Medical Officer of the Division states that orders for the limitation of irrigation and cultivation have already been The Principal Medical Officer of the Division states that orders for the limitation of irrigation and cultivation have already been given by the Lieutenant-General Commanding. He considers a large extension of masonry surface drains a necessity, and that the work should be undertaken systematically as funds become available. A system of deep drainage is also called for, to relieve the water-logging of certain parts of the station, but this would be a matter far beyond local funds, and he is of opinion that any grouping of servants larrines should be carried out with extreme caution, as inflicting a constant hardship, if applied without great care, and tending to insanitary rather than sanitary results.

The General Officer Commanding the Division remarks that all that can be done with the funds available is now being done to improve the sanitary condition of the station. Irrigation has been reduced very largely; drainage is being carried out; much superflous vegetation has been removed; and incinerators have been introduced in most parts of the Cantonments. He adds that notwith-standing the medical cry for "more improvements", he feels sure that taken all round the troops are living in a hundred fold more sanitary surroundings than did their predecessors; and that no measures for further improving the Cantonment limits will be represented. neglected.

Simla.-No sanitary report.

Shillong.—The mullah between the married and single lines is being made into a pucca drain but the drains in the lines should be similarly treated for a further distance of 50 yards towards the river. The married lines are deficient in cubic space, lighting and ventilation, and recommendations for rebuilding them have been again sent to the Principal Medical Officer of the 8th (Lucknow) Division after his inspection. One drain at the back of the regimental bazaar to be made pucca (about 150 yards long). All kutcha latrines to be pulled down and Delhi Durbar pattern ones to be substituted; all catch-pits in the latrines to be filled up if possible.

The Cantonment Committee offer no suggestions.

TABLE XXX-continued.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

The Principal Medical Officer of the Presidency and Assam Brigades again recommends that the kutcha drains be made pucca in warious parts of the lines occupied by the ight Gurkha Rifles.

The General Officer Commanding the Assam Brigade states that the kutcha drains are being made pucca.

SOUTHERN ARMY.

Bangalore.—There are numerous tanks near the barracks which receive surface and storm water more or less contaminated with sewage, and these tanks form extensive breeding grounds for mosquities of all kinds. The surface drainage is still very incomplete, the drains in many cases ending abruptly in nullahs in which filthy stagnant pools are formed. New huiting lines for the 20th Deccan Horse are under construction. The bizaars are all in too close proximity to the different military units. Compounds and open spaces are kept clean; in some places, however, open drains discharge into nullahs, constituting an insanitary condition. During the year several of these masonry drains have been continued to some distance.

The Cantoninent Committee suggest that the surface masonry drains be extended and completed as funds are available and that an impermeable flooring be laid down in all latrines and urinaries, with the least possible d-lay.

The Principal Medical Officer of the Bangalore and Southern Brigades remarks that there are several tanks in the station which are a breeding ground for mosquitoes, and it would be an advantage if they were drained, and that the surface masonry drains are being improved as funds are available. In place of providing impermeable floors for the e isting latrines in barracks, he recommends that the most recent type of latrines be erected when funds are available and also that the villages Byderbulli near the Pioneer lines. Nilsandra near the 20th Deccan Horse, Yellacondon palaya near the 119th Infantry and Blackpelly near the 125th Napier's Rifles, which are hother to malaria and plague he purchased and depolished. beds for malaria and plague be purchased and demolished.

The General Officer Commanding the Bangelore and Southern Brigades agrees with the remarks of Principal Medical Officer in regard to the tanks, but the difficulties in the way of the course be suggests are in most cases insurmountable, and he considers that the best alternative is to put small fish and frogs into the tanks to attack the larvæ. He adds that funds are not at present available to give effect to the other improvements. As regards the purchase of the insatitary villages he states that the matter has had the attention of the General Officer Commanding the Division, but difficulties connected with expense bar the way to these desirable reforms.

Bellary.—Two large tanks are close to the cantonments, and the Fort ditch contains water which is used by the native population, but in view of the small rainfall and the usual scarcity of water, these are a necessity. The water supply for the troops is obtained from unprotected wells, the quantity is scarce in the hot weather, the quality is fair.

The Cantonment (ommitte suggest:—(a) the protection of No. 2 well from zerial pollution by providing a suitable roof, and (b) the improvement of the Allipore tank catchment area by acquiring two villages and planting forest on the now cultivated area; but they add that effect cannot be given to the suggestions unless lunds are sanctioned.

The Principal Medical Officer of the Bangalore and Southern Brigades repeats the suggestion he made last year, vis:—that the deep well from which the drinking water is obtained should either be satisfactorily covered in or the pump removed from over the mouth to one side.

The General Officer Commanding the Bangalore Brigade concurs with the opinion expressed by the Principal Medical Officer and adds that the question was gone into greater detail in correspondence between that officer and the Assistant Commanding Royal Engineer.

Bhamo. The existence of the marshy land just near the Fort wall is prejudicial to health, and many of the drains inside the Fort are not pucca. Although there is no deficiency of the authorised cubic space in barracks, the buildings themselves are far too crowded together for health. The accommodation for servants in the vicinity of the officers' quarters is inadequate. The night latrines inside the Fort are most insanitary, the pattern of latrine is a bad one, and the floors are in bad repair. There is no want of cleanliness as regards the drains but many of them lend themselves to the accumulation of stagnant water. The night latrines require reconstruction, and marsh lands and nullahs require draining as far as possible.

The Cantonment Committee suggest that the present main drain in the marshy land to the south-west of the Fort should be cleaned out and some new subsidiary drains dug. The pucca drains inside the Fort should be extended as far as possible and the drain outside the south of the Fort wall, between it and the Native Infantry cook-houses, made pucca. More servants' quarters should be provided. A new type of night latrine to be selected and adopted and the present ones gradually removed as far as funds permit and the floors of the remainder repaired. A few night latrines should be constructed for the use of officers' servants inside the Fort. As regards the prevalence of malaria they suggest that all troops be supplied with mosquito curtains at Government expense.

The Principal Medical Officer of the Burma Division remarks that the drainage in and arround the Fort needs looking to, and the matter is under consideration. He considers the question of the provision of mosquito nets an urgent one.

The General Officer Commanding the Mandalay Brigade is of opinion that Bhamo will never be a healthy site for troops, as the swamp bounding it on the south and south-west would have to be drained to make it so, and the cost of this is prohibitive. He has called on the Officer Commanding to experiment with several thousand seedlings of Eucalyptus Globulus. The accommodation for servants requires extension, but the Fort is overcrowded with buildings already, and when the garrison is reduced these should be sufficient. He considers that the provision of mosquito curtains for all troops and followers stationed in Bhamo is the least compensation that Government can give to the garrison for keeping them on so malarious a site. that the provision of mosquito curtains for all troops and figure to the garrison for keeping them on so malarious a site.

Colaba (Bombay).—The Native Troops lines are not sufficiently ventilated and are too close to the crowded Town, so that causes of infectious disease are not controllable. There is a drain running from south to north through the east side of the lines, which carries dirty water to one of the main drains of the City and is often very foul and offensive.

The Cantonment Committee make no suggestions.

The Principal Medical Officer of the Bombay Brigade remarks that as funds are forthcoming existing defects are dealt with. The chief of these are :-(1) the marshy ground on the foreshore, for which reclaiming is the only remedy; (2) the insanitary chawls; (3) the Officers' quarters, which are very old, ill-constructed and obsolete. He considers that an expenditure of a comparatively small sum would make this station the healthiest site on the plains of India, and such expenditure could be met and more than met by the disposal of Government lands in Bombay—The Town Barracks for instance—which are useless and insanitary. The Marine lines are grossly insanitary and quite unfit for human habitation, and nothing short of demolition and evacuation will meet the case; and, moreover, the location of a battalion there is a public nuisance. He concludes by saying that Committees have astembled from time to time, and the whole question of the location of troops in Bombay has been discussed for many years back, but no result follows; that it is practically certain if the matter were thoroughly taken in hand, the whole of the garrison could be accommodated in Colaba, very much to their benefit and at no cost whatever; on the contrary, Government would make money out of it.

The General Officer Commanding the Bombay Brigade states that the Marine Lines are certainly unfit for habitation but that

The General Officer Commanding the Bombay Brigade states that the Marine Lines are certainly unfit for habitation, but that nothing can be done until the large questions raised by the Military Lands Committee are dealt with.

Fort Sandeman.—The proximity of the bazaar is probably responsible for much malarial infection. The latrines in the lines being made of mud and stationary in position are responsible for much pollution of the surrounding ground; but these have been condemned and are now in process of demolition. The present position and buildings connected with the dairy cattle are insanitary, but efforts will be made to have these stands rebuilt in another position.

The General Officer Commanding the 4th (Quetta) Division states that malaria was very prevalent during the year owing to heavy rainfall and that the remarks made by the Principal Medical Officer last year have received attention.

TABLE XXX—concluded.

ABSTRACT of the CANTONMENT SANITARY REPORTS of the most UNHEALTHY STATIONS, SANITARY DEFECTS. IMPROVEMENTS, SUGGESTIONS, etc.

Jacobabad.—The Cantonment is intersected with canals and channels which form a favourable breeding ground for insect pests. The water supply is indifferent and brackish, and some of the wells have tanks close by in which people of the town wash themselves and their clothes. The accommodation is sufficient, but the family lines are crowded with people who have no connection with the regiment, but whose right to live there is difficult to contest. The conservancy arrangements in the family lines are defective, but it is practically impossible to supervise them. An expenditure of R1,889 was incurred during the year on the purchase of portable latrines and the provision of washing places for them.

The Cantonment Committee state that confidential proposals regarding the family lines have been submitted to the Assistant Adjutant General, 4th (Quetta) Division, but have been held over pending the receipt of a report by Mr. Mehta, Special Investigating Officer of Government title to Cantonment lands. They add that the attention of the Deputy Commissioner has been drawn to the extremely insanitary state of the bathing tank in the immediate vicinity of the Native Cavalry lines.

extremely insanitary state of the bathing tank in the immediate vicinity of the Native Cavalry lines.

The Principal Medical Officer of the 4th (Quetta) Division remarks that in his opinion the sanitary condition of the station is bad, and that no body of troops is likely to maintain a good standard of health at this station under existing conditions. The water supply is from open shallow wells and liable to contamination. Analysis of samples of water from them recently made by the Divisional Sanitary Officer showed it to be of very inferior quality. He recently inspected these wells and thought that all are liable to gross pollution and he recommends that the well near the hospital be properly covered, fitted with a pump and a high level tank whence water could be distributed to the lines by pipes. The numerous irrigation channels render it impossible to check the breeding of mosquitoes and saturate the soil with moisture; soils so sodden notoriously lower the general standard of health, and the presence of myriads of mosquitoes must inevitably lead to the prevalence of malaria. At the time of his inspection the trenching of night soil was very badly carried out and flies were being bred in them in large numbers. The family lines are grossly insanitary and a constant source of danger to the health of all persons living in cantonments. all persons living in cantonments.

The General Officer Commanding the 4th (Quetta) Division says that it must be admitted that the sanitary condition of this cantonment is bad, as owing to the uncertainty as to whether it was to be continued as a military station matters have been allowed to lapse, but it is hoped that it will be in a better sanitary state before the next report is submitted.

Nasirabad.—The surface drainage is defective and breeding grounds for flies and mosquitoes exist either within or in the vicinity of cantonments, but steps are being taken to improve matters by enforcing sanitary regulations.

The Senior Medical Officer makes the following suggestions:-

- (1) Improvement of the surface drainage of the cantonment;
- (2) Levelling up the bed of the nullah west of the barracks, and construction of a shallow cement drain along the centre of it;
- (3) Gradual levelling up of the deepest parts of the quarries, especially the one between the barracks and the railway station;
- (4) Improvement of the course and levelling up the bed of the nullah between the Officer's bungalows and the bazaar, also filling in the shallow diggies (tanks) in the vicinity;
 - (5) The constant stocking with small fish of the deep tanks.
 - (6) The replacement by a pump of the charsas drawn by bullocks at the Danta well.

The Cantonment Committee make no suggestions.

The Principal Medical Officer of the 5th (Mhow) Division concurs with the above suggestions.

The General Officer Commanding the Nasirabad Brigade also concurs and is of opinion that the use of incinerators should be extended as much as possible and that a more ample piped water supply is required.

Trichinopoly.—The half-completed drains in the lines of the 75th Carnatic Infantry are prejudicial to health and should be completed. Two small tanks on the golf links are a favourite breeding place of Anophelinae, though larvicides are constantly used. The pipe water owing to defective filter beds is contaminated, but these are being repaired, and the quantity being insufficient an intermittent supply is enforced. Many buildings need repairing, especially the latrines in the married quarters, most of which have earthen floors which are saturated with urine and sullage water, and these ought to be cemented; as even with the use of chatties or other receptacles some contamination of the floors is unavoidable. Mazapet meat market is often in a very dirty state. A great nuisance in the cantonment is the use as latrines of the shelter given by culverts. The condition under most culverts is disgusting in the extreme, and though a special policeman has been detailed during the past five or six months to arrest any offenders, the nuisance continues, and the police seem noweeless to prevent it. powerless to prevent it.

The Cantonment Committee suggest that the two small tanks on the golf links should be filled up and the completion of the drains in the 75th Carnatic Lines carried out at once. The culvert should be closed in by gratings so as to prevent the access of natives and a special conservancy police might be appointed to prevent this nuisance in future, and a policeman appointed to see that the Mazapet market is kept in a sanitary condition. The growth of paddy should be restricted to a certain distance from the limits of the town, cantonment and dwelling-houses generally. The bazaar in the South Infantry lines should be abolished or the families of the bazaar people compelled to dwell outside of the lines. Shops should be occupied during the day only, but the abolition of the bazaar would best meet the evil. The dwellings and latrines in the married quarters should be repaired immediately, and if it is not possible to meet the expenditure from regimental funds, then a special grant might be asked for; and pipe water should be laid on to the Military hospital.

The Principal Medical Officer of the Bangalore and Southern Brigades remarks that the Officer Commanding at Trichinopoly reports that no funds are available to carry out the work of filling in the tanks referred to above; that an estimate for Rs. 7,280 has been sent up for sanction to complete the drains in the 75th Carnatic Infantry lines; and that the Municipality has been addressed in regard to the fouling of the culverts. The Mazapet market is under the supervision of the Civil authorities, and the local Municipality will be addressed in regard to the cultivation of paddy at some distance from the cantonments. The insanitary bazaar in the South Infantry lines is the private property of the occupants, and no funds are available to buy them out. Repairs to the dwellings in the married quarters will be carried out regimentally; and the local Municipality was addressed in regard to a piped water supply to the Military hospital, but the work could not be carried out for want of funds.

The General Officer Commanding the Southern Brigade states that there has been neglect in the past in permitting over-crowding; and that drainage and clearings are especially necessary as the station is a dirty place a o

TABLE XXXI.

TABLE XXXII.

INFLUENZA by months, stations, groups, and armies.

CHOLERA by months, stations, groups, and

-	- 1		arm	ies.		. 0	-				_	_				-		-			mies.		. 5.		,	-
		ADI	MISSI	ONS	FROI	ı In	FLUE	NZA	IN E	LACH	MON	RTH.			A	DMIS	SION	S FR	ом С	HOLI	ERA I	N EA	CH N	ONT	н.	
STATIONS * AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October,	November.	December.	TOTAL.	January.	February.	March.	April.	May.	Jane.	July.	August.	September.	October.	November.	December.	TOTAL.
Manipur						1													1	1						2
GROUP III,-ASSAM		-																	1	1						2
Alipore			1										1													
GROUP IV.—HENGAL AND }	-	-	,	-			-					-	1										-			
	Total Control of														-									9		
Allahabad	-																	-	,							,
Fyzabad			***							***	resid							i	***		***		***			1
Cawapore		-		-	-	***		1	***				1		-			14						-	-	14
GROUP VGANGETIC PLAIN AND CHUTIA NAGPUR.								1					- 1					15								16
Bareilly A		1											1													
Dehra Dun		1	4	5	1	***	10				***		11	***	***		***				2					2
Ambala B			***		***	***	***	***				***	***		***	***	***		***	1	***		***	***	***	1
Ferozepore	9	2	*	2		***			***	***			17	***				***			1	1				3
Sial kot		***	***			***							1									***	1	***	***	1
Jhelum	2	1	1	2					***				6	***				***				***	2			2
Rawalpindi					***						***		***	***				2	2				2			6
Attock		100				***					100	***	***		***									1		1
GROUP VIUPPER SUB-	11	5	9	9	1		1						36	***		0.1		2	2	3	3	1	5	1		17
Mardan	8	1											9				***		1							1
Nowshera	18	8	1	2					***		1		30	***				3	3	2	2	***		1	***	11
Peshawar	9	***	2				***				***		11	***		***	***	5	***		***		1			6
Kohat	. 1		-		***			***					1	***		***			***	1			***		***	1
Edwardesabad	1		1		***	1	2	***			***	1	6	***				5	1							6
Dera Ismail Khan		1	***				***	***	***		***	***	1	***			***		2	***		***	***		***	-,
GROUP VII.—NORTH- WESTERN FRONTIER,	-	***	***		***				-	141					***	***		***								-
Western Frontier, Indus Valley, and North-Western Raj- PUTANA.	37	10	4	2		1	2				1	1	58	-				13	7	3	2		1	1		27
В	-											3														
Erinpura	3	1				***	***	***	***		***	***	8				***			***						
	-		-	-		-		111		-	100		-	-	-	-						-			-	-
GROUP VIII.—SOUTH- EASTERN RAJPUTANA, CENTRAL INDIA, AND GUJARAT.	11	1											12													
Saugor																***			1		***	***				1
Jubbulpore	2	10	7	1				***					20						***	-	***				***	
Bolarum		***					400	***									***		***	***	1	***	***	***		1
Secunderabad	23	17	14	6	5	3	2		8	1	1		80		***		***		1	18	11	1	1		***	32
Kirkee					***					28	11	24	63	-		***		***					14+	10-	***	
GROUP IXDECCAN	25	27	21	7	5	3	2		8	29	12	24	163		***				2	18	12	1	1		***	34

TABLE XXXI—concluded.

TABLE XXXII—concluded.

INFLUENZA by months, stations, groups, and armies.

CHOLERA by months, stations, groups, and armies.

		ADM	18810	NS F	ком	Ise	LUEN	ZA IN	EAC	нм	DNTH				100	ADM	18810	NS F	ком	Сно	LER	A IN	KAC	н мо	NTH.	
STATIONS, GROUPS, AND ARMIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Torat.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December,	Total
Santa Cruz		1	1						1				3													
GROUP X,-WESTERN COAST	-44	1	,				-						3		-									-		
A Bellary									***				-						1	1	3	1				6
Bangalore			1										1		***	-			***						***	
B Trichinepoly																					-	-			4	
Madras							***						***		-					***	<u>-</u> '		***		***	-
GROUP XISOUTHERN }	-		1										1						1	1	4	-			4	"
Shillong			1	14									15				1									
Gangtok														-							1	***	***			
Lansdowne												1	1							2	2	***		***		9.0
Dharmsala			-	5		-		"	***				3	***	-				***	***						
Bakloh	7	14	7						18				47		-			-	4	27	4		-			36
Fort Sandeman															-					***	***		**	1		
Loralai	5	6	8	3	2							-	. 24													
Quetta	11	5	4			1							21	-		-			-	_	_			-		
GROUP XIIHILL STA-	23	25	20	22	2	1			18	1		1	113				1		4	29	7	1	***	1		43
Marching, India			2		,						1	1	5					4		3		1	2	1	-	12
EXTRA INDIA- (b) Not in the Indian Command:—										1					1	-			1000	P. Contraction			-	-		
Lutai)	3	1									***		4													
Shan-hai-Kwan	3		***										3											1		
Hong-Kong (South China) .			7	8	7	5	7	13	18	5	5	6	Sı													
Mohmand F. Force			***		1								1					9	3		-			-		12
ARMY OF INDIA .	113	70	66	48	17	10	12	14	45	35	19	33	482					43	22	58	28	5	9	4	4	174
									18			2	164				1	30	13	36	12	2	6	2		102
NORTHERN ARMY	55	29	22	30		1	3	1	10	1		-	.04						-0							R
SOUTHERN ,,	52	40	33	10	7	4	2		9	29	12	24	224						5	10	16	n.	1	1	4	48

TABLE XXXIII.

TABLE XXXIV.

ZNTERIC FEVER by months, stations, groups, and

PYREXIA OF UNCERTAIN ORIGIN by months, stations, groups, and armics.

		a	rmie	15.								- 1	-	-	-	-	-	15, g		-					_	
		AD	M1881	ONS	FROM	EN	TERIO	Fev	VER I	N EA	сн м	ONT	н.		Ai	DMISS	HONS	FRO	M PY KACH				ERTA	IN C	RIGI	e IN
STATIONS* AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	luly. *	August.	September.	October.	November.	December.	TOTAL
Port Blair													=	9	26	17	3	12	6	ïi	13	3 8	1 14	13	1 4	136
GROUP 1.—BURMA COAST AND BAY ISLANDS														9	26	17	5	12	8	11	13	11	15	13	5	145
Melktila Fort Dufferin			2					:::			···		2 2	::			4			2	2	ï			4	6
GROUP II.—BURMA INLAND	1		2	1						1	1	201	6				1			2	2	1			4	10
danipur	***		***		***	***	***	-	***		***					***	***					141	***	5	4	9
GROUP IIIASSAM									-															5	4	9
Fort William Alipore Barrackpore Buxa GROUP IV.—BENGAL AND ORISSA			:::::						-		1		1	2	1 2	4	6 1 5	2 1			12 3	7	4 ::::: 4	6	2	46 4 1 6 57
B Allahabad Fyzabad Lucknow Cawnpore		1111		11-11	11111											1 6	1 11 1	: 16 :	1 1 2 1	6	1 2		3			9 34 2
GROUP V -GANGETIC PLAIN AND CHUTTA NAGPUR.			-			-	-						1		1	7	13	6	2	9	3		3	1		45
Bareilly	8	3			5 : 1	10	7	14	4	3		111111111	 7: 3	-			2 4 1 1	30	2 8 28 9 1	1 46 3	6661	5 12	4		10 11 11	4 39 124 16 10
Lahore Cantonment					1 2	6 2	1	2 - 2	3 1				1 12 9 4		1 2	2 9	5	1 1 8	9 4 1 13	7	17 5 1 17	5 23	39	1 27	1 2 16	73 26 3 173
GROUP VIUPPER SUB-	8	4	4	4	1c	19	8	21	12	7	3	11	111	3	6	17	20	43	81	90	54	71	46	29	21	481
Mardan		2 1	10 11 11 11	1 4 1 1	3 1 1 2 4 1 1	2 2	3 2 1 1 1	1 1 1 1 20 1 3 1 1				3	1 8 15 15 18 9 7 1	1 2	4 2	1		10 6 3 2 14 4	7 7 1 2 5 9	8 7 3	11:3-0-	4 1			1111111111111	8 29 14 1 13 11 32 18 4
Hyderabad	ï											***	"1	=		***	";		1			1,	3		::	5 4
GROUP VII.—NORTH-) WESTERN FRONTIER, INDUS VALLEY, AND) NORTH-WESTERN RAJ- PUTANA.		3	13	8	13	6	7	14	2		4	3	75	4 1	6	1	9	39	33	19	S	9	6	4	1	139
Rajkot		1	1		==	:::		=	=				2		111					- ::						1 1 2
The same of the sa		=		1=				2		-			9 1	1			1	***	5	6	5	2 1 1				18 4 2
GROUP VIII.—SOUTH- EASTERN RAJPUIANA, CENTRAL INDIA, AND GUJARAT.		1			,		1	3	1	-	1	,	14	1	-	1		3	1	1		4	1	Tabl	1	31

TABLE XXXIII—concluded.

TABLE XXXIV—concluded.

ENTERIC FEVER by months, stations, groups, and

PYREXIA OF UNCERTAIN ORIGIN by months, stations, groups, and armies.

A STATE OF THE STA		arn	nies.		-											5	tatio	155, 2	grou	ps, a			ies.			
The state of the s		ADM	issio	NS F	ROM	Ent	TERIC	FEV	TER I	N E	CH	MONT	тн.		A	DMIS	SION			PYRE			INCE	RTAL	N OR	IGIN
STATIONS, GROUPS, AND ARMIES.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Saugor Jubbulpore				1 1	111					3 1			4 4 1	5	4	2	3	2	3 3	5 1	3	5				29
Aurangabad			:: : 2 :: 2 ::	-			1 1 2		5 1 5 1				6 11 1 12 2	2 7 8 8	2 :: 2 2 2 8 9	3 - 2 2 :: 11 9	2 4 9 9	3345:99	6 2 55	1 2 58 :08	3 6 5 10 7	52 51 .: 54	6 6 8 7 13 3	3 4 2 14 3	1 2 2 20 : 4 10	29 21 51 46 2 106 107
GROUP IXDECCAN	3		4	2	2		. 2	5	13	6	2	1	43	31	29	37	29	35	38	50	35	27	43	27	27	408
Bombay Santa Cruz Cannanore GROUP X.—WESTERN COAST						1		:::			2		1		1		 ī		1 2 3	1 1 2		1 9	:: 2		2	2 18
Α .	***		***			2			***		2		4		1		1		3		***	10				
Bellary Bangalore St. Thomas' Mount				-				-						2	2	6	9	12	13	8	4	1	3 . 5		"1	59
Madras		1									***		i	-	***			-						***		
GROUP XI.—SOUTHERN INDIA		1							,				2	3	3	12	10	13	15	10	4	1	9		2	82
Maymyo Kohima Shillong Gangtok Almora Lansdowne Simla Dharmsala Khyragali Baragali Kila Drosh Malakand Dargai Chakdara Abbettabad Fort Sandemaa Ouetta Shelabagh Chamaa Ootacamund				3	3	2 6	7	5 5	1 2 2 3 4 4 4 4 5 1 5 1	1	2	2	6 1	8	1	10 10	3 2	38 13 1	77 1 1 1 58 13	51 5 3	3 3 3 24 5 5	3	6 31 4	3 5 1	6	10 3 30 3 3 1 1 58 8 3 1 1 1 1777 1744 3 3 2 1 1 1
GROUP XII.—HILL STATIONS	2	1	2	.4	8	13	11	15	13	14	2	2	87	9	4	13	15	63	82	59	55	61	42	30	10	443
Marching India EXTRA INDIA. (a) In the Indian Command:— Aden Khormaksar. (b) Not in the Indian Command:—								1 11		-				6	3		6	14	3 29 1	7 1	4	. 4	3	2	8 1	24 87 3
Singapore Tien tsin Lutai Shan-hai-Kwan Hong Kong (South China)		::							:::::		1		2		4	3 :: - :	=				8 6	I 10	2 : : 4	1 3	1 4	8 13 1 47
ARMY OF INDIA .	15	10	26	20	34	41	33	58	45	30	18	20	350	76	92	113	123	245	305	275	213	217	180	124	93	2,056
NORTHERN ARMY SOUTHERN ARMY	10 5	7 3	18	14 6	30 4	37	26 5	49 9	20 25	18	8 9	14 4	251 94	7 61	14 67	32 77		91		168 99		96	62 f12	15	35 53	952

TABLE XXXV.

MALARIA by months, stations, groups, and armies.

TABLE XXXVI.

PNEUMONIA by months, stations, groups, and armies.

a post to	1	1000	1	4.013	armi	es.				-	100	-	-							and	_					
			Apr	MISSIC	NS F	ROM I	MALA	RIA II	BAC	н мо	NTH.			_		A	MISS			MON		MON	IA I	N		
STATIONS® AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Port Blair Rangoon	1 10	6	3	7 9	11	26 9	6 10	12	4 2	8	4 4	1 4	77 91	-									1		2	;
COAST AND BAY	11	6	14	16	26	35	16	15	6	10	8	5	168	-									1		2	
				101			-																		1	
feiktila ort Dufferin	27	7 27	16 17 6	3 11	2 25 12	9 25 15	19 16 36	7 11 48	2 13 40	11 40 76	\$ 23 36	8 27 28	89 263 298	=	2	3 1								1	3	
ROUP II.—BURMAL	27	35	39	14	40	49	71	66	55	127	64	63	650	-	2	5	2	1			1			2	3	
fanipur	9 5	9 .: 2	10	18	11 3	30 2 11	27 4 30	15 6 15	15 3 26	24 4 57	17 3 25	6 18	191 24 197	=		2								101	4	
ROUP III.—ASSAM	14	11	12	22	15	43	61	36	44	85	45	24	412	-		2		1						1	4	8
Fort William	55 15 4	1 2 2 1	2 12 5	8 1	3 4 6	19 5 2 4	13 3 41 4	6 11 44 2	2 25 27 1	12 17 42 1	15 14 58 4	10 12 11 4	8 ₁ 16 ₅ 25 ₂ 3:	5	- : : :		1	1		· · · · · · · · · · · · · · · · · · ·		1	1	100	4	to the flere
GROUP IV.—BEN- }	75	6	20	9	14	30	61	63	55	72	91	37	533	7	1		1	,		1		2	,	3	5	22
B Dinapore senares Ulahabad yzabad yzabad awnpore atehgarh	2 1 6 6 8 1	7 5 3	3 3 3	4 5 1 5 3 5	2 3 7 0	4 3 6 4 6 1 2	1 3 5 2 8 2 1	24 6 12 7 8 28 2	86 20 55 17 41 69	64 20 142 112 78 106 34	14 83 58 72 67 7	4 13 12 32 31 16 2	205 71 343 230 259 299 79		7	11141	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 1			2	1 1 1 1	1 1	2 - 2 2 2	8 3 4 6	15 3 5 14 31 14
GROUP VGAN- GETIC PLAIN AND CRUTIA NAGPUR.	24	16	11	24	22	26	22	87	307	556	301	110	1,506	14	9	5	8	6			3	3	4	9	22	83
A Bareilly	9 3 96 6 30 6	25 7 20 	27 8 5	4 47 6 11 1	7 34 11 11 3	4 51 5 11 2	10 48 16 13 5	35 94 65 102 13	87 62 144 147 189 27	154 21 470 177 145 45	22 1 439 139 105 16	18 334 34 25 11	351 87 1,809 621 667 129	7 3/6 6 3/6	4 4 1 3	 1 4 6 1	1 2 1			3	1			3 2 8 1	15 1 3 2	8 7 35 26 19
B allandar erozepore abore Cantonment imitsar isalkot helum kawalpindi ttock	5 11 1 11 23 8 2	5 8 1 11 14 2	1 4 1 1 22 10 4 1	744:14931	13 32 6 1 7 9 8	17 13 6 36 40 16	9 12 2 6 18	20 22 2 4 17 59 5	53 359 59 21 63 334 39 5	140 201 89 16 104 178 72 3	207 88 25 2 67 221 60 6	118 46 18 36 245 21	595 800 208 52 394 1,160 249 40	4 6 10 2 16 12 9	****	2 8 1 1 5 6 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2	2 1 1 2				3 4	3 8 6 2	7 56 1 77771	25 26 24 5 51 36 26
GROUP VI.—UPPER } SUB-HIMALAYA. }	212	94	84	111	144	201	151	442	1,589	1,820	1,398	916	7,162	90	26	37	10	5	7	6	4	3	12	38 6	5.4	302

TABLE XXXV-continued.

TABLE XXXVI—continued.

MALARIA by months, stations, groups, and armies.

PNEUMONIA by months, stations, groups and armies.

-			App		NS FR	ом М	IALA	R1A 12	EACI	H MOZ	NTH.				ADMI	8810		ROM		UMO	NIA I	N E	ACH	м	ONT	
STATIONS AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October,	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December,	TOTAL.
Mardan Nowshera Peshawar Fort Jamrud Kohat Thal Edwardesabad Dera Ismail Khan Jatta Drazinda Fort Zam Multan .	11 44 43 1 69 87 129 5 2	4 18 19 34 2 41 71 1 2	1 50 36 27 36 2	4 31 23 57 1 11 41 41	65 25 75 2 37 110 1 6	\$50 68 85 4 40 89 3 10 10 8	2 38 35 50 19 61 48 3	7 30 66 2 206 0 22 92 1 11 2 18	55 133 263 7 300 14 44 345 4 8 8 2 83	49 200 437 6 207 207 187 605 10 10 5 301	42 150 387 5 157 35 234 759 16 13	11 79 163 3 120 122 203 366 9 6 4 95	188 912 1,570 24 1,391 119 994 2,751 53 71 26 670	10 19 12 20 11 32 1	3 3 8 14 2 16 3	335 2 48 : : : 5	32	1 4 2 1 1 1	77	11-11-1111		4 4 2	4 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 3 11 5 4 6 6	667 2 2 4 4 4 14	31 44 55 58 2 35 85 1
Jandola	3	6	2	4 3	6 3	30	12 1	29	15	33	39 1	8 5	187 16		1				11					_	11	3
C Jacobabad	- 44	12 4 10	8 2 4	3 3	7 12 3	13	3	2 4 26	10 4 39	21 18 85	101 82 58	34 43 10	221 195 264	2 3 2	2 1 1	5		1	1				1 2		6 3 3	18 9 7
GROUP VII.— NORTH-WEST- ERN FRONTIER, INDUS VALLEY, AND NORTH- WESTERN RAJ- PUTANA.	424	228	200	186	361	421	278	537	1,329	2,250	2,222	1,196	9,652	128	54	35	10	12	13	5	5	10	15	36	54	377
Bhuj	13	2 1 14 8 31	3 1 2 12 15	3 :: 55 2	1 1 6 11 2	2 6 6 4	3 5 4 13 5	3 19 3 13 15	5 4 4 22 41	5 11 10 33 127	5 3 24 35 724	2 5 16 50	38 59 66 86 47		 1 3 4	I 1	1				2 1	1111	-	2 1		9 9 13
Sirdarpore Kherwara Kotra Todgarh Erinpara Neemuch Deeli Beawar Nasirabad Ajmir Jaipur Agra Bhans Nowgong Goona Agar Sebore Indore Mbow	4 2	2 38 1 1 2 2 18	1 2 2 1 8 24 1 5 28	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3331111661111	11 26 2 2 2 2 16	5 1 1 3 37 7 5 1 1 16	11 14 6 6 17 79 14 12	20 10 2 7 304 43 1 1 10 1 43	18 7 7 4 106 20 8 5 5 379 46 22 13 3 39 9 2 81	9 5 1 1 104 6 2 14 6 6 2 11 4 5 4 5	32 1 1 14 103 3 3 1 1 26 54	4 1 4 78 18 16 1 30 58 14 11:18 157 34 140 18 360	4 4 4 4 4 4 4 1 1 1 3 3	4 3 3 1 3 3 2 2	3 3 3	2 1 1		1	3	1		3		2 1 7 1 7 1	2 10 3 3 12 14 15 11 14 6 6
GROUP VIII.— SOUTH-EASTERN RAJEUTANA. CENTRAL INDIA, AND GUJARAT.	176	126	107	82	101	85	119	214	549	945	676	318	1.4 98	29	29	24	7	3	3	5	5	-	8	"	24	149

TABLE XXXV-continued.

TABLE XXXV-continued.

MALARIA by months, stations, groups, and armies.

PNEUMONIA by months, stations, groups and armies.

-			ADS	418810	NS FR	OM M	ALAR	IA IN	EACH	MON	тн.		-		Армі	8810			-	-	NIA I		ACH	MC	ONT	
STATIONS AND GROUPS.	January.	February.	March,	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL	January"	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Saugor	32 11 6 2	18	4 1 2 11	17 3 6	16 5 4	4 7 3	8 15 4 	10 1 19 1	34 3 77 14 	94 5 157 30 	94 1 75 19 	94 1 38 5	425 12 409 103 3	2 1 2	3	1					3	1 1 1 1 1	1 1 1 1 1	11111	552	8 1 14 3
B Aurangabad	8 7 8 3 3	6 3 1	8 4 2 16 4	10 1 3 16 2 3 4	6 4 1 21 3 2	1 2 4 7 18 	8 5 19 8 16 1 13 25	6 4 22 9 10 1 6 16	22 15 28 30 7 1 8	56 27 24 10 15 1 11 60	55 5 10 28 14 4 33	19 12 28 9 5	210 63 138 137 146 6 54 179	2 4 2	1 1 2 1 1 2	1	1	3	2	1 14	12 11-1-1			32	2 7	4 12 6 21 18
GROUP IX -DECCAN	80	43	52	66	63	58	122	105	249	49>	338	219	1,885	1	11	9	5	6	3	6	8	9	11	7	26	116
Bombay Santa Cruz	29	17 9	9 38	9 3 1	6 5 1	16 4 1	15	23 5 ::	41 10	84 43 1	45 16 1	36 55 	330 168 13 2	2	4	2				· · ·		1111		1	***	8 2
GROUP XWEST-	43	26	20	13	13	21	16	28	51	128	62	92	313	2	4	2				1		-	-	. 1		10
Bellary Bangalore	62		3 2	23	42	t 82	77	46	67	2 128	127	2 30	8 692	2		2		3	3 1	1 4	3			1 5		4 31
B Trichinopoly St. Thomas' Mount Madras		2			-1:	1 2	 1 			1 1	6 2 1	1	10 4 5	100												
GROUP XI.— SOUTHERN INDIA-	62	8	S	23	43	85	78	46	67	132	136	33	719	2	1	2		3	4	5	3		1	1 5	5 7	36
Bakloh Khairagali Ba-agali Kalabagh Chitral Kila Drosh Malakand Dargai	55 1 13 13 10 10 11 11 11 11 11 11 11 11 11 11 11	77 100	4 9 9 3 8 10 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 8 20 3 15 15 158	4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	36 20 5 8 81	25 2 1 23 12 1 20 64	18 23 91 152 101	7 9 2 5 7 62 243 160	7 1 2 12 56 82 146 117	132 65 132 133 173 133 133 133 133 133	9 7 7 5 9 51 12 28	23 139 238 18 4 7 7 3 146 215 371 722 1,102	32	22 22 23 24 24 24 24 24 24 24 24 24 24 24 24 24	2 5 1		3 3 3 4 4	3 3 3 3 4 4	2 1 1	2 1			33 - 11 11 11 11 11 11 11 11 11 11 11 11 1	4 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	4 6 6 2 49 1 2 2 2 2 5 100 23 111 6 6 70 1

TABLE XXXV-concluded.

TABLE XXXVI—concluded.

MALARIA by months, stations, groups, and armies.

PNEUMONIA by months, stations, groups, and armies.

			A	MISSI	ONS P	ROM	MALA	RIA I	N EAC	н мо	NIH.			1	Армі	8810	NS F	ROM	PNE	имо			ACI	и мо	NTH	
STATIONS, GROUPS, AND ARMIES.	Jamuary.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September,	October.	November.	December.	TOTAL.
Mir Ali Khel Fort Sandeman Hindu Bagh Musa Khel Kila Saifulla Murgha Loralai Gumbaz Quetta Robat Pishin Shelabagh Chaman Mount Abu Ootacamund Camp Lovedale	30	3 :: : : : : : : : : : : : : : : : : :	32 5	31 19 19 1	1 5 13 1 2 3	15 17 3 3 5 1 21 2 1	11 4 3 3 5 4 30 5 1 5 5	10 11 7 1 8 10 27 4 62 1 1	14 40 5 3 13 7 7 117 3 137 	20 11 2 4 6 33 4 97 2 	3 24 3 45 3 61 2 1 24	15 15 31 32 31 3 31 4	84 130 17 15 28 35 24 17 5:9 15 1 4 6 83	13 13 11 11 11 11 11 11 11 11 11 11 11 1	3 3 3 5 1 1 1	3		4	3			8 8		3	8 110	2 21 31 78 3 4 2
GROUP XIIHILL STATIONS.	276	138	167	288	295	330	330	674	1,055	1,029	725	318	5,545	84	36	45	21	18	18	8	6	16	19	39	65	375
																							1	1	T	-
Marching, India .	73	52	35	7	19	41	45	77	140	164	336	101	1,090	19	13	13	1		3			2	2	8	16	77
EXTRA INDIA. (a) In the Indian Command:— Chabbar lask Muscat Baghdad Aden Khormaksar Perim	923:4::	4 1 4 1		2	2 1 4	5	1 2 2	4 :: 1 :: 1 :: 1	6 :: : : : : : : : : : : : : : : : : :	9	2 3	10 6 1	53 5 11 24 10 2							2			1111111	11-11		2 4
(b) Not in the Indian Command:-								0															1			
Colombo (Ceylon) Singapore Tien-tsin S h a n- h a i- Kwan Kwan Hong Kong (South China) Bazar Valley F. F. Mohmand F. F.	20	3 1 6 6	1 2 	9	6 6 2 80	6 12 1 7 29	5 14 5	6 3	30	45: : 9::	9 4 3	10 3 	59 63 1 1 119 7 109	111		3 1		1 1 12							1	7
ARMY OF INDIA .	1,551	816	793	ES7	1,167	1,491	1,399	2,406	5,538	7,847	6,424	3,478	33,797	392	197	184	68	72	59	39	38	49	75	160 2	90 1	,623
Northeen Army .	956	445	453	605	709	973	813	1,671	3/992	5,456	4,365	2,434	22,882	288	111	102	46	37	34	16	17	21	40 1	103 :0	59	984
SOUTHERN ARMY .	486	303	270	253	345	422	517	645	1,372	2,209	1,707	925	9,466	83	63	65	19	19	15	22	20	24	32	48 10	3	513

TABLE XXXVII.

TABLE XXXVIII.

DYSENTERY by months, stations, groups, and armies.

DIARRHOEA by months, stations, groups, and armies.

-	14		A		ssiot		ом І	Dyse	NTER	Y IN	EAC	н мо	NTH.		-		ADME	ssion	CS FR	юм І		RHOE		EAC	сн м	ONTE	
STATIONS* AND GRO	ours.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	Jane.	July.	August.	September,	October.	November,	December.	1
Port Blair Rangoon	: :		2	23		6 7	4 12	2 4			2 7	2 8	7 6	25 82	-	1							1	-	1	1	3
10 mm	COAST		2	23	9	13	16	6		2	9	10	13	107		1									1	1	4
Meiktila	1														-										1		
Fort Dufferin Bhamo			10	7	1		1	2	1 10	7	4 5	3 3	12	19 15 30	4	9 1	8 1		···	3	5	4		5	3	2	21 25
GROUP II.— BURMA II	NLAND	1	11	7	2	1	2	2	12	7	10	6	3	64	4	12	10			2	6	4	1	6	3	2	51
Manipur Dibrugarh	: :	4	5	2	2	3	2		1	1	4	3	3	28	-			3	5	6	2				1		18
GROUP III.—ASSAM		4	5	2	2	3	2		,	1	4	3	3	31	-		1	3	5	6	2				1		18
Fort William . Alipore . Barrackpore . Buxa .	: :	4	5	3	2000	1 3 1	3 2 3 1	 2 14 	7614	7 12 1	10 6 14	2 4 11 2	4 10	37 35 99 9	2		···				1011						1 2 2
GROUP IV.—BENGAL ORISSA	AND	5	6	6	20	6	9	16	28	20	30	19	15	180	2		1								1		5
B Dinapore Benares Allahabad Fyzabad Lucknow Cawapore Fatebgarh		1 :: 32 2 5 ::	1 6 1		7 2 8 1	1 4 11 1 3 3	2 1	1 3 	3 3 15 2 8 3	5 3 11	4 8 27 9 12 8	 17 13 38 5 1	96 26 3	14 25 116 38 105 32 1			1	1111111								2 2 1	3 4 3 1 2
GROUP V.—GANGETIC AND CHUTIA NAGPU	PLAIN	13	9	11	18	23	5	5	34	26	68	74	45	331		-	2	-	-				ı		5	5	13
Barcilly		332	3	1 :: 2 4 3 2	1 8 4 2	1 ::: 12 9 3 9	1 2 4 3 2 1	3 13 2 1	6 :88 5 3	11 1 17 13 3 19	29 4 24 11 6 16	6 2 25 17 6 12	7 1 22 4 5 9	66 10 141 78 36 74		3 :: ::						1 3 1	 I I 12	1 2 4 3	3 1		3 11 11 22 1
B Juliundur Ferozepore Lahore Cantonment Amriksar Sialkot Jhebum Rawalpindi Attock		5 32	3 2 1	3 1 3 4	3 3 1 1 3 5 1	3 7 1 5 2 10	2 7 1 1 3 2	2 14 1 11 1	4 2 3 5 7 2 1	12 11 6 1 13 11 3	13 16 23 2 12 22 11	12 31 17 19 9 15	4 13 5 2 5 23 2	56 87 77 10 66 85 56	11111111		 2 1 3 1	1 1 1	2 2 3 1 1	2 1		1 2	1	1 1	2 3 2 2 1 1		5 11 4 7 15 11 6
GROUP VIUPPER HIMALAYA .	Sus-	21	10	24	32	62	29	28	54	123	189					4	7	9	9	5	4				16	11	101

TABLE XXXVII-continued.

TABLE XXXVIII-continued.

DYSENTERY by months, stations, groups, and armies.

DIARRHŒA by months, stations, groups, and crmics.

-	ADMISSIONS FROM DYSENTERY IN EACH MONTH.										AD	MISSI	ons	FROS		ARRE	DEA	IN K	ACH	MON	тн.	-				
STATIONS AND GROUPS.	laneary.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Tozal.
Mardan Nowshera Peshawar Fort Jamrud Kohat Thal Edwardesabad Dera Ismail Khan Jatta Drazinda Fort Zam Multan	148 : 2 : 58 2 : : 1	1 2 3 :: 2 :: 6 7 :: :: 3	13 20 11 4 8 1	2 14 5 3 2 2 6	20 12 9 2 5 8 	3 20 12 10 17 2	 5 9 18 3 5 	13 8 17 4 8 8 1	5 28 16 4 20 13 21 2	2 22 16 2 23 3 21 28 1	4 22 16 32 1 8 17 35 17 	1 12 17 1 9 1 11 13 1 5	18 191 142 7 136 13 3 12 4 49	52	 2 1 3 		3 2 1 3 1 1 2	33:1:5:1	:34:2:5::::	13	: [n o o o n n	211123391	2 2 2 3 4 8 1 1 1	: 52 : 2 54 : : : 5	121 12 12 14 11 11 11	2 21 28 2 41 2 27 66
Jandola	-:	1 2		4	4	2 1		5	I	8	5	5 1	37 5	1	1	11	1	1		3			3	2		13
Jacobabad	1 2	1 1 1	2	1			1 1	4	3 9	5	7 4 6	13 6 3	25 24 27			4	2		-					: 4 2	:: 5 4	 11 15
GROUP VII.—NW. FRON- TIER, INDUS VALLEY, AND NORTH-WESTERN RAJPUTANA	44	30	61	41	65	75	44	69	126	153	138	100	946	12	7	31	15	13	16	20	18	21	22	39	30	244
Bhuj			1 1 1	2 1			-1111	1 18 6		7 3			6 1 3 25 25 25			2				2 2			===	=======================================		1149
Kotra Erinpura Neemuch Deoli Beawar Nasirabad Ajmar Agra Jhansi Nowgong Goona Agar Sehore Mhow	18	1	1 1 1	1 8 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 4 2	2 2 3 3	4 2	233	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 3 2 2 5 5 5 2 1	 2 8 7 1	1 14 9 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 2 2			1 1	3 3 1			1 4 4	2 1	1 2 3 1	771 2 2	3 :: : : : : : : : : : : : : : : : : :	17 5 23 4 3 4 11
GRGUP VIII.—SOUTH-EAST ERN RAJPUTANA, CENTRAL INDIA, AND GUJARAT	1	5	7	20	16	10	12	60	42	32	32	29	290	8	2	3	4	7	,	5	11	8	18	12	5	84
Saugor · · · · · · · · · · · · · · · · · · ·	3	1 2	111111111111111111111111111111111111111	1 9	2 5	2 4	8	2 26	3 10	9 1 9	16	12	22 2 115 1	- ! - !	1171		11-1	1111		1-::					:: 3	1 10 1

TABLE XXXVII -- continued.

DYSENTERY by months, stations, groups, and armies.

TABLE XXXVIII—continued.

DIARRHŒA by months, stations, groups, and armies.

	ADMISSIONS FROM DYSENTERY IN EACH MONTH.									A	DM18	SION	S FR	OM D	DIAR	RH OB/	IN	EAC	н мс	NTH						
STATIONS AND GROUP	January.	February.	March	April.	May.	June.	July.	August.	September,	October.	November,	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August	September.	October.	November.	December.	TOTAL,
B srangabad	4 9 1 1	4 4 3	1	3 2 2 1	1 6 4 3	1 2 6 4 1	1 5 44 1 3 5	4 1 12 80 7 1 11 3	2 1 11 20 1 4 2	5 0 19 1 4	3 4 6	2 3 35 1 2	14 15 52 236 24 2 41 17	111111111111111111111111111111111111111	4	3	3 2		1 5 3 ::: 2	3 11 1 5	2 5	3 1	3	1 1 2		2
ROUP IX,—DECCAN	. 21	15	26	20	21	20	69	147	54	58	33	57	541	4	7	4	8	1	11.	23	14	6	5	5	7	9
ombay	. 3	3	4 2	2 2	2 6 1 1	3	1 10	5 13	1 41 ::	5	5 9	6 10 1	27 84 7 2	3				 1	2		3 2	3	1 2	2 2	3 ::	1
ROUP X.—WESTERN CO	AST 18	4	6	5	10	4	11	18	6	7	14	17	120	3			1	1	2		5	3	3	4	7	2
ellary	10		-	3	1		1 10	1 52	5	1 18	7	2 5	8 131	7	::					2		4	5		2	
chinopoly Thomas Mountdras	: 1	1	-		-			1			2 2 2	1 2	5 7 11	===		111			 2 					5 1	111	
OUP XI.—SOUTHERN I	EDIA 12	2 21	4	5	2		12	55	6	20	14	10	162	7	-	-			3	2	2	4	3	6	2	-
aymyo ohima illoog ungtok yantse mera aini Tal unsdowne mia togh harmsala kiloh harmsala kiloh haragali alabagh hitral la Drosh alakand sirgai nakdara obottabad serat et Lockhart angu ir Ali Khel wi Khel usa Khel	. 2		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 1 2 2 7 3 1 1 4 1 1 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1	17	5 2 2 1 1 2 2 1 1 4 4 4 2 17	4 4 3 = 7 1 3 1 1 1 1 1 1 1	3 2 16 1 4 10 13 3 1 11	3 3 1 9 1 3 3 3 2 2 2	3773	3 3 8	6 1 1 2 2 1 1 3 1 3 1 1 3 1 1 1 1 1 1 1 1	32 9 21 3 3 3 15 3 96 34 21 10 30 10 9 93 3 3 12 2 47 4 6		3 3	1	1 2 4 4	1 2	3	5	2 1 5 5	5 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	1 1 1	1	2	33 34 44 44 44 44 44 44 44 44 44 44 44 4

TABLE XXXVII—concluded.

TABLE XXXVIII—concluded.

DYSENTERY by months, stations, groups, and armies.

DIARRHŒA by months, stations, groups, and armies.

		At	DMISS	SION	S FR	ом [Dyse	NTE	Y IN	BAC	н м	ONTE		ADMISSIONS FROM DIARRHERA IN EACH MONTH,												
STATIONS, GROUPS, AND ARMIES.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December.	TOTAL,	January.	February.	March.	April.	May.	June.	July.	August.	September,	October.	November.	December.	TOTAL.
Kila Saifulla' Murgha Loralai Gumbaz Quetta Robat Shelabagh Chaman Mouat Abu Ootacamund	11 4 2 11 1	*	5	1 2 S 1	1	15	24 6	48	58	3 1 18	1 11 2	3 1	11 7 10 3 209 16 3 11 3				2	3	4	5	8 49	9 ::7 : : : : : : : : : : : : : : : : :	4 10 1	5	11-1-1111	96 3
GROUP XII,—HILL STATIONS	22	29	25	59	74	73	92	107	1115	46	48	38	778	2	10	4	13	13	24	51	73	43	23	13	7	276
Marching, India	20	11	9	2	8	27	111	24	6	4	74	40	236	13	4	1	1	4	9	4	6	2	3	4	7	58
EXTRA INDIA. (a) In the Indian Command:— Chabbar		3	1 2 2	1	1 4 2	4		2 3 2 1 4		3 4	3 1 5 1	1 2 16 16	14 18 1 27 3 33	3							1 2	-111111	7		11141-	4 29 1
(b) Not in the Indian Com- mand:— Colombo (Ceylon) Singapove Tien-tsin North China Lutai Hong Kong (South China) . Bazar Valley, F. F. Mohmand, F. F.	1 1 10 1 1 0 14	18	6 16 1	2 6 2 3	58 1 53	4 18 2 8	8 11 1 1	10 5 2 3	5 2 2 13	12 4 12	10 2 1	7 2	72 98 10 42 5 64	4	1	4	5	1	: : : : : : : 6		4	2:::::		1 2		19 5 1 1 10 29
ARMY OF INDIA .	223	188	239	249	378	309	331	645	576	716	669	495	5,019	63	52	71	59	79	86	121	151	109	110	124	90	1,115
NORTHERN ARMY	94		203	156	207						413		2,675	100				1000	-	-	2000			61	42	483

III—PRISONERS, 1908.

TABLE K.

JAILS by ADMINISTRATIONS.

			JAILS by ADMINISTE	RATION	VS.			
JAILS.	Height above the sea- level in feet.*	Authority for height.+	JAILS.	Height above the sea- level in feet.*	Authority for beight.	JAILS.	Height above the sea- level in feet.	Authority for height.+
ANDAMANS :-			BENGAL :-contd.					-
Port Blair Convict Settlement	85	S. G.	Patna (Bankipore)	177	S. G.	NW. F. PROVINCE:-		0.0
BURMA :- Mergui	14	S. G.	Chapra (Saran)	181	M. D. S. G.	Kohat	1,165	S. G.
Tavoy	288	22	Buxar, Central Sambalpur Darjeeling	500 7,168	**	Dera Ismail Khan Abbottabad	571	**
Shwegyin	128 156		United Provinces of Agra	7,100	. "	Autottabau	4,166	"
Rangoon, Central, Europeans Natives	} 14	"	AND OUDH(a):- Korantadih (Ballia)			BALUCHISTAN :		
Maubin		***	Ghazipur	227 256	S. G.	Sibi	489	S. G.
Bassein, Central	40 34	S. G.	Gorakhpur	255 292		Zoerra	5,511	*
Henzada	44 74	"	Fyzabad	336 305	1. B.			
Sandoway			Rai Bareli	351	S.G.	RAJPUTANA :		0.0
Akyab	32	S. G.	Jaunpur Benares, Central	263	"	Ajmer	1,627	S. G.
Prome	149	S. G.	,, District	256	"	CONTRACT DROWNINGS		
Magwe	653	s. G.	Mirzapur Allahabad, Central (Naini)	298	"	CENTRAL PROVINCES:-	1,236	S. G.
Meiktila	860	"	Karwi Banda			Saugor Jubbul pore, Central	1,753	1. B.
Myingyan, Central Mandalay ,	243 240	S. G.	Fatehpur	415 373	S. G.	Narsinghpur Mandla	1,305	S. G.
Monywa	250 600	м.о.	Hamirpur Orai (Jalaun)	367	"	Bilaspur Raipur, Central	968 968	20
Mogok	111	S. G.	Cawnpore	417	S. G.	Balaghat (Burha) Seoni	2,043	S. G.
Katha	351 329 361	"	Lucknow, Central	} 400	"	Chhindwara Hoshangabad	1,030	1. B.
EASTERN BENGAL AND ASSAM -	301	"	Gonda	378		Nimar (Khandwa) Betul	2,189	I. B. S. G.
Cachar (Silchar)	104	M. D.	Bahraich	398 471	S. G.	Nagpur, Central Bhandara	1,025 861	
Sibsagar Dibrugarh Tezpur	318 342	S. G.	Sitapur Hardoi	449 462	"	Wardha Chanda	935 658	2
Nowgoog	292 208	L. B.	Etawah Mainpuri	498 511	"	Yeotmal Amraoti	1,476 1,194	7
Dhubri	134	S. G.	Etah Fatehgarh, Central	350	1. B.	Akola Buldana	920	M. D.
Mymensingh Dacca, Central	257 59 20	M. D. M. D.	Shahjahanpur	307	S. G.			
Tippera (Comilla)	36 87	"	Pilibhit Bareilly, Central	} 560		HYDERABAD RESIDENCY JAIL :		
Noakhali	43	"	Budaun District	544	"	Secunderabad	1,732	S. G.
Faridpur	13	S. G.	Aligarh Bulandshahr	727	n n	BOMBAY :-		
Rajshahi, Central (Rampur Boalia)	***		Moradabad	655 772	11	Sukkur (b) Sind Gang	***	***
Bogra	70 61	M. D.	Saharanpur	903	"	Hyderabad, Central Karachi	134	1. B. S. G.
Dinajpur	116	s. G.	Muzaffarnagar Meerut	790 739	20	Rajkot Ahmedabad, Central	170	"
Jalpaiguri Aijal	108	"	Muttra Agra, Central	576 354	"	Dhulia Yerrowda, Central (Poona)	1,951	1. B.
Kohima	3,917 4,500	I.B.	Jhansi	860	"	Bijapur Deccan Gang	1,998	S. G.
Bangal:-	4,987	S. G.	Lalitpur	5,494	s."G.	Dharwar Thana	2,385	S. G.
Khulna	2		Pauri	6,400	M. D.	Bombay, Common House of Correction	20	**
Baraset Presidency, Central, Europeans	33	M. D.	PUNJAB :-	1 35	276	Ratnagiri Karwar	110	M. D. S. G.
Alipore "Natives .	17	S. G.	Delhi Rohtak	715 712	S. G.	Aden	26	
Alipore, Juve nile	} 21	I. B.	Hissar Karnal	689 809	I. B. S. G.		19 33	
Hooghly	34	s.'G.	Ambala	902 806	"		11 13	
Krishnagar (Nadia)	97 32	м. "р.	Hoshiarpur	1,058	"	MADRAS:		
Murshidabad (Berhampore) . Purneah Naya Dumka	121	S. G.	Perozepore	756	"	Mangalore Cannanore, Central	42 47	S. G.
Suri (Birbhum)	489	M. D.	Lahore, Central	706	,,	Bellary Salem	919	
Midnapore, Central Balasore	298 149	M. D. S. G.	Gurdaspur			Coimbatore	1,433	:
Cuttack	59 74	**	Gujranwala Sialkot	829	S. G.	Madura Trichinopoly, Central	438 274	**
Angul . Chaibassa (Singhbhum)	17	s. G.	Gujrat	827	S. G.	Tanjore Cuddalore	193	**
Purulia (Manbhum)	745	S. G.	Rawalpindi	1,707	м. о.	Veilore, Central Madras, Civil	698	"
Palamau (Daltongunge) Hazaribagh, Central	2,164		Shahpur Mianwali	655	S. G. I. B.	Rajahmundry, Central .	112	M. D.
Gaya Bhagalpur, Central	1,997 375	S. G. M. D.	Lyallpur			Berhampur	79	S. G.
Monghyr	148	S. G.	Montgomery, Central	600	I. B. S. G.	Russellkonda		-
Champarun (Motihari) . Muzaffarpur .	167 217	"	Dera Ghazi Khan	395	,,	Coorgi-		-
	179	"	Simla	7,230	10	Mercara	3,803	G.

^{*} These are not the exact heights of the jails themselves above sea-level, but usually those of the survey-marks or of the mercury-surface in barometer cisterns in the stations in which the jails are situated.

† S. G. = Surveyor-General of India; I. B. = Intelligence Branch of the Division of the Chief of the Staff; M. D. = Meteorological Department;

(a) Late North-Western Provinces and Oudh.

(b) Prisoners transferred to Sukkur on 28th November 1906.

TABLE XL.

RATIOS of ADMINISTRATIONS.

The ratios of admissions and deaths to strength are taken from Table XLII.

The actuals will be found in Table XLIII.

		1 1 1		RATIO	S PER .	000 OF TI	IR AVER	AGE STOP	NOTH			-
	-	Eastern		United			Central	JE SIKE	I.		1	
	Burma.	Bengal and Assam.	Bengal.	Pro- vinces.	Punjab.			Bombay.	Madras.	India,*	Anda- mans.	India.†
I AVERAGE ANNUAL STRENGTH .	13,871	7,118	15,565	28,308	11,919	1,345	4,013	7,930	10,638	101,336	14,067	115,403
II.—CONSTANTLY SICK RATE OF EACH MONTH— January												
February	13'6	27.4	33'4 32'7 34'2	26.6 26.0	28'2	33.0	16'2	35.1	18.7	26°7 24°9	79'8 77'5	336
April May	15'6	32'8 36'4 34'6	36.6	28°9 28°4	53.3 53.4	23°3 29°6 24°4	18'8 18'3 18'4	32.1	17'9	26.2	75'9	32°3 32°6 33°4
June	14'0	36'5	38.5	28.0	21.8	30.2	20°I 17°4	29'5	23'4	26'4 26'9 20'0	83°7 87°7 80°6	34*2
August	17'3	39°7 42°4	44°3 39°4	32'9	23.5	31.2	21.8	34.5	25'2	30'2	78.4 73.6	35'8
October November December	15'3	45'1	38.6	36'9	32.0	67.8	27'8	30'1	27'0	33'0	74'0 72'9	37'8
OF THE YEAR .	16.4	36.3	37'9	35'1	28.0	39-8	21.7	30.6	23'7	30'1	73-4	35'3
INCLUDING SUBSIDIARY JAILS AND	15'5	35.6	38.4	30,0	26.1	37'1	21'0	32.2	53.0	28'7	78-6	347
III.—Admission rate of the year—		340	307		25'8	38.0	20'9	30.1	31,2	27.9	***	33.8
Influenza	1'2	32.7	5'4 8'4	47	2*8	1'5	47			'2	100	3'7
Small-pox Enteric Fever	1'5	'3 4'2	1'3	26	1.3	7	77	·6	14'3	1.3		1,1
Malaria Pyrexia of uncertain origin Tubercle of the lungs.	35'6	283°4 5°9	247'7 3'4	281°3	9'1	672'9	239'5	1257	72'9	197.7	5 56.2 9.2	278'0
Pneumonia Respiratory Diseases	3.6	11.2	8.2	18'2	13'0	24'5	10'0	6·6	7.7 8-4	9' 12'4	10.3	121
Dysentery Diarrhoga	9°2 19°4 11°6	201'3	27.8 181.7 95.8	45°6 23°1	49'2	30.2	45"	46.7	20°9 64°1	23.3	45°1 110°8	26°0 81°1
Spleen Diseases	'1	8	.6	'2	32'0	17-8 5-9 3-0	28'4	47.8	70	37.6	35'5	37'3
Anzemia and Debility Abscess, Ulcer, and Boil	39'1	18 8	13'7	10'2	13'2	15.6	12'5	4'2 10'5 85'	20'4 28'6	11.8 65.3	2'2 '4	10'4 69'4
ALL CAUSES .	276-8	917'1	9300	678%	581'2	1,221'6	632.2	653'6	442'5	645.9	1,438'5	742'5
LOCK-UPS		892'5	903'6		582'3	1,267'9	632'0	648-1	528.7	651'1		742'4
IV.—DEATH RATE OF THE YEAR—	100	1107	3.08	'21								_
Small-pox	'79 	1'97	'06 '32	32	*08 *17 *34	74	*50 *25		7.05	1.68		1'47
Malaria Pyrexia of uncertain origin	.50	1'26	'84 '13	1'55	'42 	1'49	1'00	1,32	1'03	1'04	3,30	1,18
Tubercle of the lungs Pneumonia Respiratory Diseases	3'39	4'50 3'23	5'01	2'79 4'91	5.87	74 4'46	3'99	3'01	3'20	3°76 3°24	7'11	4'17
Dysentery	1'37	8'43	8.54	3.89	4°53 '84 3°78	2'23	1°50 5°23	1 13	7.05	1.03	1'07	1'03
Hepatic Abscess	14	1,30	1.80	1'27	1'09		*50	*63		'94 '10	.71	16,
Phagedena, Slough, and Gangrene	14	1.20		'07	'42		*50	'25	*94	'55	*14	*49 *05
ALL CAUSES .	13'27	31.89	31.21	24.09	23'49	15.61	22.18	18'16	29°8o	24'17	26.66	24'47
Lock-ups		31.55	31,10		23'44	12,01	22'16	17'37	29'28	24'09		24*39
V.—PERCENTAGE IN 100 ADMISSIONS— Influenza	'16	3'57	'02	(6)	'48	12	'75		'02	*66		.20
Cholera Small-pox Enteric Fever	44	'03	'90 '14	'09 '39	23		12	102	3'23	'51	=	39
Malaria	12'86	30'90	26'64	41.44	28 30	55.08	37.88	19'24	16.46	30'62	*01 59*54	37'45
Tubercle of the lungs Pneumonia	5'94 2'76 1'30	1°15 1°26	1'38	1'44	1'57	,22 5,22	1'58	1,00	3'04	1'45	*66 *73	1'27
Dysentery Diseases	3'33	3.03	2'98	3,12	2°74 4°74 8°46	2'50	2°76 7°13	6.28	1°89 4°72	3,61	3'14	3.20
Diarrhea Spleen Diseases	4'19	7'90	10'30	3'41	5'51	1'46	4'49	7°14 7°31 °42	14,49	2.81	7'70 2'47	10'92 583 '07
Ansemsa and Debility	*08 *70	2'05	1'48	1'50	2'27	1'28	1.07	164	*04 4*61	1.85	15	1'40
Abscess, Ulcer, and Boil	14'14	4'69	6.12	12'38	14'02	12.72	10.39	13.08	6.46	10.00	6.94	9'35
VI.—PERCENTAGE IN 100 DEATHS— Cholera	6.0	6.2	12'6	-9								
Small-pox Enteric Fever	1.6	44	1.0	1.3	77	4.8	2'2	7	23'7	6.0		60
Malaria Pyrexia of uncertain origin	3'8	4'0	2'6	65	1.8	9.2	4'5	69	3.2	1·5 4'3	8.3	48
Parairatory Diseases	32.2	14'1	15'9	11'6	25.0	4°8 28°6	18'0	16.7	10'7	15'6	26.7	170
Respiratory Diseases Dysentery Diarrhoga	3'3	26.4	27'0	5'7	3.0	14'3	53.6	6-2	237	4'2	15'5	137
Hepatic Abscess Anæmia and Debility	1.6	4'0	5.7	5'3	4.6		2.3	3.2	3	3'9	2.7	3'7
Phagedana, Slough, and Gangrene		4'0	3.0	1.0	1'8	-		1.4	3,5	2'3		1'0
* Including Aimer Sibi Quatta Sec			***	3	***		5,3	***	-	*2	.2	.3

Including Ajmer, Sibi, Quetta, Secunderabad, Mercara and excluding Andamans.
 † Including Ajmer, Sibi, Quetta, Secunderabad, Mercara and Andamans.

TABLE XLI.

RATIOS of GEOGRAPHICAL GROUPS.

The ratios of admissions and deaths to strength are taken from Table XLII.

The actuals will be found in Table XLIII.

		1			100	n		ALCOHOL:	Charles Company	-			-	-
									AVERAGE					-
		1	11	111	IV	V	VI	NW.	VIII	IX	X	XI	XII	1
		Burma	0300	1000		Gange-		Frontier,	SE. Rajput-					
		Coast	Burma			tic Plain	Upper Sub-	Valley,	ana,	Dec-	West-	South-	and a	India.*
		and Bay	Inland	Assam.	Orissa.	Chutia	Hima-	and	Central India,	can.	Coast.	India.	Hills.	India.
		Islands			O. I.	Nagpur.	laya.	NW.	and	7	Coust.	******		
								Rajput-	Gujarat.			1000	100	
			1	To the last									-	
I AVERAGE ANNUAL STRENGTH .	. *	9,542	4,329	1,532	12,584	25,317	13,349	8,293	4,666	7,557	2,400	9,636	666	101,335
			-	-										-
IICONSTANTLY SICK RATE OF EACH	MONTH-		1000	20'8		100	-		-015			note!	-01-	and the
February		13'9		18.0	33.0	27'9	30'5	27.5	38'5	30.2	21'3	20'4	18'4	26'7
March		. 15'2	16.7	18'9	38.0	20-7	227	25'0	36.0	33'4	28.6	20'0	16.0	26'0
April		137		22'5	39'5	29"1	23'6	27.6	35'2	30.1	21,5	17'9	20'1	26'5
June		. 15'2	14'0	30.0	42'3	27'1	24'5	25'3	33'5	2916	24'4	23'4	24'3	2679
July		184		45°5 33°2	46.4	30.1	24'2	25'4	30'7	32'7	27'7	24'8	33'2	30'2
September		144	16.2	30.0	45'0	28.8	36.6	31'3	42.8	34'3	23'8	25'3	33.3	31'0
October		137	18.7	29'0	48'2	32'4	40'5	32'2	42'8	33.2	20'1	20'4	34.5	33'0
December		. 16'0		22.8	43'4 39'7	30.0	47°3 37°3	31,1	41'9	30'4	21.1	23.2	39'6	30.1
	-			1	1000			1			1000		-	-
OF THE	EAR	153	15'8	26.2	41.7	29'0	30,3	27.9	37.0	31.8	24.6	22'8	26'8	28-7
										1000	-		1	
II ADMISSION RATE OF THE YEAR-					18.0	-		1'0	ALTE	215	7	-1		42
Influenza				26	5'5	3.0	7.3	*5		2.2	***	13.0	40'5	33
Small-pox			212	.4	*5	2.6	2'1	1.0	1'1	7	1'2	1'2	***	1'2
Enteric Fever				627'3	3,1	204.8	351.6	203.0	193'3	310,3	3.8	69'1	184'7	197'7
Pyrexia of uncertain origin		33'		***	50	11'3	7.6	4'2	***	9.0	8'3	81		9.4
Tubercle of the lungs		: 73		3.9	13.5	8.9	9°3 25°7	12'5	19'1	8.7	7.5	8.2	10.2	9'4
Respiratory Diseases		. 9%	9'0	18.3	30'4	1912	21'4	42'3	32'8	22'8	49'6	18.5	75'1	23'3
Dysentery		143		91'4	196'0	86.8	62°0	47 8 31 4	25'7	50'8	30'4	58'7	91'6	37.6
Spleen Diseases			***		.0	'2	'2	1'9	'2	2'1	.8	241	6.0	. 6
Scurvy Angemia and Debility		: 1		20'2	16.0	.0	10.3	11.0	10'1	107	17'9	10'3	27'0	11.8
Abscess, Ulcer, and Boil		. 37"		53.2	53'8	74'2	82'3	84.3	81'7	96"1	35'4	25.3	856	65'2
h. C.								6000	580'4		France	432'9	2600	6,000
ALL Ca	USES	. 270	290'8	1138'4	956.6	660'9	771'4	620.3	300 4	744'3	5300	43- 9	867'9	545'9
					-		1			-				
IV.—DEATH RATE OF THE YEAR— Cholera		. 3	2.31	2'61	2'62	1'44	*07	'12	*21	-66		5'81	28.53	1.68
Small-pox			***	.65	***	110	'45	'12	***	*26	-	200		115
Enteric Fever		: '2		1'96	'92	1'56	'22 '82	1,33	'43	*26 *79	2.20	'52 '42	4'50	1'04
Pyrexia of uncertain origin		:		***	*08	'04	111	***	***	***	111	***	101	.03
Tubercle of the lungs .		3.3		1'95	4°85 2°85	3.62	3.22	4.82 4.46	2°79 4°71	3.71	3'75	3'22	9.00	3'76
Pneumonia Respiratory Diseases		: 7			1,31	1'25	1.97	1,03	*64	1.72	'42	.83	1'50	1'03
Dysentery · · ·		. 11	1 185	7'18	8'09	5'40	1'49	2,50	1'50	3'31	'83	6'54	21'02	4.67
Diarrhora Hepatic Abscess		. 1			'08	1'44				-		1000		
Anemia and Debility Phagedena, Slough, and Gang		. '2	*23	***			15			240	111	10	1'50	194
	tone .	. 1	23	2.61	1,00	*72	*22	*24	*21	'13	'42	73	1'50 4'50	10
								24				10	1'50	'10 '55 '04
ALL CA		. 1	23	2.61	1,00	*72	*22	*24	*21	'13	'42	73	1'50 4'50	10
		:	23	3.01	1,00	'72 '08		24		13		73	1'50 4'50	'10 '55 '04
ALL CA	USES	. 1111	18'02	3.01	29'57	'72 '08 27'36	24'72	23.12	19'29	19.32	17.92	27.09	1'50 4'50	10 155 104 24'17
ALL CA	USES	. 1111	18'02	26.76	29'57	'72 '08 27'36		23.12	19'29	13	17'92	27°09	1'50 4'50	24'17 '66-
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox	USES	1171	1 18'02	26.76	1'00 29'57 1'89 '58 '06	72 '08 27'36 '37 '45 '39	'22 ' '24'72 '94 '02 '27	23°15	19'29	19'32 19'32 '34 '11	17'92	27°09	1°50 4°50 87°09	10 155 104 2417 166 151
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever	USES	1171	1 18'02 1 1'03	26.76	1'00 29'57 1'89 '58 '06 '31	'72 '08 27'36 '37 '45 '39 '03	'22 24'72 '94 '02 '27 '12	23°15	19'29 '04 '04 '18	19°32	17'92	27°09	1'30 4'50 87'09	10 155 104 24'17 166 119 117 30'62
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin	USES	1111	1 18'02 1 18'02 3 1'11 1 1'03 6 13'90 5 5'40	26.76 26.76 23 '06 55'10	1'89 '58 '58 '06 '31 26'29 '59	'72 '08 27'36 '37 '45 '39 '03 30'98 1'71	'22' 24'72 '94 '02'.27 '12'.45'58 1'00	23°15 23°15 23°15 23°15 23°15 23°25 23°36 23°36	19'29 19'29 '04 '04 '18 33'31	'13 '26 19'32 '34 '11 '09 '07 28'25 1'21	17'92 17'92 24 71 20'60 1'57	'10 '73 27'09 '02 3'00 '05 '29 15'97 3'0)	1'50 4'50 87'09	10 155 104 24'17 166 17 30'62 1'46
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs	USES	11'1	3 1 18'02 3 1'11 1 1'03 6 13'90 0 5'40 9 2'70	26.76 26.76 23 '06 55'10	1'89 '58 '06 '32 26'29 '59 1'38	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35	'22 24'72 '94 '02 '27 '12 45'58 1'00 1'20	23°15 15 '07 '15 '07 '15 '07 '15 '07 '15 '07 '19 '19 '19 '19 '19 '19 '19 '19 '19 '19	19'29 19'29 '04 '04 '04 '18 33'31 1'33	'13 '26 19'32 '34 '11 '09 '07 28'25 1'21 1'17	17'92 24 71 20'60	'10 '73 27'09 '02 3'00 '05 '05 '29 15'97	87'09 4'50 4'67 4'67 21'28	100 155 104 24'17 24'17 166 171 30'62 1'46 1'45 1'92
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Poeumonia Respiratory Diseases	USES	11'1 11'1 12'3 12'3 6'2 2'7	1 18'02 1 18'02 3 1 18'02 3 1'11 1 1'03 6 13'90 5'40 9 2'40	26.76 26.76 23 '06 55'10	1'00 29'57 1'89 '58 '06 '31 26'29 '59 1'38 1'04 3'18	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'36 1'76 2'91	"24"72 "94"72 "94" 02 "27" 12 "45"58 1"00 1"20 3"33 2"78	23°15 23°15	19'29	'13 '26 19'32 '34 '11 '09 '97 28'25 1'21 1'17 '57 '57 '57	'42 17'92 '24 '71' 20'60 1'57 1'42' 9'36'	'02 27'09 '02 3'00 '05 '29 15'97 3'09 1'87 1'97 4'27	87'09 4'50 87'09 4'67 21'28 1'21 1'90 8'05	100 '555 '04 24'17 '666 '51 '17 30'62 1'46 1'45 1'92 3'61
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery	USES	1111 1111 1111 1111 1111 1111 1111 1111 1111	3 1 18'02 3 2 1'11 1 1'03 1 1'03 1 1'09 0 5'40 9 2'70 4 2'40 4 2'40 9 10'72	26176 26'76 26'76 233 '06 55'10 34 '09 1'01 18'03	1'89 '58 '58 '06 '32 26'29 '59 1'38 1'04 3'18 20'58	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35 1'76 2'91 13'13	"24"72" "94"72" "94"72" "12" 45"88 1"90 1"20 3"33 2"78 8"93	23'15 '15'07'15'07'31'36'193 3'49'65:17'34	19'29	'13 '26 19'32 '34 '11 '09 '07 28'25 1'21 1'17 '57 '3'06 6'83	17'92 17'92 24'71 20'60 1'57 1'42 1'26 9'36 15'09	'10 '73 '73 '27'09 '02 3'00 '05 '29 15'97 3'09 1'87 1'97 4'27 1'97 4'27	87'09 4'50 4'67 4'67 21'28 1'21 1'90 8'05 10'35	100 155 104 24'17 24'17 166 171 30'62 1'46 1'45 1'92
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Poeumonia Respiratory Diseases Dysentery Diagracea Spleen Diseases	USWS	11'1 11'1 12'3 12'3 6'2 2'7 3'4	3 1 18'02 3 1'11 1 1'03 6 13'90 9 2'70 9 2'70 9 2'40 4 2'46 3 10 9 10'72 9 10'72 9 10'72 9 3'81	26176 26'76 23'06 55'10 34'69	1'00 29'57 1'89 '58 '06 '32 26'29 '59 1'38 1'04 3'18 20'58 9'33 '06	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35 1'76 2'91 13'13 6'08	"24"72 "94"72 "94" 02 "27" 12 "45"58 1"00 1"20 3"33 2"78	23°15 23°15 23°15 23°15 23°15 23°19 31°36 25°19 31°36 25°19 31°36 25°19	"21 19'29 "04 '04 '18 33'31 "1'33 3'29 5'05 4'43 5'00 '04	'13 '26 19'32 '34 '11 '09 '07 '28'25 1'21 1'17 '37 '3'06 0'83 6'63 '28	'42 17'92 '24 '71 20'60 1'57 1'42 1'26 9'36 15'09 5'74	'02 '73 '02 '3'00 '05 '29 '15'7 '3'0) 1'87 1'97 4'27 13'57 1'37	87'09 4'50 4'67 21'28 1'21 1'90 8'05 10'35 7'09 '69	100 '555 '04 '24'17 '666 '51 '19 '17 30'62 1'46 1'45 1'09 5'81 1'91 5'81 '09
VPERCENTAGE IN 100 ADMISSIONS Influenza Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Discases Dysentery Dagriboa Spleen Discases Scurvy	USWS	· 11'1 · 11'1 · 12'1 · 11'1 · 13'1 · 12'3 · 6'2 · 2'7 · 3'4 · 5'1 · 4'3 · 6'2 · 1'1	1 18'02 1 18'02 1 18'02 1 1'11 1 1'03 6 13'90 9 2'70 9 2'70 9 2'70 9 2'70 9 2'70 9 2'70 9 2'70 9 3'81 	26176 26'76 26'76 23'06 55'10 34'69 1'61 8'03 8'14	1'00 29'57 1'89 '58 '06 '32 26'29 '59 1'38 1'04 3'18 20'58 9'33 '06 6	'72 '08 27'36 27'36 30'98 1'71 1'35 1'76 2'91 13'13 6'08 '03 '01	"24"72 "94"72 "94"72 "12"45"58 1000 1"20 3"33 2"78 8"03 3"35"03	23°15 23°15 23°15 23°15 27°7 31°36 26°31 3°49 6°51 7°34 4°82 290 6°51 7°34 4°82	19'29 19'29 19'29 10'4 10'8 33'31 1'33' 3'29 5'65 4'43 5'00 10'4	'13 '26 19'32 '34 '11 '09 '28'25 1'21 1'17 '57 '3'06 6'63 '28 '6'63 '28'	17'92 17'92 24 20'60 1'57 1'42 1'26 9'36 15'09 5'74 '16	'10 '73 '73 '27'09 '02 3'00 '05 '29 15'97 3'09 1'87 1'97 4'27 1'37 '1'37 ''05	87'09 4'50 4'67 21'28 1'21 1'90 8'035 7'09 '17	100 '555 '04 24'17 '666 '511 '17 30'62 1'45 1'92 3'61 11'91 5'81
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Darrhora Spleen Diseases	USWS	· 11'1 · 11'1 · '2' · '1' · '3' · 12'3' · 6'2' · 2'7' · 7' · 3'4' · 5' · 4'3	1 18'02 1 18'02 1 18'02 2 1'11 1 1'03 6 13'90 5 '40 9 2'70	26176 26'76 26'76 23'06 55'10 34'09 1'01 8'03 8'14	1'00 29'57 1'89 '58 '06 '32 26'29 '59 1'38 1'04 3'18 20'58 9'33 '06	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35 1'76 2'91 13'13 6'08	"24"72 "94"72 "94"72 "24"72 "12" 45"58 1"00 1"20" 3"33 2"78 8"03 3"35" "03	23°15 23°15 23°15 23°15 23°15 23°19 31°36 25°19 31°36 25°19 31°36 25°19	"21 19'29 "04 '04 '18 33'31 "1'33 3'29 5'05 4'43 5'00 '04	'13 '26 19'32 '34 '11 '09 '07 '28'25 1'21 1'17 '37 '3'06 0'83 6'63 '28	'42 17'92 '24 '71 20'60 1'57 1'42 1'26 9'36 15'09 5'74	'02 '73 '02 '3'00 '05 '29 '15'7 '3'0) 1'87 1'97 4'27 13'57 1'37	87'09 4'50 4'67 21'28 1'21 1'90 8'05 10'35 7'09 '69	100 '55 '04 24'17 666 '51 '17 30'62 1'46 1'92 3'61 1'91 5'81 '092 '11'91 5'81 '092 '11
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diagraboa Spleen Diseases Scurvy Anaemia and Debility	USWS	· 11'1 · 11'1 · 12' · 11'1 · 12' · 12' · 12' · 13' · 6'2 · 2' · 2' · 3'4 · 5' · 4' · 5' · 1' · 1' · 5' · 1' · 1' · 1' · 1' · 1' · 1' · 1' · 1	1 18'02 1 18'02 1 18'02 2 1'11 1 1'03 6 13'90 5 '40 9 2'70	261 26.76 26.76 23.766 55.10 	1'89 '58 '58 '66 '32 26'29 '1'38 1'04 3'18 20'58 9'33 '06 '167	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35 1'76 2'91 13'13 6'08 '03 '01 1'87	"22" 24"72 "94 "02 "27 "12 45"58 1"00 1"20 3"33" 3"35" "03 "1"33	23°15 23°15 23°15 23°15 27°7 31°36 26°51 27°34 482 23°20 23°	"21 "04 "04 "18 333"31 "133 329 505 4'43 5'06 "04 "07	'13 '26 19'32 '34 '11 '09 '07 28'25 1'21 1'17 '57 3'06 0'83 6'63 '28 6'63 '28 '1'44	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'93 15'99'36 15'99'36 15'99'36 15'94 10'33'38	'10 '73 '73 '27'09 '05 '25 '29 '15'97 3'09 1'897 4'27 1'37 1'37 '05 '13'57 1'37 '13'57 1'37 '4'40	87'09 87'09 4'50 21'28 1'21 1'90 8'05 10'35 7'09 '69 '17 3'11	'10 '55' '04' 24'17' '66' '51' '19 '17' 30'62 1'46' 1'46' 1'49' 3'61' 1'92' 3'61' 1'92' 3'61' 1'19' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Dagrifica Spleen Diseases Scuvy Angemia and Debility Abscess, Ulcer, and Boil	US#S	· 11'1 · 11'1 · 12' · 11'1 · 12' · 12' · 12' · 13' · 6'2 · 2' · 2' · 3'4 · 5' · 4' · 5' · 1' · 1' · 5' · 1' · 1' · 1' · 1' · 1' · 1' · 1' · 1	1 18'02 1 18'02 1 18'02 2 1'11 1 1'03 6 13'90 5 '40 9 2'70	261 26.76 26.76 23.766 55.10 	1'89 '58 '58 '66 '32 26'29 '1'38 1'04 3'18 20'58 9'33 '06 '167	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35 1'76 2'91 13'13 6'08 '03 '01 1'87	"22" 24"72 "94 "02 "27 "12 45"58 1"00 1"20 3"33" 3"35" "03 "1"33	23°15 23°15 23°15 23°15 27°7 31°36 26°51 27°34 482 23°20 23°	"21 "04 "04 "18 333"31 "133 329 505 4'43 5'06 "04 "07	'13 '26 19'32 '34 '11 '09 '07 28'25 1'21 1'17 '57 3'06 0'83 6'63 '28 6'63 '28 '1'44	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'93 15'99'36 15'99'36 15'99'36 15'94 10'33'38	'10 '73 '73 '27'09 '05 '25 '29 '15'97 3'09 1'897 4'27 1'37 1'37 '05 '13'57 1'37 '13'57 1'37 '4'40	87'09 87'09 4'50 21'28 1'21 1'90 8'05 10'35 7'09 '69 '17 3'11	'10 '55' '04' 24'17' '66' '51' '19 '17' 30'62 1'46' 1'46' 1'49' 3'61' 1'92' 3'61' 1'92' 3'61' 1'19' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'1' 1'
VPERCENTAGE IN 100 ADMISSIONS Influenza Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diagraca Spleen Diseases Scurvy Anaemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATRS-	US#S	· 11'1 · 11'1 · 2' · 11'1 · 3' · 6'2 · 2' · 7' · 3' · 4'3 · 6' · 5' · 13'9	1 18'02 1 18'02 3 1 10'03 6 13'90 0 5'40 0 2'70 4 2'40 4 2'40 9 10'72 8 3'8; 4 1 14'61	261 26'76 26'76 26'76 35'10 35'10 8'03 8'14 1'78 4'70	1'00 29'57 1'89 '58 '06 '32 26'29 1'34 3'18 20'58 9'33 '06 '18 1'67 5'62	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35 1'76 2'91 13'13 6'08 '03 '01 1'87 11'23	"24"72 "94"72 "94"72 "12" "12" "15" "15" "15" "15" "15" "15	23°15 23°15 23°15 23°15 23°15 27°31°36 26°51 23°34 28°22 23°16 23°	19'29	13 26 19:32	17'92 17'92 24 '74 20'60 1'57' 1'42 1'26 9'36 15'09 5'74 '16 3'38 6'68	'10 '73 '73 '73 '27 '09 '02 '3' '00 '05 '29 '15' '97 '1' '97 '4' '27 '1' '37 '1' '37 '1' '37 '1' '37 '4' '46 '0' 55	1'50 4'50 4'67 21'28 1'21 1'90 8'05 10'35 7'09 -69 3'11 9'86	100 '55 '04 24'17 66 '51 19 17 30'62 1'45 1'92 3'61 11'91 5'81 '09 11 1'82 10'09
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Dagrifica Spleen Diseases Scurvy Angemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS— Cholera Small-pox	US#S	11'1' 11'1' 11'1' 11'1' 13' 12'3' 12'3' 12'3' 13'3' 13'3' 13'3' 13'3'	1 18'02 1 18'02 3 1 18'02 3 1 10'03 6 13'90 6 13'90 7 2'70 9 2'70 9 2'70 9 2'70 1 14'61 1 14'61	261 26'76 26'76 26'76 35'10 55'10 55'10 1'61 8'03 8'14 4'70	1'00 1'89 '38 '06 '32 26'29 '39 1'38 1'04 3'18 20'38 9'38 9'38 1'67 5'62	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35 1'76 2'91 13'13 6'08 '03 '01 1'87 11'23	"22" 24"72 "94 "02 "27 "12 45"58 1"00 1"20 3"33" 3"35" "03 "1"33	23°15 23°15 23°15 23°15 27°15 27°15 27°15 27°15 28°19	19'29 19'29 19'29 19'39 19'39 19'39 19'33 3'31 1'33 3'29 5'05 4'43 5'06 1'74 14'07	13 26 1932 1932 1932 1932 1932 1932 1932 1932	17'92 17'92	'10 '73 '73 '27'09 '02 S'00 '05 S'00 '15'97 3'09 1'87 1'37 '05 4'40 6'55 21'5	87'09 87'09 4'50 21'28 1'21 1'90 8'05 10'35 7'09 '69 '17 3'11	100 100 100 100 100 100 100 100 100 100
VPERCENTAGE IN 100 ADMISSIONS Influenza Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diarrhora Spleen Diseases Scurvy Anaemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS Cholera Small-pox Enteric Fever	US#S	· 11'1 · 11'1 · 2' · 11'1 · 3' · 6'2 · 2'7 · 3'4 · 4' · 5' · 13'9	1 18'02 1 18'02 3 1 18'02 3 1 1'03 6 13'90 6 13'90 6 2'40 7 2'40 7 3'10 7 3'10 7 14'61 1 14'61	261 26'76 26'76 26'76 35'10 35'10 8'03 8'14 1'78 4'70	1'00 29'57 1'89 '58 '06 '32 26'29 '59 1'38 1'04 3'18 20'58 9'33 '06 '18 1'67 5'62	'72 '08 27'36 27'36 37'45 '39 '03 30'98 1'71 13'5 1'76 2'91 13'13 6'08 '03 '01 1'87 11'23	"24"72 "94"72 "94"72 "12"	23°15 23°15 23°15 23°15 23°15 27°15 27°15 28°19	19'29 "04 '04 '18 33'31 '13 32'9 5'05 4'43 5'06 '04 10'7 1'74 14'07	13 26 1932 1932 1932 1932 1932 1932 1932 1932	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'97 17'92 17'97 18'99'36 15'09'36 15'09'36 15'09'36 15'09'36 15'09'36 15'09'36	'10 '73 '73 '73 '73 '73 '74 '77 '73 '75 '74 '77 '74 '77 '74 '77 '74 '77 '74 '77 '74 '77 '74 '75 '74 '75 '75 '75 '75 '75 '75 '75 '75 '75 '75	1'50 4'50 4'50 4'67 21'28 1'21 1'90 8'05 10'35 7'09 -'69 3'11 9'86	100 100 100 100 100 100 100 100 100 100
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Dagrifica Spleen Diseases Scurvy Ansemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS— Cholera Small-pox Enteric Fever Malaria	US#S	11'1' 11'1' 12' 12' 11'1' 13' 12'3' 12'3' 12'3' 13'4' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5' 13'9' 13'5'	1 18'02 1 18'02 1 18'02 2 1'11 1 10'03 6 13'90 9 2'70 9 2'70 9 2'70 9 2'70 1 14'61 1 14'61	261 26'76 26'76 55'10 35'10 8'14 1'78 4'70	1'89 '58 '66 '32 26'29 '59 '38 1'04 3'18 20'58 9'33 '66 '18 1'67 5'62	'72 '08 27'36 27'36 '37 '45 '39 '03 30'98 1'71 1'35 1'76 2'91 13'13 6'08 '03 '01 1'87 11'23	"24"72 "94"72 "94"72 "12"	23°15 23°15 23°15 23°15 23°15 27°31 27°31 28°32	19'29 19'29 19'29 19'39 19'39 19'39 19'33 3'31 1'33 3'29 5'05 4'43 5'06 1'74 14'07	13 26 1932 1932 1932 1932 1932 1932 1932 1932	17'92 17'92	'10 '73 '73 '27'09 '02 3'00 '03 '29 '15'97 3'09 1'87 1'97 4'40 6'55 '29' 21'5 '21'5	87'09 4'50 4'67 21'28 1'21 1'90 8'05 10'35 7'09 -'17 3'11 9'86 32'8	100 100 100 100 100 100 100 100 100 100
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Disarrhora Spleen Diseases Scurvy Anaemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs	US#S	11'1'	1 18'02 1 18'02 3 1 18'02 3 1 10'3 6 13'90 9 2'70 9 2'40 9 2'40 9 3'81 14'61 14'61	261 26'76 26'76 26'76 35'10 35'10 8'03 8'14 1'78 4'70	1'00 29'57 1'89 '38 '06 '32 26'29 '59 1'38 1'06 3'18 20'58 9'33 '06 '18 1'67 5'62	'72 '08 27'36 27'36 237'36 330'98 1'71 13'53 1'76 2'91 13'13 6'08 '03 '01 1'87 11'23 5'3 '7 '4 5'7 '1 13'13 13'13	"24"72 "94"72 "94"72 "12"	23°15 23°15	"21 "19"29 ""4 "4"4"4"4"4"4"4"4"4"4"4"4"4"4"4"4"4	13 26 1932 1932 1932 1932 1932 1932 1932 1932	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'97 18'97'96 15'794 16'08 15'794 16'08 15'794 16'08 15'794 16'08 15'794 16'08 15'794 16'08 15'794 16'08 15'794 16'08 15'794 16'08 15'794 16'08 15'794 16'08 16'0	'10 '73 '73 '73 '73 '73 '74 '77 '75 '75 '75 '75 '75 '75 '75 '75 '75	1'50 87'09 4'67 21'28 1'91 1'91 1'90 8'05 10'35 7'09 '17 3'11 9'86 5'2 6'9	100 100 100 100 100 100 100 100 100 100
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Dagrifica Spleen Diseases Scurvy Angemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia	US#S	11'1' 11'1' 12' 11'1' 13' 12' 13' 12' 13' 14' 13' 13' 13' 13' 13' 13' 13' 13' 13' 13	18'02 18'02 18'02 1'11 1'03 1'11 1'03 1'11 1'03 1'10 1'07 2'70 2'70 2'70 2'70 2'70 2'70 1'72 3'80 1'11 1'4'61	261 26'76 26'76 26'76 35'10 55'10 55'10 8'03 8'14 1'78 4'70 9'8 2'4	1'00 29'57 1'89 '58 '06 '32 26'29 '59 '38 '06 '18 '106 '18 '167 '562	'72 '08 27'36 27'36 337 '45 '39 '03 30'98 1'71 13'13 6'08 '03 '01 1'87 11'23 5'3 '7 '4 5'7 '1 13'3 11'4	"22" 24"72" "94"72" "94"72" "12" 45"58 1"00 1"20 3"33 2"78 8"03 3"355 "03 10"66	23°15 23°15	19'29 "04' '04' '18' 33'31 "33'31 "33'39' 5'05' '4'43' 5'00' '04' 17'4' 14'07	13 26 1932 1932 1932 1932 1932 1932 1932 1932	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'93 17'92 17'93 18'93 18'93 18'93 18'93 18'93 18'93 18'93 18'93	'10 '73 '73 '27'09 '02 3'00 '03 '29 '15'97 3'09 1'87 1'97 4'40 6'55 '29' 21'5 '21'5	87'09 4'50 4'67 21'28 1'21 1'90 8'05 10'35 7'09 -'17 3'11 9'86 32'8	100 155 100 100 100 100 100 100 100 100
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Poeumonia Respiratory Diseases Dysentery Diagracia Spleen Diseases Scurvy Anaemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery	US#S	11'1 11'1 12'3 12'3 6'2 27' 7' 3'4' 4'3 6' 1' 5' 13'9	1 18'02 1 18'02 3 1 18'02 3 1 10'3 6 13'90 0 5'40 0 2'40 1 2'40 9 12'8 8 3'8, 4 1 14'61 9 12'8 9 12'8 9 13'3 7 13' 1 16'7 1 16'7 1 16'7 1 16'7 8 8 3'8 8 3'8	261 26'76 26'76 26'76 35'10 55'10 34'69 1'61 8'03 8'14 1'78 4'70	1'90	'72 '08 27'36 27'36 237'36 330'98 1'71 13'53 1'76 2'91 13'13 6'08 '03 '01 1'87 11'23 5'3 '7 '4 5'7 '1 13'13 13'13	"22" 24"72 "94"72 "12" 45"58 1"00 1"20 3"33 2"78 8"03 3"35" "33 10"66 "3" 1"33 10"66	23°15 23°15	"21 "19"29 "04 "18 "33"31 "1"3 "3"29 "5"05 "4"43 "5"06 "04 "17"4 "4"07 "1"1 "2"2 "1"1 "2"2 "1"4"4 "24"4 "3"3 "14"4 "4"4 "3"3 "14"4 "4"4 "3"3 "14"4 "4"4 "	13 26 1932 1932 1932 1932 1932 1932 1932 1932	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'93 18'99	'10 '73 '73 '73 '73 '75 '75 '75 '75 '75 '75 '75 '75 '75 '75	1'50 87'09 4'67 21'28 1'21'19 8'05 10'55 7'09 '17 3'11 9'86 32'8 5'2 6'9 3'14 1'7 24'1	100 100 100 100 100 100 100 100 100 100
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Dagrifica Spleen Diseases Scurvy Angemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS- Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diseases	US#S	. 11'1 . 12'1 . 11'1 . 12'3 . 12'3 . 6'2 . 27' . 7' . 3'4 . 6' . 23' . 13'9 . 13'9	1 18'02 1 18'02 3	2'61 26'76 26'76 26'76 55'10 34 69 1'91 8'93 8'14 1'78 4'70 9'8 2'4 7'3 9'8 2'8 2'8 2'8 2'8 2'8 2'8 2'8 2'8 2'8 2	1'90	'72 '08 27'36 27'36 337 '45 '39 '03 30'98 1'71 13'13 6'08 '03 '01 11'87 11'23 5'3 '7 '4 5'7 '1 13'3 11'4 4'6 19'7 5'3	"22" 24"72" "94"72" "94"72" "12" 45"58 1"00 1"20 3"33 2"78 803 3"35" "03 1"33 10"66	23°15 23°15 23°15 23°15 23°15 23°15 23°15 23°16	19'29 "04'04'04'188'33'31'133'32'9'5'65'4'43'5'06'07'1'74'14'07'1'1'1'1'1'1'1'1'1'1'1'1'1'1'1'1'1'1'	13 26 1932 1932 1932 1932 1932 1932 1932 1932	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'93 18'93	'10 '73 '73 '73 '73 '75 '75 '75 '75 '75 '75 '75 '75 '75 '75	1'50 87'09 4'67 21'28 1'21'1'7 3'11'1'7 3'11'1'7 3'28 5'2 6'9 3'4 1'7 24'1'7 24'1'7	100 100 100 100 100 100 100 100 100 100
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Dagrinea Spleen Diseases Scurvy Ansemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS- Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diarrhoza H paatic Abscess A summa and Debility	US#S	11'1 11'1 12' 13' 6'2' 7' 3'4' 5' 13' 6' 1' 1' 1' 1' 1' 1' 1' 1' 1	1 18'02 1 18'02 1 18'02 1 18'02 3	261 26'76 26'76 26'76 35'10 34'69 1'61 8'03 8'14 1'78 4'70 9'8 2'4 2'4 26'8 2'4	1'00 29'57 1'89 '58 '06 '32 26'29 '59 '1'38 '1'67 5'62 8'9 '31 '20'9 '31 '4'4 '4'4 '4'4 '4'4 '4'4	'72 '08 27'36 27'36 337 '45 '39 '03 30'98 1'71 13'13 6'08 '03 '01 1'87 11'23 5'3 '7 '4 5'7 '1 13'13 11'4 4'6 197 5'3 '4 2'6	"22" 24"72 "94"72 "94"72 "12" 45"58 45"58 8'03 3"35" "03" 1"33" 10"66 "3" 14"2 29"4 14"2 29"4 18"2 5"2 "6"	23°15 13°15 13°16 13°16 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3	"21 "9'29 "04 "18 33'31" 133 3'29 5'05 4'43 5'06 "04 14'07 "1'1 2'2 "1'1 2'2 "1'4 24'4 3'3 14'4 7'8 "1'1	134 19'32 19'32 19'32 1'11 '09 28'25 1'21 1'17 '57 3'06'63 '28 '07 1'44 12'91 3'44 1'44 1'44 4'1 19'2 5'5 8'79 11'4	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'93 18'99	'10 '73 '73 '73 '73 '75 '75 '75 '75 '75 '75 '75 '75 '75 '75	1'50 87'09 4'67 21'28 8'05 10'35 7'09 '17 3'11 9'86 32'8 5'2 69 3'4 1'7 24'1 1'7 5'2	100 100 100 100 100 100 100 100 100 100
VPERCENTAGE IN 100 ADMISSIONS Influenta Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diagrabora Spleen Diseases Scurvy Anaemia and Debility Abscess, Ulcer, and Boil VIPERCENTAGE IN 100 DEATHS Cholera Small-pox Enteric Fever Malaria Pyrexia of uncertain origin Tubercle of the lungs Pneumonia Respiratory Diseases Dysentery Diarrhora Hepatic Abscess	US#S	11'1 11'1 12' 13' 6'2' 7' 3'4' 5' 13' 6' 1' 1' 1' 1' 1' 1' 1' 1' 1	1 18'02 1 18'02 3	261 26'76 26'76 26'76 35'10 34'69 1'61 8'03 8'14 1'78 4'70 9'8 2'4 2'4 26'8 2'4	1'00 29'57 1'89 '58 '06 '32 26'29 '59 '1'38 '1'67 5'62 8'9 '31 '20'9 '31 '4'4 '4'4 '4'4 '4'4 '4'4	'72 '08 27'36 27'36 337 '45 '39 '03 30'98 1'71 13'5 176 2'91 13'13 6'08 '03 '01 1'87 11'23 5'3 '7 '4 5'7 '4 5'7 '4 19'7 5'3 '3	"22" 24"72 "94"72 "94"72 "12" 45"58 45"58 8'03 3"35" "03" 1"33" 10"66 "3" 14"2 29"4 14"2 29"4 18"2 5"2 "6"	23°15 13°15 13°16 13°16 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3 19°3	19'29 "04'04'04'38'33'3'3'29'5'05'4'43'5'00'07'1'74'14'07'1'1'1'2'2'2'1'1'1'2'2'2'1'1'1'1'1'1'1'	13 26 1932 1932 1932 1932 1932 1932 1932 1932	17'92 17'92 17'92 17'92 17'92 17'92 17'92 17'93 17'97 17'92 17'90 17'97 18'99	'10 '73 '73 '73 '73 '75 '75 '75 '75 '75 '75 '75 '75 '75 '75	1'50 87'09 4'67 21'28 8'05 10'35 7'09 '69 3'11 9'86 5'2 6'9 3'47 24'1 1'7	100 '55 '704 '24'17 '66 '51 '17 '30'62 '145 '192 '3'61 '145 '192 '3'61 '11'91 '5'81 '199 '11 '182 '10'09 '6-1'5 '4'3 '11'51 '5'4 '4'2 '19'3 '3'9

TABLE XLII.

	-			RAT	10S 0	JAIL	S, GI	ROUF	Syan	d AD.	MINIS	TRAT	TION	VS.		Fo	or actu	als se	e Table	XLIII.
	1 - 1				1	. ADMIS	SION R	ATE.			2. I	DEATH	HATE	PER	1,00	0 07 5	FIRENC	TH.		22
JAILS AND GROUPS,	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of un-	Tubercle of the lungs.	Pneumonia,	Respiratory Diseases.	Dysentery.	Diarrhoga,	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anzemia and Debility.	Abscess, Ulcer, and Boil.	Phagedaena, Slough, and Gangrene.	ALL CAUSES,	Average number constantly sick per 1,000 of strength.
Mergui .	79{					25-3	75'9		-::		189°9 37°9				25"	12-7	=		430'4	2 -5
Tavoy	110 {			***	18-2	9"1	***	***		9'1	9.1	91					***		72.7	} 9.
Moulmein .	579 {		***		1'73	53°5 5°18		5'2	3.2	17'3	29'4 5'1						39'7		362'7 13'82	} 190
Shwegyin .	161 {	***				37'3		***	***	6'2		***	***			18'6	80'7		273'3	} 124
Toungoo .	572 {	10'5			1'7	140	8.7	7'0	17	15'7	14'0						19.3		260'5 8'74	} 20.7
Rangoon, Cen- tral (Euro- peans).	} 17{		***			117-6						1176							352.0	} 14'5
Rangoon, Cen- tral (Natives).	}2,485 {				*40	346	55'1	10'1	1.6	12.2	13'3	28:2	14			14	55'1		357'3 14'89	} 18.5
Maubin .	151 {					72'8					26.2			***		6.6	19.0		33'11 569'5	} 10.0
Myaungmya .	847 {		24			20'1		2.0	1,3	3.2	3.2	3.2	1.18		-	2'4	22'4		142'9	} 8.3
Bassein, Central	1,102 {		.9		1'8	24'5		109	9	5'4	20'0	.9					23'1		285.8	200
Insein, Central	2,304 {	-	-22			44'7	4'3	7.8	1.7	69				·4 ·43		*4 -43	35.9		138-8	100
Henzada .	412{				3.	2'4		4°9 243		4'9					***	2'4	26.7		165.0	13
Myanaung .	79{					12'7			127		12'7					127			18919	12.7
Sandoway .	84 {								11'9	1179	11,00	=	:::			11.0	71'4		154.8	en {
Kyaukpyu .	145 {					124'1		13'8	6-go	27.6	117 ⁻² 6-90	124'1		-			96%	***	793'1	} 27.6
Akyab	415 {					1270 2'41	4'8	2'4	7°2 4°82	12'0	28*9				*4		14'5		173 3	} 96
GROUP I.— BURMA COAST AND BAY ISLANDS	9,542		*3		-8	33'4	16.8	7°5 3°56	2'0	9.3	1'15	11.8	.2	.10	.3	1'4	37.6		270'5	} 15'3
Paungde .	165 {		24'2			36.4	-	12'1	6.00	61	42°4 6°06						12.1		2667	} 242
Prome	379 {		26°4 18°4			87'1		79	13-2	13'2	10'6	26.4		***		7	147'8		543'52	23.7
Thayetmyo, Central.	} 917{					18.2	2'2	120	7'6	6.2	5'5	4'4				1'1	9.8	-	172'3	76
Magwe .	187 {				***	58-8			=	5°35						5'3	5'3	=	133'7	5'3
Yamethin .	96 {					31.5				31.3	31°2 10°42					***	20'8		20.83	208
Meiktla .	83 {		=			12'0					12'0					12'0	:::	***	108'4	5'2*
Pagan	63{					317		31.75		15'9	15'9	15'0					79%	***	333'3 1	15'9
Myingyan, Central .	} 947{				9'5	13'7	14.8	127	8'4 5'28	1:16	101,4	24'3 1'06	1'06			4'2	33-8	==	322'1	23.2
Mandalay, Central .	} 900{		1,11		171	66.7	400	3'3	6.7	11'1	17 8	4'4		201		1,11 3,5	52.5		3522	14'4
Monywa .	86 {					11.6			:::			11.6					34'9	==	186'0	11.6
Shwebo .	225 {		:::		13.3	22'2	57'8		4°44 4°44	4'4			100				71'1		31:'1 8-89 }	178
Mogok	71 {					42"3	:::	141		=							14'1		98.6 t	141
Bhamo .	76{					171'0	26.3		13.16 30.2		13.5					13.5	65.8	***	26'32	13.2
Katha	76 {						13.2	=	12.3			65.8					13'2		13'16	13'2
Kindat	58 {	==				120'7					17'2					17.2	69'0		17'24	17-2
GROUP II	} .329 {		3'2		3,0	40'4	15"7	7'9	7.31	90	31'2	11'1	*23			3'2	42"5	=	290'8 1	15'8
The second secon		-	THE REAL PROPERTY.					-		.1	Call Said Said									

TABLE XLII—continued. RATIOS of FAILS, GROUPS, and ADMINISTRATIONS.

-	-	-24		RATI					, and		-	TRATI						ls see	Table 2	
JAILS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fover.	Malaria.	Pyrexia of un- certain Origin, 2	Tubercle of the "lungs.	Pacumonia.	Respiratory Diseases.	Dysentery.	Diarrhosa.	Hopatic Abscess.	Spleen Diseases,	Scury.	Anzenia and Name Debility.	-	Phagedaena, Slough, and Gangrene,	ALL CAUSES,	Average number constantly sick per 1,000 of strength.
Cachar .	71{		14'1			4366			56.3	141	56'3	84.2					28.5		816'9 42'25	} 141
Sibsagar .	73 {			***		260'3		***		27'4	219*2	68.5					10976		808'2	} 274
Dibrugarh .	104					1,240'4		976	19'2	67.3	19*2	105"8				57'7	28-8		1,682°7 38°46	38'5
Terpur	267 {		***			116.1	***	7.5		15'0	7.5	15'0			***	7'5	41'2			
Nowgong .	54 {		-							18'5	18'5	18'5			***		37'0		277 8	18.5
Gauhati .	308 {		9'7	3.52		289°0 3°25	***	3.5	3,3	13'0	71'4	178.6	-			16'3	58.4		831'2 51'95	} 35.7
Dhubri	37 {	-				1,081-1				27.0	405'4	297'3				54"1			2,6757	} 541
Sylhet	618 {				***	1,006'5		3.5	8'1	12'9	126*2	79'3		***		25'9	61'5		1,623'0	}=75
GROUP III }	1,532 {		2.61	7.65		627"3		3'9	7.8	18.3	91.4	92.7				20'2	53.5			} 26'5
Mymensingh.	580 {	25'9	12'1		3'4	274'1		60	8%	32.8	375'9	201'7			1.7	36'2	24'1	1.2	1,279'3	} 483
Dacca, Central	1,270	163'8			***	1480		6.00	10.5	28.3	234.6	91'3	-8			16.5	22.1		37°93	35"
Tippera .	428 }					119.2		7'09	7'0	5'51	133'2				4.7	14'0	35.0		37'80	} 23'4
Chittagong .	226 {	-	***			92'9		88	17.7	31'0	7'01	4'4			2-34		53"		18.69	} 26'5
Noakhali .	178					151'7		4'42	4'+2	4'42	758'4				***	5'6	5'6		17'70 994'4 5'62	} 33"7
Bakarganj .	529 }					147'4		9'5	37.8	105'0	37*8	30°2 7°36			-	397	21.0		756-1	} 227
Khulna	645					906.3				62.2	234'4	78-1			31'2		93'8		1,906.2	62'5
Jessore	401 {					458'9	52'4 2'49	12'5	17'5	3979	633'4	67'3				34°9 7°48	94'8	1000	32'42	648
Baraset	118{					771'2			141	8'5	678°0 8°47	254'2				16.0	42'4		2,423'7	} 678
Presidency, Central (Europeans). Presidency,	35 {	28%				314'3			57"1	***		114'3				::	857		1,171'4	} 57"1
Central (Natives).	\$ 1,180 {	:::		*8		267.8		11'0 4'24	-8	14'4	2'54	106.8			11.0	1 69	22'0	=	818-6	} 35.4
Alipore, Central	5		171			348'4 1'58 130'4	16	6.83	4'7	29'4	114'0 4'20 173'9	110'4)		1.6		5'3	61.2	-	909°1 16'82 652'1	46.3
II.						184'2	13.1	13'2		13.5	539'5	26'3				13'2	26'3			39'5
	76 {			***		282'1		13.16		33,3	26,32					8.4	142'5		39'47	363
Burdwan .	358 {			5.0		467.3	-	8.38			2'79	85'4			***	25'1	50.3		13'97	
Krishnagar .	210 5		9'5		47.6	300'0	9.5	9.5	503	42'9	5'03					857	857		30,10	52'4
Faridpur		27.8	9-52		9'52	705'6		16.7	9,25	4'76	275'0	4'76				33'3	83.3		47-62	47'2
Pabna	360 }					80'4	-	5*56			2.78	5'0					15'1		135.7	5.0
Murshidabad	300 }					246.7	***	3,3	3.3	16.7	400	23'3				13'3	30'0		5'03	22.2
Rajshahi, }	803 {	***	5'0	1'2	33'6	97'1		3'33	3'3.		246.6	3'7			1'2	1'2	26.5		547'9	38.6
Central, 5 Bogra	150{		4'98	***	11,31	166.7		4'98	1.25	2'49	93'3	26.7				13.3	200	-	453'3	200
Malda	123 {					187.0	341'5		81		138.2	227.6				33.2	40'7		13'33	24"4
Dinajpur .	250				3'3	46'8		23'4 10'03	8°13 20'1	10'0	90°3 13°38	73.6	=	***		68	26.8	100	16' 44 ' 43'	26'8
Rangpur .	236	1	***		::	419'5		8.47	33'9	4'24	35.11	::			:::	4'2	31,3		97'46	76'3

1	- 1					I. ADMIS					2. 1	DEATH I	TATE P	ER 1,0	000 01	STR	_			155
JAILS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria,	Pyrexia of un- certain origin.	Tubercle of the langs.	Patumonia.	Respiratory Diseases.	Dysentery.	Diarrhera.	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anaemia and Debility.	Abscess, Ulcer, and Boil,	Phagedana, Slough, and Gangrena	ALL CAUSES.	Average number constantly sick per 1,000 of strength.
Jalpaiguri .	127 {					47'2		79	7'9	15.7	78.7	78.7		-		31.2	23.6		598·4 15:75	} 31.2
Purneah .	260 {		-		:::	173'1		77	11.2	33.1	53.8	46.3				3'8	26.0		484'6 3'85	} 346
Naya Dumka	144{		208.3			'118.1		13.9	27.8 694	41'7	437'5	62.2				6.9	48-6	::	1,152'8	} 347
Sari · ·	204{		4'9			813'7		34°3 4'90	4'9 4'90	24'5	44'3	230.4				49.0	88.3		1,911'8	} 53.9
Bankura .	240 {		::			137'5		29-2	12'5 4'17	62°5 4°17	28.3	104°2 4°17	::	20.8		250	33.7		600°0 16'67	} 33.3
Midnapore, }	957{			1.0		198-5	==	5'2 4'18	3,13	26.4	6.57	74'2	::			1.0	106.6		1,050'2	+ 44'9
Balasore .	172 {		5°81			162-8		:::		5.8	314.0	145'3	5'8 ₁			581	52'3		1,046°5 46°51	} 46.5
Cuttack .	343 {	***	5.0	5.0		142'9	117	11'7 8'75	11.7	5.85 91.5	184·6 20·41	107'9 2'92		::	3.0	5.8	72'9		868·8 43°73	} 46.6
Puri	174		200'0 86'96	5'7		51.7		8'7		***	264'4 22 99 295'7	5'75 113'0	=			34'5 11'49 	40"2		517°2 68°97 1,408 7	172
GROUP IV.— BENGAL AND ORISSA.	}12,984 {	18'0	5'5 2'62	'5	3'1	251'5	5.6	8'70 13'2 4'85	9'0	30'4	69'57 196'0 8'09	89'3 1'31	*3	-6	1.7	16.0	53'8	.,	955·6 29°57	} 417
A Chaibassa	185		27'0			108.1	113'5	5"4	5'4	70'3	129.7	75'7 5'4'				16.5	70'3		945'9	37.8
Purulia .	201		10'0	10'0		238.8	1 11 1	50	14'9	24'9	99'5	313.0				24'9	64.7		930.3	29'9
Ranchi	213		47	14"1		145'5		9'4	28'2		417.3	173'7				9.4	51.6		1,103'0	610
Palamau .	152 {		13'2	6.6		315'8			39'5	19-7	269.7	125'0				19'7	78.9		65'79	46'1
Hazaribagh, }	1,035 {		-		1.0	271'5 1'93		20'3	3.0	39-6	313'0	176-8		ro 		16.6	76'3		1,186.2	42.5
Gaya B	552 {	3.6	23.6	1*8		96'0	1.8	2.3	19'9 7'25	6.1	119'6	3.6				3.6	36.3	1.8	492'8 61'59	18.1
Bhagalpur, }	1,866{		5'4 2'08			163°5 '54		12°3 6°43	9°1	21.4	8'04	85°7 5°36	'5 '54			15'5	46.6	:::	33'23	33.3
Monghyr .	372 {		=	2.7		274'2 2'69		21'5		29.6	2.69	99'5	:-	=		18.8	75'3		24'19	43.0
Darbhanga .	319{		3,13			37.6		15'7	3,1	157	241'4	137°9 3°13			==		69.0	==	821'3	40'8
Champarum .	315 {					120'6			127	25'4	3.12	28.6				3'17	41'3		396-8	12.7
Muzaffarpur .	376		21'3		2.7	117'0	***	8.0 2,35	12.3	10°6 2°66	5'32	50'5 2'6h		::	:::	13'3	37 2 2'66		537'2 39'89	31.0
Patna	387 {		54°3 25°84	2.28		201'6		216	78 258	1,5'5	5'17	72'4					54'3		692°5 46°51	35.5
Arrah	275 {			3.6		214'5		14'5	3.64	14'5	7.27	65.2	::		::	3.6	83.6	==	821'8 14'55	25.2
Chapra .	280{	***				192'9	=	3'57			214'3	45.4			:-		10'7	=	592°9 3°57	17'9
Buxar, Central	1,230 {				1.63	294'3		13'0 7'32	1.02	5'7	13'82	39'8	***			28.2	26.8		38.31	32.2
Korantadih .	35 {		:::			28°57					57'1						28'6		200'0	2.0
Ghazipur .	381 {					5°25		=	18'4	63°0 5°25	10,20	13'1	***			44.6	78-7		36.42	\$ 63.0
Azamgarh .	302 {	9'9	==		3.31	311.3	***	3'31	3,31	3,31	49'7 6'62	16-6					76.3		26.40	16.6
Gorakhpur .	527 -	3.8		3'8		233'4 1'90		7'6			7.59	626				1,00	68.3		1,003'8	} 87.3
Basti	363 {			67		141'9		19'3 2'75 5'0 1'67	15'0	8.3	49.6 8.26 16.7 1.67	10.3				19°3 2°75 13°4	163'6		746.6 63.36 652.8 16.69	í
Sultanpur .	363	-	-	1.67		382'9 5'51 60'2	28	16'5 2'75 12'0	19'3 13'77 1'7	24°8 2°75 24°1	8'3 34'4	8'3		=		11.0	151'5	::	\$76°0 38°57 303°2	30.3
Rai Bareli .	581 {					3'44	***	5'10		***	5'16	2.10				1'72		***	39.36	} 241

TABLE XLII—continued. RATIOS of FAILS, GROUPS, and ADMINISTRATIONS. For actuals see Table XLIII.

					CONTRACT					*****	INIST			-		-	tuals			The same of the sa
1	les -	-	-	-	-	1. Al	7 7	ON RAT	E.	1	2, D	EATH	2.2	-5.1	1,000	OF 8			-	k per
JAILS AND GROUPS.	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of uncer tain origin,	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhosa.	Hepatic Abscess	Spleen Diseases	Scurvy.	Angenia and Debility.	Abscess, Ulcer, and Boil.	Phagediena, Slough, and Gangrene.	ALL CAUSES.	Average number constantly sick per 1,000 of atrength,
				3.0		238'3		156	19'5	7.8	65.4	7.8		156		19'5	43'0		5820	2
Partabgarh .	256	***	***	3.3	***	250'7		3'3	7'81	19'8	45'2	46'2	***			26'4	122.1		699'7	} 23.4
Jaunpur .	303 {		***	***	***	216.0		***	6*60	3'30	9,00	3,30	***		***	***			26'40	\$ 29.7
Benares, Central.	1,881			11		*53		2,33	3'7	1'59	24'5	.23				1'06	***		19'14	£ 24'5
Benares, Dis-	413 {				274	159'8		2.42	0'7 4'84	4'8	21'8	14'5	***	***		7'3 4'84	65.4		464'9 29 06	} 24.3
Mirzapur -	222 {			0,0		27.0		4.5	4'50		13.2					8,01 8,0	55.2	***	157'7	} 20
Allahabad, }	1,645		6.7 2.43	·6		65.1	151-6	3,02	3.0	1,35	3471	17'7	***	***	***	2'4	1516		597'1	} 286
Aliahabad, }	603{	***	3.3	3'3		131'0		1.00	6.63	63'0	79°6 9°95	11.6		***		2,0	1.42*6		837 5	} 41'5
Karwi	39{					128.5			51°3 25°04		25.6	76°9 25 64					25 6		461°5 76°92	}127*
Banda	209 {		9.6	4'8		330'1 4'78		4'8 4'78	23'9 14'35	62*2	124'4	526		***		4'8	76.6		52.63	} 28.7
Fatehpur .	264 {				***	310°6 3'79			22'7	22'7 3'79	18'9	11'36		***		3.8	125.0		746°2 45°45	} 20'3
Hamirpur .	108	37'0				703'7	***		9.3	55.6	120'4	18'5					111.1		1,296'3	} 278
Orai · ·	156 {					429'5	12'8		12.8	12'8 6'41	109'0					6.4	96'2		826'9	} 25.6
Cawnpore .	408 {					490°2		2'5	7'4	9.8	66'2	88°2 7°35				7'4	41'7		899'5	} 22'1
Unao	310{					77'4		3'2	3.53	97	3,5	6.2				3.53	67.7		322'6	1 129
Lucknow,	1,679 }			3.0		8.3		3.6	7"1	3.6	20'3	3.6	1'2	,	6		37'5		140'0	} 14'3
Central. [645			47		46.5		3'1	7.8	3.1	32-6					1'6	74'4		328.7	
District. 3	476 {		2'1			153'4		2'1	8'4	10'5	42.0	52.2				2'1	60'9		521'0	} 25'2
			2'10	7.0		1326		157	3'5	14'0	13,3	3'5			***	73'3	20'9		382'2	} 20'9
Gonda	573 {			10'3		298.4		4"1	22.6	22'6	70'0	59"7				67.9	111.1	271	897'1	,
				17'3		155'6		8.6	8.6	11'5	11'5	20,3				8.6	129'7		585'0	, ""
Kheri • •	347 {	61.3		2'4		383.0	2'4	8°65	38'4	4.8	32'4	16.8				2.4	60.0		750'3	,
Sitapur	833 (8.1	***	18919		40	8.1	141	3.00	26'3			***	2072	54'5	***	499'0	,
Hardoi				2'02		146'4		3'1	6.2	81.0	84'1					156	87.2		619'9	,
Etawah	321 4					1,481.5	67'9	2.1	247	24.7	6'23	80'2				3,15	101'9		2,163'6	18.7
Mainpuri .	324	0.3		64	***	439'1		35'3	12'35		3'05 67'3	10000000	-74			32.3	96.5		907'1	1
Etah · ·	312							12.85			3'21		***			17	41'7	1.7	28:85	35.3
Fatehgarh, Centras,	1,752		==		-	85°6 5°71		571	1'14	4.00		3.75					40'0	'57		} 13.1
Fatehgarh, } District. }	350			2,0	=	305'7		25'7	571	40°0 2°86	71'4	28.6				5.9			34'29	} 22'9
GROUP V GANGRIIC PLAIN AND CHUTIA NAGPUR.	26,317 {	2'5	3'0	2.6		204'8	11'3	8.0	3,15	19'2	86·8 5·40	40°2 1°44	77	·2		12'3	74'2	'2 '08	660'9	} 290
Α.												1								
Shahjahanpur	406	=		4'9		517'2			2.46	44'3	27'1	1977				7.4	123'2		963'1	} 41°0
Pilibhit : .	47	-		21'3	***	63.8	21'3			21 3	42.6	21'3	-				63-8		297'9 42'55	
Bareilly Central.	2,113	=		3		393°8 °47		11.8	24°1 6°94	80	25°6 3'79	9.0	:::				41.6		593'0 18'46	

-		1						-	. ADM	ISSION	EATE.		2. DE	ATH	RATE	PER	1,000	OF ST	RENGT	R.	100,
JAILS AND GROUPS.		Average annual strength.	Influenza.	Cholera.	Small-pox,	Enteric Fever,	Malaria,	Pyresia of un- certain origin,	Tabercle of the langs.	Pacumonia,	Respiratory Diseases.	Dysentery.	Diarrhosa.	Hepatic Abscess	Spleen Diseases.	Scurvy.	Anaemia and Debility,	Abscess, Ulcer, and Boil,	Phagedagna, Slough, and Ganerene	ALL CAUSES,	Average number constantly sick per 1,000 of strength.
Barcilly,	3	760	-		2.6	***	526'3		158 2 63	69'7	22'4	27.6	6.6				1*3	89.5		877.6	} 3r6
District. Budaun		395			2'5	***	848.1		5*1	50.6	22'8	15'2	22.8				10'1	68.4		1,293'7	} 35"4
Aligarh		3/3				***	487.9	***	8.0	34°9 5°36	21'4	16.1		2.7			5'4	72'4		916'9	32'2
Bulandshahr .					3.8	***	1,100'0		3.85	26'9 7'69	61.2	115'4 11'54	3'85					126'9		1,788'5	} 46.5
Moradabad .		405			4'9 2'47	***	987.7	***		32'1	24'7	123'5 7'41	49'4				12'3	200'0		1,679°0 41°98	} 37.0
Bijnor .		308			9.7 6.49		333.8		26°0 9°74	32.2	6.2	13.0	3,3				3.5	61.7	***	493'5	} 16.5
Dehra Dun		94		***	10.6	***	478-7	31,3	31'9	31.3	21.3	21.3	63.8				10.0	95'7		21,000,0	42'6
Saharanpur .		380			79		336°8 7'89	***		2.63	10.2	360.2	57.9					118.4	==	34'21	} 22.3
Muzaffarnagar		167	65'9	=	:::		1,2036	101	60	47°0 11'98	65 9	167.7	83.8				65.9	173'7		23'95	47'9
Meerut .		596	2.03 5.03		3'4 1'68		273'5		1.7	30°2 10°07	3'36	8.39 92.6	3,36		=			75'5		786-9	26'8
Delhi	51 (498			4,0 5,01		285.1		8.0	12.02	6.0	58·2 4·02		3.01 3.0			2'0	44'2			} 30.1
Rohtak .		154					214'3		=	6.2	6.5	58.4	32.5					77.9		623'4	} 19.2
Hissar		186-			***	***	5'4		21.2	2.38	48'4	91.4	26.9					172'0		854°8 5'38	} 43.0
Karnal		125	=				720°0 8°00		***	24.00	64.0	16.00	56.0	***			28'0	88'0		48.00	} 33.0
Ambala .		642-	=		3.0	1.26	102.0	-	9'35	7'79	1.20	45'2	3'12			***		154'2		574'8 32'71	} 240
В		1				4		1 9													
Ludhiana .		236-	-		4'2		63.6	8.5	8.2	12'7 4'24	8.2	29'7	4'2					46.6	::	262°7 8'47	} 8.2
Hoshiarpur		65-	:::				476.9		=		***	138.2	61.2					61'5		892*3	} 15'4
Jullunder		261-	-				103'4			7.06		46°0 3°33	23.0	3.8	3.8	-	19'2	118.8		536'4 15'33	} 19.2
Ferozepore		396	=			2.2	136.4	65'7	7'58	35'4	65.7	17.7	80.8				40'4	103.2		12.63	} 35'4
Amritsar		131-	-				366.4			763	53'4	15.3	22'9					167.9		1,038-2	} 2279
Lahore, Central		}1,565	16.6	-		1.0	269*6	33.0	8'31	10,55		70'3	2.56				13.4	86'9		36.42	
, District		475	==	4.3 5.11	2'1	2'11	13000	147	8 42	10'5	10.2	37°9 8°42	35.8				2'1	14'7		423°2 27°37	
" Female		. 171				***	140'4	52.6	23'4		5'85	11 70	200				10'5	57.6		631.6	
Gurdaspur	. 10	. 191				***	73'3 5'24		10.0	10'2	5.5	15'7	2,3				10,0	23.5		293°2 20°94 598°0	
		. 301			2.6	5'3	364'1		664	33.5	18.2	3'32	13'2				158	55'4		14.93	1 12.3
		379				33	567*2		14'9	14'9	7.5	89'6	67.2		-		7.5	171.6		683 4 518	
Gujrat .	•	134			-		1480	4'5	17'9	13'5	135	130.0	35'9				13'5	85'2			} 22'4
Jhelum .		223			1.3	2.7	91.6		448	8 97	13.2	49'9	16.5			***	25.6	43'1		3 39	5
Rawalpindi Campbellpur .		1742	1			1.37		5.9	1.3;		1.3	129'4					2'70	1176		20,51	14'8
				-				-	1	1	1	-		-		1		-	1	11.76	1 .,0
GROUP VI. UPPER SUB-HIMA- LAYA.		13-349	{ 7'3	2 .07				7.6	0.1	2 7.5					5	=	10'3			771'4	303

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TABLE XLII—continued.

RATIOS of FAILS, GROUPS, and ADMINISTRATIONS. For actuals, see able XLII

				CALL		JAILS		UPS,	and 2	1DMI		RATIO		_	_				ble XLI	-
JAILS AND GROUPS,	Average annual strength,	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of un-	Tabercle of the lungs.	Paeumonia.	Respiratory Diseases.	Dysentery.	Diarrhosa, Bravad	Hepatic Abscess.	Spleen Diseases.	Scurvy.	Anzemia and so	Abscess, Ulcer, 22 and Boil.	Phagedæna, Slough, and Gangrene,	ALL CAUSES.	Average number constantly sick per 1,000 of strength,
A Peshawar	. 591 {	-:			-	1,247'0	***	3'4	35'5	35.5	79'5	=	-	-:-	5.1	1.5	211.2		1,895'1	-
Kohat .	. 116{	=		==	:::	129'3			17'24	34'5	43'1	17'2					60'3	::	491'4 34'48	} 250
Bannu .	152 {	13'2	:::	=		46.1			6-6	19.7	85.2	5972	***		::	32'9	72.4	-	572'4	} 250
Shahpur .	. 208{	:::			==				9.6	96	817	105'8				4'8	96.3		903'8 4'81	} 183
Mianwali .	. 216 {	=			=	46.3	9.3			27.8	9'3	12.0			=		97'2		475°9 4°63	} 18'5
Lyallpur .	. 298 {	=	=	6.7	=	208'1	3'4	3'4	3'4 3'36	6.7	3'4	13'4	-				40'3		42 3 '5 3'36	\$ 18-1
Jhang · ·	188{	=				276%	:6'0		10'6	:6.6	42.6	16.0							776.6	} 18.0
Montgomery, Central.	1,967 {		1.2	1'5	=	75'2	'3	31.2	7'1	35.6	49'3 5'08	60°0 1°02				15'3	26'4		430'1 31'01	} 33'5
Mooltan, Central Mooltan, District	1,062 {	5'6		43	174	68'7 '94 100'0	=	5'65	8'5 2'82	43'3	1,0	9'4		47	-		109'2		444'4 24'48	
Dera Ismail Khan	1 1005		-	1'43	1'43	345'3		18·6 2·86	22.0	34'3	2.86	28.1 18.6		20'5	2.6.		153'5			} 25"7
Dera Ghazi Khan	391 {				2'56	2,13	13'4	2.56	2'56	357	89'3	49.1				4'5	111'6		879'8 17'90	251
В	,							***			4'40		***						875°0 13'39	2273
Sibi	42 {					333'3	:::		23'8		47.6	=					95'2		690.2	3.8
Sukker	385 {					10'39	=		23'4 5'19	31.5	18.5	5'2			2.5		10°4	=	223'4	37'2
Sind Gang · ·	459 {	=	==		=	4'36			95'9	76.3	2,18	54°5 4°36		2,5	4'4	4'4 1	24'2	***	836'6 37'04	37.2
Hyderabad, Central.	3 910 {		1,10		1,10	1'10		3.30	9'89	0110	2'20		-	2'2	10		27.5		638·5 37·36	23"1
Karachi	384 {					10'4	62.2	78	26	23'4	2.60	2816		=	2.5	30 4	4'4		484'4	13.2
GROUP VII.— NW. FRONTIER, INDUS VALLEY, AND NW. RAJ- PUTAHA.	> 8,293	1'0	.5 .12	1'0	·5 ·36	203'9	4'2	12'5	22'7	42°3 1°09	47.8	31'4	=		4"1 1	44.	85.3		650'3	} 27'9
Rajkot	80 {	-		=		12'5		=	::	25'0	25'0	100'0		::			37.5	=	337'5	37.6
Ahmedabad, Central.	} 918{	:::			::	46.8		6.2	8.7	21.8	13,0	18'5			171 1	5'3	70'8		35612	17'4
Ajmer	359 {	=			::	125'3		2*8	5-6	5'6	2'79	13,9				2'8	66.9		342'6	13.0
Muttra	270{		3'70	::		3'70		7*4	33'3		59'3	88'9 7'41			=		48"1		40'74	85'2
Agra, Central .	2,246 {			4	2'2 '45	162*1			18'3	45'9	1'78	14'7			10	200	18.1		506.2	45'9
,, District .	504{				=	11171	=		35'7 5'93	29'8	1'98	27.8	300				1'98			317
Jhansi	233 {					390'6			47°2 1°46	12.0	77'3	150'2	- 4	4'3		4'3 1	85'8	=	34'33	25'8
Lalitpur	56				=	17-86	=	=		357	17'9	17.9	100			3.6	=		17'86	17'9
GROUP VIII.— S. E. RAJPUTANA, CENTRAL INDIA, AND GUJARAT.	}4,666		'21	*2	1'1	193'3			9'1 3	000	279		100	.2		21	43		550'4	37'0

		7					t. ADM	1 2	_		. 2	. DEATH	RATE	PER	1,00	o OF	STREN		1		2
JAILS AND GROUPS		Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Ferer.	Malaria.	Pyrexia of uncertain origin.	Tubercle of the	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhora.	Hepatic Abscess	Spleen Diseases.	Scury.	Ansemia and Debility.	Abscess, Ulcer, and Boil,	Phagedaena, Slough, and Gangrene,	ALL CAUSES,	Average number
A amoh .		86{					348.8			23'3	11.6	69.8	69-8				11.6	186'0			1 :
ugor .		140 }			71		371'4		71	14'3	71'4	178'6	121'4				14'3	100,0		1,314'3	1
bbulpore, Central.		} 906 {					211'9		5.2	3.3	1,10	9.9	3.3			17		47'5		423'8 4'42	1
rsinghpur		75 {					40.0		13.33			40°0 26°67	13'33				13.3	13.3		186'7	1
ındla .		76 {			1.16	***	65.8				526	13.16					***	92'1		368°4 39°47	-
aspur .		104{					96.3	9.6				163.2	9.6				96	28.8	9.6 9.62	528°8 19°23	}
mbalpur		223{		26'9		9°0 4°48	345'3			900	31'4 4'48	237'7 13'45	71'7				4.5	62.8		1,067°3 58°3 o	}
ipur, Cen-	ľ	} 578{	10'4	-:		177	224'9	13'8	6'9 5'19	8°7 3°45	29°4 3°46	74'4 13'84	45°0 1'73				57'1	110'7	:::	892°7 48°44	}
laghat .		65{					123'1	15'4	138°5 30°77		61'5	61.2	30-8					15'4		569°2 30°77	}
oni .		67 {			14'9		149					104.2			=			149'3		23.82	}
hindwara		61 {					82.0		16'4	16.4		16.4	16.4	***			15'4	98.4		393'4 49'18	3
shangabad	٠	74 2		=			1486		27'0			81°1 67°57	175.7		:::		13'5	54'1	=	648'6 81'08	}
nar .		69{				:::	87.0					43'5	202'9	=		:::		87.0		724'6	}
ul .		55{					72.7				54'5	18.18	18'2			=	54'5	72'7	18.3	418°2 36°36	}
gpur, Cen- ral.		} 985 {	1.0	==	=		468°0 1°02	33'5	7.11	3.0	15.3	36.2	19,3				2.0	52.8		15,53	}
andara		54{							::	***		18.2	***						==	37'0	}
ırdha		57 {		==		::	52'6	17'5					32.1					17.5	17'54	17'54	3
anda		66{	=			=	121'2				15.5	15'2	30.3					15.2		15'13	}'
В										23.2		129'4					11.8	94'1	-	917'6	-
underabad		85 {					102.8		976	11.76	48.1	11'76	86'5					28.8		33,23	}
otmal .		104-	59'2				17.8		9.02	23.7	0.63	35'5	5'9					53'3		19'23	
raoti .		} 169 {	12'0				90'4		6.0	5'92	6%	42.2	241			-	***	95'4		28.3	}
dama .		166{ 56{	6'02				53.6			1,19	6'02	35'7	17'9				35'7			24'10 375'0	1 1
lia .		405		-			69"1		7'4		4'9		9.9				2'5	37'0		288.9	
rowda,		1,555 {			1.3		174'9		7'41		22.2	27000	115'1		10.3			39'5		980.7	
ipur .		334				***	116.8	65.9	3'0		92.8	62.9	9.0					44'9		751.2	
can Gang		581				1.7	144'6				14'97	30,3	58.5	17		3'4	3'4 3	308-1		,067'1	
irwar		361 {		::		-	307'5	5'5	2.8	2.8	2.8	66'3	63.7			2.8		47'1	=	717'5	
	-																			1	
	1			419	+						-	-	-	4	-	-	-	1	-		

TABLE XLII—continued. RATIOS of FAILS, GROUPS, and ADMINISTRATIONS. For actuals see Table XLVII.

			RA	TIO	S of	FAILS,	GRO	UPS,	and .	ADMI	NISTR	ATIC	NS.		1	For a	tuals	see Ta	able XI	.VII.
			767			1. /	DMISS	ION RA	TE.		2. DEAT	H RAT	E PE	R 1,0	00 OF	STRE	_			F 25 2
JAILS AND GROUPS,	Average annual strength.	Influenza.	Cholera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of un- certain origin.	Tubercle of the	Pacumonia.	Respiratory Diseases.	Dysentery.	Diarrhea.	Hepatic Abscess	Spleen Diseases	Scurvy.	Anzemia and Debility.	Abscess, Ulcer, and Boil.	Phagedzena, Slough, and Gangrene.	ALL CAUSES,	Average number constantly sick per 1,000 of strength.
Thoma	583{			3*4	-	130'4		5'1 3'43	51	82'3	51.2	65.5		-		10"3	70'3		729°0 15°44	} 326
Bombay, Common .	403{	:			:::	119'1		12°4 4°96	4.8g	24.8	17'4	27.3			***	22.3	29.8		364°8 14°89	} 14'9
Bombay, House of Correction,	} 216{	:::		4.6	:::	13.9		9°26	4'6	13.9	41'7	4.63				9'3	23.1	=	23115	} 18'5
Ratasgiri	93 {			***		43.0	10'8			43'0	21'5			10'8			10.8		333'3	} 21'5
Karwar	198 {	:::			=	131,3	32.3		10"1	60.6	2.02	1000		2.1			15'2	-	782'8	
Mangalore	94{				31'9	31'9	10.6		-		170'2	2000					28.3		21,58	
Cannanore, Central	813 {				5.69	6.12	16.0	3.69	7'4	51.7	105'8	20'9				32'0	20 3	=	537'5	} 27"1
GROUP X WESTERN COAST.	} 2,400 {	***		1'2	3'8	109'2	8.3	7°5 3°75	6.7	49.6	\$0'0 '83	30'4	==	-8		17'9	35'4	=	530'0	} 246
A Bellary, Central	722{	::		1'4	=	103.9	***	12.2	9'7	1,39 6.0	55°4 6°93	8.3	::			9'7	526		601'1	} 346
Salem, Central .	708 {				8'5	77'7	2.8	2.8	2.83	-	72'0 1'41	=					7"1	=	274°0 8'47	} 127
Coimbatore, Central .	} 1,282 {					19'5		3,00	9'4	6.5	3,13			::	1.6	6.3	21'1	=	13'26	
Palamcottah .	388 {		5 2 2 58	***		20'6		2.6	2.28	7.7	41'2	:::				2016	36'1		229'4	20%
Madora	471 {		=			25.2	23.4	6'4 4'25	4.2	34.0	25.2					7*3	17.0	=	.9	} 23'4
Trickinopoly, Central.	}1,09: {					50.3	55	2'75	27	81	6.43				-	*92			298°8 16°50	10'8
Tanjore	1	2.6		2.7		20.6		2.6	2'69	41"1	100'3	5'1				1279	28-3		388'2	}
Cuddalore .	389					14'9	58.7	2"57	11'2	32'7	7'71	16.4			-	40.0	72'9		10'28	}
Vellore, Central	1,345							2'97	2'97	'74	3,53					2'23			17'84	} 5:00
Madras Peni- tentiary, Central.	35 9		2'1		2°1 1°05	11.6	21'1	3.16	6.3	15.8	2'1	=				11.6	10'5	=	241.3	} 126
C Rajahmundry, Central.	}1,064		60°2 22 56	1.1	-	(9'5	8'5	10°3 8 46	9'4	26.3	148-5		-94			27'3	1 32	***	1000	} 30'1
	647	-	38.6 7 185.0		3.1	505 3'0 109'8		12'4 4'64		4612	1156	-				71"1	10.8		1,225'7 72 6. 606'9	,
Berhampur .	173		104.03		5.78				11:36		28'9	0	-	F	-	-			184'97	} 17'3
GROUP XI.— SOUTHERN INDIA.	9,636		5'81	*2	1'2	69'1	13'4	3,33	8'5		58'7		-10			19'3		-	432 9 27'09	} 228

		Tro	-				i. Admir		_		2.	DEATH 1	RATE	- 2	1	OF S		1 6	-		Per l
GROUPS A ADMINE TRATION	10	Average annual strength.	Influenza.	Chotera.	Small-pox.	Enteric Fever.	Malaria.	Pyrexia of un- certain origin.	Tubercle of the lungs.	Pacamonia,	Respiratory Diseases.	Dysentery.	Diarrhora.	Hepatic Abscess	Spleen Diseases	Scurry.	Ansemia and Debility.	Abscess, Ulcer, and Bod,	Phagodaena, Slough, and Gangrene.	ALL CAUSES.	Average number
ijal .		9					5556	***		***	111.1	444'4	666.7				1111	1111		2,777.0	13
ohima .		18			***	***	166'7	***		***	***	55'6			***	100	***	556		444'4	1
aillong .		51 {				***	176'5	***	1961	1976	78.4	19'61	58.8		***	1976	***	98.0		39*22	1
arjeeling		108 {					157°4 9°26		46°3 1852		206.3	64°8 9°26	55.6				27.8	55.6		9537 37°04	3
lmora .		82{					85.4			24'4	48.8	1341	61.0					24'4		524'4 12'2	35
auri .		13 {				***	461'5		76'9 76'92			230'8	76'9	***				76'9		92-31	1
aini Tal		41 {					634'1			24'4	24'4		317"				122'0	73*2		1,634°1 73°17	26
imla .		11 {		***			***										20.0		-	90'9	3
bbottsbad		95{				***	115'8			10'5		21'1	31,1		***		31,1	63'2		358.4	3
uetta .		51 {	=		***		607'8		-	19'6	58.8	78.4	75*4		78-4			411'8		2 ,745':	3
lercara .		92 5				***	43'5			43'5	326	43'5	10'9				10'9	32.6		315'2	3
ussellkonda		95		284"2	-		42'1 21'05		***	10.2	21.1	147'4					31.28	84'2		757'9	1
ROUP XII	HILLS.	} 666{		40'5			184'7		10'5	16.2		91.05	61.20	-	60	1.2	27'0 4'50	85-6		867°9 87°09	25
Aden	: :	65 {					4612		-			30.8	15'4		15 4			30'8		184'6	-
NDIA (a)		1,01'336 {	4'3	3.3	112	1.1	197'7 1'04	9'4	9'4 3.76	12'4 3'24	23.3	76·9 4·67	37°6 '94	1.	-6	7	11'8	65.5	'1	645-9	3
																		_	_	_	
URMA .		13,871	14	1'2		1'5	35'6	16:4	7.6	3.6	9'2	19'4	11'6	11	*1	*2	1.9	39'1		276-8	1
ASTERN BE	NGAL ?		32-7	1°2 '79	-3	1'5 '22	35°6 '50	16.4	3,39	3.6	9°2 '43 26°8	201-3	11°6 '14	122	1 707	·2 	1.9	43.0		13'27	25 0
		7,118-{	32-7	2"1 1"97	-3	4'2 1'40	283°4 1°26	5'9	3'39	1,52	26'8 1-97	201-3 8-43	72'5	.1	*07	··· ·8 ·14	18-8	43'0	-1	917:1	,
ASTERN BE	NGAL ?		32-7	2'1	-3	4'2	283'4	5'9	3'39 10'5 4'50	1,52	26.8	201-3	72'5 1'26	.1	*07	··· ·8 ·14	18-8	43'0	1	13'27	
ASTERN BI AND ASSAM,	NGAL }	7,118{	32-7	2°1 1°97 8°4 3°98	-3	1'0	283°4 1°26	5'9	3'39 10'5 4'50	1'23 11'5 3'23 8'5 2'31 18'2	26°8 1-77 27°8 '45	1°37 201°3 8°43 181°7 8°54 46°6	72'5 1'26 95'8 1'80	'13' '13'	·07	*8 *14 ****	18-8	43°0 14 57°4 06 84°1	7	917:1	men also
ASTERN BI AND ASSAM.	NGAL }	7,118{	32-7	2°1 1°97 8°4 3°98	··· ··3 ··14 1°3 ··06 2°6 ··32 1°3	1'0 '32	283'4 1'26 247'7 '84 281'3	5'9 3'4 '13	3°39 10°5 4°50 12°8 5°01	1'23 11'5 3'23 8'5 2'31 18'2 4'91	26°8 1-97 27°8 '45 21°4 1°38	1°37 201·3 8°43 181°7 8°54 46°6 3°89	72'5 1'26 95'8 1'80 23'1 1'27	'13' '13'	·07	*8 *14 ****	18-8 1-26 13-7 196 10-2 146	43°0 '14 57'4 '06 84'1 '14 81'5	7	917'1 31'89 930'0 31'61 678'9 24'0,	
ASTERN BI AND ASSAM. ENGAL . INITED PROVI	NCES .	7,118 { 15,565 { 28,308 { 11,919 {	32·7 *2 4·7 1·5	79 2°1 1°97 8°4 3°98 °6 °21 °4 °08	 14 1'3 '06 2'6 '32 1'3 '17	122 4'2 1'40 1'0 '32 '3 '07	283'4 1'26 247'7 '84 281'3 1'55 164'4 '43	5'9 3'4 '13 9'9 	3'39 10'5 4'30 12'8 5'01 8'2 2'79 13'0 5'87	1'23 11'5 3'23 8'5 2'31 18'2 4'91 15'9 4'53	26'8 1-97 27'8 '45 21'4 1'38 27'5 '84	1°37 201°3 8°43 181°7 8°54 46°6 3°89 49°2 3°78	72'5 1'26 95'8 1'80 23'1 1'27 32'0 1'09	'1 '1 '13 '13 '11 '2 '08	· 07 · · · · · · · · · · · · · · · · · · ·	** ** ** ** ** ** ** ** ** ** ** ** **	18-8 1-26 13'7 '96 10'2 '46 13'2 '42 15'6	43°0 14 57°4 57°4 84°1 14 81°5	71	917:1 31:89 930:0 31:61 678:9 24'0, 531:2 23:49	me de de de
ASTERN BE AND ASSAM. ENGAL . INITED PROVIDE . L-W. FRONTE PROVINCE	NCES .	7,118 { 15,565 { 28,308 { 11,919 { 1,345 {	32-7 '2 4'7 1'5	79 2°1 1°97 8°4 3°98 °6 °21 °6	-3 -14 1'3 -06 2'6 -32 1'3 -17	'22 4'2 1'40 1'0 '32 '3 '9 '34 '7 '74	283'4 1'26 247'7 '84 281'3 1'55 164'4 '42 672'9 1'49 239'5	5'9 3'4 '13 9'9	3'39 10'5 4'30 12'8 5'01 8'2 2'79	1'23 11'5 3'23 8'5 2'31 18'2 4'91 15'9 4'53 24'3 4'46	26.8 1-97 27.8 '45 21.4 1.38 27.5 84 30.5 22.23	1°37 201°3 8°43 181°7 8°54 46°6 3°89 49°2 3°78 76°6 774	72'5 1'26 95'8 1'80 23'1 1'27 32'0 1'09	'1 '13 '11' '2 '03	· 07 · · · · · · · · · · · · · · · · · · ·	*8 *14 **** *** *** *** *** *** *** *** **	18-8 1°26 13'7 '96 10'2 '46 13'2 '42	43°0 14 57°4 506 84°1 14 81°5	11 11 11 11 11 11 11 11 11 11 11 11 11	917'1 31'89 930'0 31'61 678'9 24'0, 531'2 23'49 t,221'6 15'61	me is all als als
ASTERN BI AND ASSAM. ENGAL . INITED PROVI	NCES .	7,118 { 15,565 { 28,308 { 11,919 {	32·7 '2 4·7 '11 2·8 1·5 	779 2°1 1°97 8°4 3°98 °6 °21 °4 °08	 13 13 -06 32 13 13 17 7	122 4'2 1'40 1'0 '32 '3 '07 '9 '34 '7 '74	283'4 1'26 247'7 '84 281'3 1'55 164'4 '42 672'9 1'49 239'5 1'00	5'9 3'4 '13 9'9	3'39' 10'5 4'50' 12'8 5'01' 8'2 2'79' 13'0 5'87' '74' 10'0 3'99'	1'23 11'5 3'23 8'5 2'31 18'2 4'91 15'9 4'53 24'3 4'46	'43 26'8 1-77 27'8 '45 21'4 1'38 27'5 84 30'5 2'23 17'4 1'50	1'37 201'3 8'43 181'7 8'54 46'6 3'89 49'2 3'78 76'6 74 45'1 5'23	72'5 1'26 95'8 1'80 23'1 1'27 32'0 1'09 17-8 	'122' '1 '13' '13' '11' '2 '08'	'07 '-6 '7 5'9	*8 114 111 114 114 114 114 114 114 114 11	18-8 1-26 13'7 '96 10'2 '46 13'2 '42 15'6 	43°0 -14 57°4 -06 84°1 -14 81°5 155°4	11 11 11 11 11 11 11 11 11 11 11 11 11	13'27 917'1 31'89 930'0 31'61 678'9 24'0, 531'2 23'49 t,221'6 15'61 632'2 22'18	me is all als als
ASTERN BE AND ASSAM. ENGAL . INITED PROVIDE . L-W. FRONTE PROVINCE	NCES .	7,118 { 15,565 { 28,308 { 11,919 { 1,345 {	32-7 '2 4'7 1'5	79 2°1 1°97 8°4 3°98 °6 °21 °6	-3 -14 1'3 -06 2'6 -32 1'3 -17	'22 4'2 1'40 1'0 '32 '3 '9 '34 '7 '74	283'4 1'26 247'7 '84 281'3 1'55 164'4 '42 672'9 1'49 239'5	5'9 3'4 '13 9'9	3'39 10'5 4'30 12'8 5'01 8'2 2'79 13'0 5'87 6'7 '74	1123 3123 85 2731 182 4791 1579 4753 2475 4746	26'8 1-/7 27'8 '45 21'4 1'33 27'5 '84 30'5 2'23 17'4 1'50	1'37 201'3 8'43 181'7 8'54 46'6 3'89 49'2 3'78 76'6 74 45'1 5'23	72'5 1'26 95'8 1'80 23'1 1'27 32'0 1'09 17-8 	"13" "13" "2" "08" "" "" "" "" "" "" "" "" "" "" "" "" "	· · · · · · · · · · · · · · · · · · ·	370	18-8 1-26 13-7 -96 10-2 -46 13-2 -42 15-6 	43°0 '14 '57'4 '06 '84'1 '14 '81'5 '' '85'5 '' 85'5	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	917'1 31'89 930'0 31'61 678'9 24'0, 531'2 23'49 t,221'6 15'61	200 15 15 15 15 15 15
ASTERN BI AND ASSAM. ENGAL . INITED PROVI	NCES .	7,118{ 15,565 { 28,308 { 11,919 { 1,345 { 4,013 {	32-7 	79 2'1 1'97 8'4 3'98 -6 -21 -4 -08	-3 -14 1'3 -06 -32 1'3 -17 -7 -50 -6 	122 4'2 1'40 1'0 32 33 '07 '74 -7 '74	283'4 1'26 247'7 '84 281'3 1'55 164'4 '42 672'9 1'49 239'5 1'00	5'9 3'4 '13 9'9 9'1 11'0	3'39 10'5 4'30 12'8 5'01 8'2 2'79 13'0 5'87 6'7 '74	1123 1115 3123 85 2131 1812 4191 1519 4153 2413 4146 510 11712 3128	26'8 1-77 27'8 '45 21'4 1'38 27'5 21'3 1'38 27'5 2'23 17'4 1'50 1'13	1'37 201'3 8'43 181'7 8'54 46'6 3'89 49'2 3'78 76'6 74 45'1 5'23 46'7 '88	72'5 1'26 95'8 1'80 23'1 1'27 32'0 1'09 17.8 28'4 '50	"13" "13" "2" "08" "" "" "" "" "" "" "" "" "" "" "" "" "	'07 '6 '7 5'9 	*8 114 111 11 11 11 11 11 11 11 11 11 11 1	18-8 1'26 13.77 '96 13.72 '46 13.72 '42 15.76 	43'0 14 57'4 57'06 84'1 14 81'5 14 85'5 25'0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	13'27 917'1 31'89 930-0 31'61 678'9 24'0, 581'2 23'49 1,221'6 15'61 632'2 22'18	place also also also also
ASTERN BI AND ASSAM. ENGAL . INITED PROVI UNJAB . IW. FRONTI PROVINCE ENTHAL PROVINCE	NCES .	7,118 { 15,565 { 28,308 { 11,919 { 1,345 { 4,013 { 7,930 {	23-7 11 23 24 17 25 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	779 2°1 1°97 8°4 3°98 °6 °21 °4 °08	-3 -14 1'3 -06 -32 1'3 -17 -7 -50 -6 	122 4'2 1'40 1'0 1'32 1'3 1'07 1'7 1'7 1'2 1'25 1'25 1'40 1'40	283'4 1'26 247'7 '84 281'3 1'55 164'4 '42 672'9 1'49 239'5 1'00	5'9 3'4 '13 9'9 9'1 11'0	3'39 10'5 4'50 12'8 5'01 8'2 2'79 13'0 5'87 74 10'0 3'99 6'6 3'03	1'23 11'5 3'23 8'5 2'31 18'2 4'91 15'9 4'53 4'46 5'0 1'00 17'2 3'28	26'8 1-97 27'8 '45 21'4 1'38 27'5 '84 30'5 2'23 17'4 1'50 4'13 20'9 '75	1'37 201'3 8'43 181'7 8'54 46'6 3'89 49'2 3'78 76'6 74 45'1 5'23 46'7 '88	72'5 1'26 95'8 1'80 23'1 1'27 32'0 1'09 17.8 28'4 '50 47.8 '61 7'0	'122' '13' '13' '13' '11' '11' '11' '11'	· · · · · · · · · · · · · · · · · · ·	** ** ** ** ** ** ** ** ** ** ** ** **	18-8 1-26 13-7 196 10-2 146 13-2 146 13-6 	43'0 14 57'4 57'06 84'1 14 81'5 14 85'5 25'0	"1 "1 "97 "" "" "" "" "" "" "" "" "" "" "" "" ""	13'27 917'1 31'89 930'0 31'61 678'9 24'0, 531'2 23'49 1,221'6 15'61 632'2 22'18 653'6 18'16 442'5 29'80	me, who who who who who was
ASTERN BI AND ASSAM. ENGAL . INITED PROVI	NCES .	7,118 { 15,565 { 28,308 { 11,919 { 1,345 { 4,013 { 7,930 { 10,638 { }	32-7	779 2°1 1°97 8°4 3°98 °6 °21 °4 °08	-3 -14 1'3 -06 -32 1'32 1'37 -17 	122 4'2 1'40 1'0 32 3 '07 '74 '77 '74 1 2'2 '25 4 1	283'4 1'26 247'7 '84 281'3 1'55 164'4 '42 672'9 1'49 239'5 1'90 1'25'7 1'00 1'25'7 1'03	5'9 3'4 '13 9'9 9'1 11'0 6'9 13'4 '' 9'5	3'39' 10'5 4'50' 12'8 5'01' 8'2 2'79' 13'0 5'87' 7'4 10'0 3'99' 7'7 3'20' 10'5 7'11' 9'5	1'23 11'5 3'23 8'5 2'31 18'2 4'91 15'9 4'53 4'46 5'0 1'00 17'2 3'28 8'4 1'88	26'8 1-97 27'8 '45 21'4 1'33 27'5 84 30'5 2'23 17'4 1'50 43'0 1'13 20'9 75	1'37 201'3 8'43 181'7 8'54 46'6 3'89 49'2 3'78 76'6 74 45'1 5'23 46'7 '88 64'1 7'05	72'5 1'26 95'8 1'80 23'1 1'27 32'0 1'09 17.8 28'4 '50 47.8 '63 7'0 	'122' '13' '13' '13' '11' '13' '11' '11'	77	"8 114 114 114 114 114 114 114 114 114 11	18-8 1'26 13'7 '96 10'2 '46 13'2 '42 15'6 12'5 20'4 '94	43'0 '14 57'4 '57'4 '14 84'1 '14 81'5 '14 85'5 '25 25'6 '	77 - 30	13'27 917'1 31'89 930'0 31'61 678'9 24'0, 531'2 23'49 1,221'6 15'61 632'2 22'18	per the the the the the the

^{*}Worked on the aggregates.

(a) Excluding Andamans.

(b) Including Andamans.

TABLE XLIII.

ACTUALS of FAILS, GROUPS, and ADMINISTRATIONS on which the ratios in Tables XL-XLII have been calculated.

ACTUAL	S of JAI	Lody	GROUP	s, and	AUMI	1311	MALIC		DALLOUS NO	E/4 E/1	e ra	- 17	n I ao	nes A	L-XL	II na	ve been	cate	utatea	
JAILS AND GROUPS.	Average annual strength.	Influenza.	Cholera. Small-pox. Enteric Fever.	Malaria.	Pyrexia of un- certain origin. Tube rele of the hungs.	Pacumonia.	Respiratory Diseases.	Dysentery.	Diarrhora.		Scurvy.	Anaemia and "Debility.	Abscess, Ulcer, 22 and Boil, 18	Slough, and	ALL CAUSES,	Tænia,	Ascaris lumbri-	Deacunculus Medinensis.	Strongylus duo- denalis.	Average number contantly sick per 1,000 of strength.
Manual				2	6		-	15	3 -		2	1	!	.	34					
Mergui	79 {							3	*** 10						3	***	***			3 2
Tavoy	110}				= =			1		-	-	***			1		-			} .
Moulmein .	579{			31	3	2	10	17	8	3 3300			23	***	210					} 11
Shwegyin .	161 {			6			1					3	13		44					} 2
Toungoo .	572 }	6	1	5	5 4	1	9	8	3	- 100			11		149					} 17
Rangoon, Cen- tral (Europeans)	1 17 }			2					2						6					}
Rangoon, Cen- tral (Natives).	} 2,485 {	***	:	86	137 25	4	31	33	70			1	137		888					1 46
tral (Natives).	,			11	16	2	2	4	4			1	3		37 86					,
	151 {	***	2	17	5		3	3	3				19		121					} 3
Myaungmya	847 {			1	1			***	1				***		315					} 7
Bassein, Central	1,102 {		1 2	27	12		6	32					31		4				2	} 22
Insein, Central.	2,304			103	10 18	4 2	16			1		1	85		435 23					} 23
Henzada	412 {		1	1	2		2				-				68					} 3
Myanaung .	79 {			1						1000	-				15					} .
Sandoway .	84 {							1			-				13 2			-		} .
Kyaukpyu .	145					1	4	17	18				6		74					} +
Akyab	415{			5	1	3 2					1				7			=	3	} +
GROUP L.— BURMA COAST AND BAY IS- LANDS.	9,542 {	6	3 8	319	160 72	19 7	89	134	113 2		3	13	359		2,581		::		5	147
			4	6	2	1	,	7					2		44					
Paungde .	165 {		2		1	1		1	***			3	56	-	206					1 4
Prome	379 {		7	33	3	5		1	10			***			11	***			= =	9
Thayetmyo, Central,	} 917{			17	5	7	1	5	4		-		0.5		158	=			}	7
Magwe	187 {						1 1	::		1	-		100		25				= =	
Yamethin .	96{			3	= =		3	3 1					200		20 2			_		2
				3				1				1			9)				
Meiktila .	83-			2	2										21			(SA) 0		-
Pagan	53{		9	13	14 12	8	11	96	23			4			305					
Myingyan, Cen- tral. Mandalay, Cen-	947			60	36 3	5	ìo	16	4			2	22		317		10000			22
tral.	300								1				3		16					13
Monywa .	86-{			5	13	1	1						16		70 2					
Shwebo	225 -			3	1								1		7					
Mogok	71 3			13	2	2						1	5		34					
Bhamo	76 {					1			5				1		11				3	
Kindat	58 5			7				1 1				1	4	-	16		19000000			
GROUP IL.—			14 13	175	68 34	31	39	135	48			-	184		1,259			_		10
LAND.	4,329 }		20 1	- 1	13	10	3	-	1 1	***	***				1	-	-	-		-

PRISONERS, 1002.

A DOMESTIC	Tes.	F		1				o 1		I. A	DMISSI		161	4.1	2. Dw.	1 5				Le		1.	-
JAILS AND GROUPS.	Average annual	The state of the s	Influenza.	Cholera. Small-pox.	Enteric Fever.		Pyrexia of un-	lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrheea.	Hepatic Abscess.	Scurvy.	Anaemia and Debility.	Abscess, Ulcer, and Boil.	Phagedman, Slough, and Gangrene,	ALL CAUSES.	Taenia.	Ascaris lumbri- coides,	Dracunculus Medinensis.	Strongylus duo- denal s.	Other Entoros.
achar .		715		1		31			4 1	1		6		1 1000	-	2		58					
bsagar		73 {				19				2	16	5		7 / / / / / / / / / / / / / / / / / / /	-	8		59				0.00	- 2
ibrugarh .	. 1	04{			1:	29		1	2	7	2	11		1000	6 2	3		175	-			1	
ezpur .	. 2	67 {		= =		31		2 2		4	2	4			2	11		79				-	-
owgong .		54 }	***			200				1		1		A. D. C. C.		2	***	15	-				: }
subati .	. 3	08 {			1	89			1	4	22 6	55		A A CONTRACTOR	5 1	18		256 16					
hubri .		37 }			- :	40				1	15	7000		5 2000	2			99					-
thet	. 6	18 {			60	22 2		2	5 2	8	78 3	70.0			16	38 1		1,003 11		1			-
ASSAM.	} 1,5:	32{	::	4 1		3		6 3	12 4	28	140	200	: :	500000	31 4	82	::	1,744		:	-	4	11.7
ymensingh	. 5	0{	15	7	2 13		::	4	5 2	19	218	117		(C)	21 2	14		742 22					16
cca, Central	. 1,2)	70{	208		18	88 2		19	13 6	3/5	298	116			21	70		1,190 48					- }
ppera .	. 4	28{				51		3 2	3		57				6	15		201					1
ittagoog	. 2:	26 {				11		2	4	7	38	1				12		160	1000				1
akhali .	. 17	8{				7					135			0 000	1	1		177		9000			. 3
karganj	. 5	300						5	20	56 2	20	16		0 0000	21 3	27		490 11		2027			}
ulna .		4 {								4	15	5		0.00	1	6	:::	122		3000			1
sore .	. 40	1			18	1 1	21	5	7 2	16	254	27			14	38		673 13	_		200		3
aset .	. 11	8{			9					1	So I	30			2	5		286 4				= -	}
sidency, Centr Europeans)	al } :	5 {	1	= =					2			4			=	3		41	0.00		CCC	-	}
esidency, Centr (Natives)	al } 1,18	100		- :	31		-	5	1	17	145	126		14	19	26		966 13					3
pore, Central	. 1.90	3{		2 1		-		43	9 4	56	217	210	3	-	10	117		1,730	000				1
, Juvenile		3{				_	9000			1	4		-		=			1000					
wrah .	. 7	61			7.0		1	1 1		1	41 2	2			1	2		0.2	02 800				1
oghly	. 35	8 1					=	8 3	6	8	22	89		***	3	51		423 5 .				: ::	}
rdwan .	. 19	01		1	1 00			2	6	9	44	17			5	10							}
shnagar	. 21	0{		2			2	2	2 2	9	25	31			18	18		2.00	100				}
ridpur .	. 35	0 {	35					6 2	4	15	99	47			32	30			32 32				}
ona .	. 19	}0	-		A 2 3			-				1 -				3		- 1	- :	200 50	: :		}
rshidabad	. 30	1			7			1 1	1	5	12	7			4	9		193			: :		}
jshahi, Central,	} 80	3 1		4 1 4				4	3	10 2	198 8	3 -		1	1	21		400	2 -			1	}
gra .	. 15	1			2	27		1		2	14	4 :		1 =	2	3	=						}
ılda	. 12	3{	=		. 2	-	200	=	1	3	17	28	: ::		4	5	=	-			: :		1
najpur .	. 29	100			1 1		-	7 3	6 3	3	27	22 .	40000	1	8	8		2.0				-	1

TABLE XLIII—continued.

ACTUALS of GAILS, GROUPS, and ADMINISTRATIONS on which the ratios in

				and A				-	DMISSI				DEATH								
JAILS AND GROUPS,	Average annual strength.	Influenza.	Cholera. Small-pox.	Enteric Fever. Malaria.	Pyrexia of uncer- tain origin.	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhea.	Hepatic Abscess.	Spieen Diseases.	Scarvy.	Abscess, Ulcer, and Boil.	Phagedaena, Slough, and Gangreen,	ALL CAUSES.	Teenia. Ascaris lumbri-	Dracunculus Mediannia	Strongylus duo-	Other Entozoa.	Average number
Rangpur	236 {			99		2 2	8 3	5	146			-	1	5		305				-	}
alpaiguri	127 {			6		1	1	2	10	10			4	3	=	76					}
Purneah	260 {			45		2	3	6	14	12				7		126	100			-	}
laya Dumka	144 {		30	17		2	4	6	63	9			1	7		166					}
uri	204 {		1	166		7	1	5	9	47			10	18		390				2	-
ankura	240 {			33	-	7	3	15	14	25		5	6	8		144	4 .			-	}
lidnapore, Central .	957 {	=	1	190		5 4	11 3	54	122	71			1	102		1,005		1		-	}
alasore	172{		2	28	-	***		1	54	25	1		2	9		180					}
uttack	343 {		1 1	49	4	4 3	4	21	64	37			1 2	25		298 15					}
ıri	174{		1						45	7		-	6	7		90 12					}
ngul	115{	-	23	19	1 ::	1:		2	34	13	***			13		162			-		1
ROUP IV.— BENGAL AND ORISSA. }	12,984 {	234	72 7 34	40 3,266 12 11	73	171 63	129	395	2,556 105	1,159	2	8	22 208	1	1	12,421 384	14 1	2	2	2	}:
A	185 {		5	20	21	1	1 1	13	24	14			3	13		175			-		}
orulia	201 {	-	2 2	48		1	3 2	5	20	43		-	5	13		187		2			1
anchi	213 {		1 3	31		2	6	4	80 6	37			2	11		236 13					-
damau	152 {		2 1	48	=		6 2	3	41 4	19			3	12		166	1	_		-	1
azaribagh, Central.	1,035			1 281		21 9	4	41	324 11	183			!!	79		1,228	3				}
ıya	552{	3	7	53	1	4	11 4	5	66	2		-	2	20	1	272 34					}
hagalpur, Central .	1,866 {		5			23 12	17	40	170 15	160 10	1		29	87		1,234 62	2				+
onghyr	372 {		1	102	-	8		11	So I	37			7	28		584	8 8		44	65	-
arbhanga	319 {		I	12		5 4		5	77	44				22	=	162 7				33	1
hamparun	315{			9"			4	8	19		100		1	13		125	-			}	1
uzaffarpur	376{	=	8	1		3 2	5	4	44 2	19			5	14		202 15					+
atna	387 {						3	6	50 2	28				21		268 18				- 3	-
rrah	275 { 280 {			59		3	1	4	8: 2 60	18		-		23 3		2:5 4 166			2	}	1
exar, Central	1,230 }			2 362		16	9	7	344	49			35	33		1,089	5 1	-	-	- 2	
orantadih	35 {			2		9			17 2					1		47				3	
hazipur	381 {			248			7 5	24 2	24 4	5	-		17	30		425 14	1				
zamgarh	302 {	3	- ::	1 94		2	5	6	15	5				23		202				-	
orakhpur	527{	2	1	123		4	9 2	22	*83 4	33	-	-	36	35		529	4 5			}	-
asti	363 {			74		7	3	8	18	7			7	45		271	1 1			: 3	
yzahad	599 { 363 {			139		6	9 1 7	5 9	10 1	3			4	98		391	2			- 3	
	201	in		2		1	5	1			100	-				14		0.000	1000	3	

		-							-	ADMISSI	loss		-	DEA	TUE							
JAILS AND GROUPS.	Average annual strength.	Influenza.	Cholera. Small-pox.	Malaria.	Pyrexia of un- certain origin,	Tubercle of the	Pneumonia.	Respiratory Diseases.	1	Diarrhora. Hepatic Abscess.	1 3	Scurvy.	Anæmia and Debility.	1 .	1	ALL CAUSES.	Taenia.	Ascaris lumbr i-	Dracunculus Medinensis.	Strongylus duo-	Other Entozoa.	Average number constantly sick.
Rai Bareli • •	581 {			35		7 3	1	14	20	10			4	27		211				-		} 14
Partabgarh .	256{		1	61		4	5 2	2	17	2	4		5	11		149					-	} 6
Jaunpur	303{	***		79		1	6 2	6	14 3	14			8	37		212 8			==			} 9
Benares, Central .	1,881 {		2	408 1		21 10	7 3	12	46	17		-	1 2	210		1,045 36		1				} 45
" , District .	413 {			66		2	4 2	2	9	6		-	3 2	27 11		192 12			:::			} 10
Mirzapur	222 {		2	6			1 1		3			-	2 2	5		35 5						} , 2
Allahabad, Central	1,643 {		4	107	249	14	5	37	56 2	29			4	249		981 27			:::			} 47
, District	603 {		2 2	79		6	12 4	38 3	48 6	7		=	3	85		505 19	1			:::		} 25
Karwi	39{						2			3		-				18 3						}
Banda	209{		2 1	69		1	5 3	13	26	11		=		16		228	-		:::			} 6
Fatehpur	264-{			82 I			6 3	6	5	27 3		:::		33	:::	197						} 8
Hamirpur	108{	4		75				6	13	2	***	=	::	12		140						} 3
Orai	156{			67	2		2	1	17			=		. 15		129						} 4
Cawnpore	408{			200			3	4	27	36			3	17		367 12					1	} •
Unao	310{			24		1	1	3		2			1	21		100						} +
Lucknow, Central .	1,679 {	***	5	14	=	6 2	12	6 2	34 11	6 2		1		63		235 32						} 24
" , District .	645{		3	30		2	5	2	21 4	===				48		212 14						} 17
Barabanki	476 {		1	73		1	4	5	20	25		=		29	::	248 10	-:		:::	:::		} 12
Gonda · ·	573 {		= 1=	76		9	2 2	8	7	2			42	12	***	21g 9						} 12
Bahraich	486 {		3	145	==	2	11	11 2	34	29 -			33	54	1 1	436 8	1		2			} 23
Kheri	347 {	***	6	54		3	3 2	4	4	7				45		203						} 7
Sitapur	833 {	51	2	319	2	2	32 4	4	27 3	14			2	50	= }	625						\$ 20
Hardei	495 {		= f=	94		2 2	4	7		13		=	10	27		247 8	-					} 12
Etawah	321 {			47			2	26	27	===		:::	5	28		1.0					'	} 6
Mainpuri	324{	3		480	22		8 4	8	59	25				33	=	701				:::		} 15
Etah	312 {		2	137		4	14		21 I	9			11	30		283						} 11
Fatehgarh, Central	1,752			150		13	14 2	25	53	12	==		3	73	3 1							} 23
,, District	350 {			107	::	9	5 2	14	25	10	=			14		12						} 8
GROUP V.— GANGETIC PLAIN AND CHUTIA NAGPUR,	26,317 {		79 68 6 38 5 3	5,389	298	235 96	307	506	2,283 142	1,051 3	5	1	325	,953	5 2	17,394	30	95	2		100	762
A Shahjahanpur .	406{	•••	2	210			1	18	11	8 1			3	50		77.00				10000		} 17
Pilibhit	47{		1		1			1		1				3		14 2						}
Bareilly, Central .	2,113 {		2 2	832		25 4	51 21	17 2	54 8	19			2	88	::	1,253						} 73
		-		7777	-0.			-	N. C. S. C.				-	-								

0 2

TABLE XLIII-continued.

ACTUALS of FAILS, GROUPS, and ADMINISTRATIONS on which the ratios in Tables XL-XLII have been calculated.

7			UPS, an	d AD		1311		I. AD	MISSIO		the	rati		2. DE		L	XLII ha	ine t	been	cas	cutat	ed.	-
JAILS AND GROUPS.	Average annual strength.	Inflectia.	Cholera. Small-pox. Enteric Ferer.	Malaria.	* 5	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhosa.	Hepatic Abscess.	Spicen Diseases.	Scurry.	Anzenia and Debility.	Abscess, Ulcer, and Boil. Phagedaena,	Slough, and Gangrene.	ALL CAUSES.	Tania,	coides.	Dracunculus Medinensis.	Strongy lus duo- denalis.	Average number	constantly sick.
Bareilly, District ,	760{		2	400	-	12 2	53	17	21	5				1	2000		6/17		-			24	24
Budaun	395 {		1	335		2	20 2	9	6	9 2	-			4	27		511	1				1	14
Aligarh	373{			182		3	13	8	6	1				2	27		342	1002				1.0	12
Bulandshahr	260 {			286	***	3	7 2	16	30	24					33		465 8					10	12
Moradabad	405{		2	400 I			13	10	50	20			***	5	St .		68o 17	100				16	15
Bijnoc · · ·	308{		3	72		8 3	10	2	4 1	1				3	- 3		152	1000				1	5
Dehra Dun	94{	***	1	45	2	3	2	2	2	6		-	441	1			94					1	4
Saharanpur	3So {		3	128			2	4	137	22				***	45		453 13					16	21
Muzaffarnagar .	167{	11		201		1	8 2	11	25	14			-	11	29		399			-		10	8
Meerut	595{	59 3	2	163			18 6	6 2	57 5	17					-		450 24	1	1			3	16
Delhi	498 {		2	142		4	21 6	3	29 2	8	1 1			1	1000	-	275 14					10	15
Rohtak	154 {			33	***		1	1	9	5	***		***		3000		96			4		10	3
Hissar . · ·	186{	-				4	6	9	17	5	-	::.		4			159 I			14		10	8
Karnal	125 {			90			3	8	19	7				2	000	:	- 6		-	1		10	4
Ambala	642 {		2	68	***	6	14 5	15	3	35				18								3	16
B Ludhiana	236 {		. 1	15	2	2	3	2	7	1				40	11 .		62					100	2
Hoshiarper .	65 {	***		31					9	10000			-		4 .		58				-	1	1
Jullunder	261 {	+11		27			4 2	3	12	6	,	1		5	31 .		140					2	5
Ferozepore	396{	***		54	26	5 3	14	:6	7	32				16	41 .		343			2		1	14
Amritsar	131 {	***		48			1	7	2	3 -		***	-		22		136						3
Lahore, Central .	1,565 {	26	3	422		20	43	50	110					- 4	36		1,093		-				52
, District .	475{		2 1 2	39	7	6 4	0.2	5	18	100		839		1	7 :		4.00			_			8
" , Female .	17'{			24	9	4 5	-	3 1	11 2	1721			-	2	4		- 50	4 .					5
Gurdaspur	191 {			14	=	=		1						1000	11					75.			2
Gujranwala	301 {			86		3 2	10	2	6						16		0		000				4
Sialkot	379 {		1 2	138	=			7	31						21		2					}	7
Gujrat	134 {			76	:::	2	2	1	12					100	23							,	3
Jhelum	223 {			33		4	3 2	3							19	200	7 -		0000			3	3
Rawalpindi	742 {			63		1	6	10	37	1				2	32		15						
Campbellpur	170{		===	27					22					727	20	42	4				. 1		3
GROUP VI UPTER SUB- HIMALAYA.	13,349 {	97	2 28 12 1 6 3	4,693			343 97	296	827	345	3 2	_	1	37 1,4	98			3			2	} 40	2

	*** ***	
Anneitro		

	7	100	1 1 1	1	16 1	100				I. AD	1 4	NS.				2. Di	EATHS.	-	-	-			1
JAHA AND GROUPS.	Average annual streegth.	Induenza.	Cholera. Small-pox. Enteric Fever.	Malaria.	Pyrexia of uncer- tain origin	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases,	Dysentery.	Diarrhoea.	Hepatic Abscess	Spleen Diseases.	Scarry.	Anemia and Debi-	Abscess, Ulcer, and Boil.	Phagedaena, Slough, and Gangrene.	ALL CAUSES.		Ascaris lumbri-	Dracunculus	Strongylus duo- denalis.	Other Entozoa.	Average number
eshawar	591 {			737	-	2	21 3	21 2	47 1		-	-	3	9	125		1,120						1
ohat	116 {	***		15			6 2	4	5	2					7		57			1			
annu	152{	2					1	3	13	9		-		5	***		87		141	3			
ahpur	208 {	***		83			2	2	17	22				1	20		158		***	5			
ianwali	216{			10	2			6		3					21	***	92			6			
allpur	298{		2	62	1		:	2	1	4	1000	-			12		128			***		-	
ang	188 {			52	3	***	2	5	8	3		-			23		146					- 5	
ontgomery, Central.	1,967 {		3 3	148	1	62 27	14	70	97	118				30	52		846 61			1		- 5	
coltan, Central .	1,052 {	6		73		13	9 3	46	2	10		5		4	116	-	472 26	1		2].	1	
" , District .	700 {	***	3 1	70		13	16	24	20 2	13			1	13	128		451 15				CO 100 P	1	
ra Ismail Khan .	391 {		1	135		7	4	13	36	11		8	1	5	60		344			5		1	
ra Ghazi Kha n.	224	***		26	3	***	1	8	20	11					25		195	1		***		1	
B	42 {			14			1	-	2	-					4			-				110	
kkut	385 {			26			9 2	12	7	2			2		4					1		,	
d Gang	459 {			98			44 7	35	29	25		1	2	2	57		384					1	
derabad, Central .	910 }		1 2	131	1		56	91	59 2	16		2	23	16	25		581	1				1	1
rachi	384{			4	24	3 1	1	9	31				2	5	17		185		-			,	1
OUP VII.— W. FRONTIER, DUS VALLEY,AND -W. RAJPUTANA.	8,293 {		4 8 4	1,691	35		185	351	196	260 8		6	34 0	1 2	707		777.7	4		24		1	2;
jkot	80 5			1				2	2	8					3		27				1	1	
medahad, Central.	918 {	***		43		6	8 3	20	11	17	,		, ,	4	65		327					1	
В							-			1				1								1	
ner	359 {			45			2	1	5	5	100000000000000000000000000000000000000				24		100000		-				
ttra	270 {		1	288		2	9	6	43 5	24				9	67		10 00 00 M						
District	2,246		1	364		9	10	103	4	33 4					53		7 000		-			10.00	14
District .	504 {			56		2	3	15	16						49		301		1004				
nsi	233 {	?		91	***		5	3	18	35		1			20		239						
itpur • • ·	36{			1.4			=				33500000			3			25						
OUP VIII.— E. RAJPUTANA, ENTRAL INDIA, ND GUJARAT.	4,666 {		1 1 5	902			Sq 22	153	120	137		1	2 4		8:		2,70S					}	17

TABLE XLIII—continued.

ACTUALS of FAILS, GROUPS, and ADMINISTRATIONS on which the ratios in Tables XL-XLII have been calculated.

		GRO		-	nd AL		1311		1.	ADMI	SSIONS	š.			2.	DEAT	IIS.		iave b	een c	alcul	7	-
JAILS AND GROUPS,	Average annual strength.	Influenza.	Cholera.	Small-pox.	Malaria.	Pyrexia of uncer-	Tubercle of the lungs.	Pneumonia.	Respiratory Diseases.	Dysentery.			Spleen Diseases.	Scurvy.	Anzemia and Debility.	5	70	ALL CAUSES.	Teenia. Ascaris lembri-	Dracuncules Medinensis.	Strongylus duo- denalis.	Australia Entrazon,	Average number constantly sick.
A Damoh	86{				30			2 1	1	6	6	-			1	16		88		4		}	2
Saugor	140 {			1	52		1 1	2	10	25	17	-			2	14		184		2		1	6
Jubbulpore, Central .	906 {				192		5	2	9	9	3			1		43	=	384		6		-	11
Narsinghpur	75 {						;			3 2	1	100			1	1		14				}	1
Mandla	76 {			1	5				4	1			444			7		28 3				1	1
Bilaspur	104{	:::			10	1				17	1		200			3	1	55 2			100000	}	2
Sambalpur	223{		6 5	2	77			2	7	53	16		0.00		1	14		238 13				1	6
Raipur, Central .	578 {	6		1	130	8	4 3	5 2	17 2	43 8	790				33	64		516 28				-}	23
Balaghat	65 {				8	1	9 2		4	4	10000							3/	1:		100000	:}	2
Seoni	67 {	:::		1		=	==			7				-		10		37				}	1
Chhindwara	61{					::		1		1			400			6		24 3			10000	}	1
Hoshangabad	74 {		=			::	1			6 5	1000					4		48				: }	1
Nimar	69 {		-								14					6		50			::: :	1	1
Betul	55 {				4				3	1					3	4		23				3	1
Nagpur, Central .	985 {		-		461	33	7	3	15	36	10				2	32		793 15	= -			1	22
Bhandara	54 {		-							'								2	= =			10	•••
Wardha	57 {									-	2						1	13				1	
Chanda	66 {	***					:::		1				=					16				10	1
B Secunderabad	85 {			=	17			2	-	11					1	8		78 2					,
Yeotmal	104 {				11		1		5	2	9				1	3		41 2				}	1
Amraoti	169 {		-		3			4 1		6	1				1	0		6 2		1			3
Akola	166 {	2 1			15		1		1	7	4				1	16		97	-	1		1	4
Buldana	56 {				3					2	1				2			21		1.		1	
Dholia	405 {				28		3 3		2	::	4				1 7	15		117		1.			8
Yerrowda, Central .	1,555 {			2	272		21	1	35	77	179		16		25	217		1,525	4	47			105
Bijapur	334{				39	52	9	,	31 5	21	3					15		251 7		22		-	8
Deccan Gang	581				84	:	-	5	26	17	34	1		2 1	2	179		620	1	1		1	22
Dharwar	361	==	-			2	1			24	23	-		1		17	-	259 1		8		+	5
GROUP IX}	7,557 {	19	6 5	5 4 2 2	1,589	68	66 28	32 8	172	384 25	371	-	16	4	S ₁	726	3 2	5,625 146	6 1		=	3	240

JAILS AND	annual		1.0	100	7 6	-00														_		
GROUPS.	Average strength.	Influenza.	Cholera. Small-pox. Enteric Fever.	Malaria.	Pyrexia of un- certain origin.	Tubercle of t	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarrhosa.	Hepatic Abscess	Spleen Diseases	Scervy.	Anzensia and Debility.	Abscess, Ulcer, and Boil.	Phagedgena, Slough, and Gangrene.	ALL CAUSES.	Taenia.	Ascaris lumbri- coides.	Dracunculus Medinensis.		Other Entozoa.
hana		-	2	76		3		48		38	1			6								T
nana	583 {			1		2	3	1	30	1					41		425	-		22		}
ombay, Common .	403 {			48		5 2	4 2	10	7				=	9	12	***	147			2		}
Correction.	216{			3	***	6		3	9	1			::	2	5		50 5			***		:}
tnagiri	93 {			4	1			4	2			1				***	31	-		1		}
arwar	198 {			26	5		2	12	4 ²	6		1			3		155		1			}
angalore	94{		3	3	1				16								27		1			}
annanore, Central .			6	102	13	4	6	42	86	17				26	23		437			***		1
ROUP X.—	813{		3	5		3	1		1								14					}
WESTERN COAST.	2,400{		3 9	262	20	18	16	119	192	73		2		43	85		43		2	26	=	-}
							-		-									1			1	
Allary, Central .	722 {		1	75		9	7 2	5	40 5	6				7	38		454 15	2	1	66		. }
lem, Central .	708 {		6	55	2	2	8	9	SI		-				5		194			10		,
imbatore, Central	1,282 {	***		25		5	12	8	29				2	8	27		251		-	35		16
		***		'		5	2		4	-		***					17	-				1
B	388 {		2	8		1	3	3	16					8	14		80			1		
adura	471 {		1	12	11	3	2	16	12 2	***				7	8				1	9		}
ichinopoly, Central	1,091 {			32	6	18 3	1	12	83				-	8	23		326 18			17		1}
anjore	372 {	***	1			2	1	3	3	2					9		39					
iddalore	389 {	1		8		1 1		16	39	2				5	11		151		1	7		- }
illore, Central .	1,345 {	***		20	79	3 4	15 4	44	19	22				55	98		733 24		3	23		2 }
adras, Civil	35{		: ==										-								= :	: }
adras Peni- tentiary, Central.	949 {		2 2 2 1	11	20	11 3	6	15	2					11	10	400	2:9		1	4	1	1}
c																						
ajahmundry,Central	1,064 {		64	74	9	11 9	10 2	28	158					29	23		639			17		-
izagapatam	647 {		25 2 11 2	327		8 3	15	11	94 14	25				46	7		793 47	1	2		1	
erhampur	173{		32 2	19		4	2 2	8	20			:::		2			105					-
ROUP XI.— SOUTHERN }	9,536 {	1	125 2 12	666	129	78	82	178	566	57		***	2	186	273		4-171	13	9	189	2	1

TABLE XLIII—concluded.

ACTUALS of FAILS, GROUPS, and ADMINISTRATIONS on which the ratios in Tables XL-XLII h

ACTUALS 0	f FAILS	, GR	OU	PS, a	nd Al	DMI	VIST	RAT	-	S on	which	the	_	-	in T	_	XL-	-XLII	has	00	een v	calci	lat	-
JAILS, GROUPS. AND ADMINISTRATIONS.	Average annual strength.	Influenza.	Cholera.	Small-pox. Enteric Fever.	Malaria.	Pyrexia of sucer- tain origin.	Tubercle of the langs.	Pneumonia.	Respiratory Diseases.	Dysentery.	Diarribora.	Hepatic Abscess-	Spleen Diseases.		Anzemia and Debility.	0	Phagedaena, Sleugh and Gangrene,	ALL CAUSES.	Tania.	Ascaris lumbri-	Dracunculus Medinensis,	Strongylus duo-	Other Entoroa	Average number constantly sick,
Aijal Kohima	9 1		111		5 3	-			-	4	6	-				1		25						
Shillong	51 {			-			1 1	1	4	11	3			1		5		43	111					2
Darjeeling .	108				¥		5 2	***	32	7	6				3	6		103		-			-	} 6
Almora	82 {				7			2	4	11						2		43 1						} .
Pauri	13 }	-					1 1	111		3 1	1							15 2						} .
Naini Tal	41 {		***		26					=	13		-		5	3		67	-	***	-			} '
Simla	114													***	1 2	6		15						}
Abbottabad	95 {	-	***		31			1	3	4			4			21		140	-	***	***			1 3
Quetta	92 {				4				3	4	1		-		1	3		29						
Russellkonda	95 }	- :::	27					1	2	14				-	5 3	8	=	72 40	***					
GROUP XII	} 666{	=	27 19		123		7 4	11 2	50	61	41				18	57	-	578 58				=		18
EXTRA ÎNDIA— Aden	65 {				3					2			1			2		13			***			
+ Remaining from 1997 . Admissions 1 Octal deaths . Deaths out of hospital	1,01,335	26 439 4	337	15 36	20,039	18 953 2	164 951 381	142 1,259 328	168 2,366 104	194 7,796 473	66 3,866 95 	10	4 57 2	8 69 3	73 1,194 50	243 6,605 8	9	2,269 65,455 2,449 28	60	1 122 1	4 410	60 2		2,509
BURNA	13 71	6	17	21		228	106	50	128	269 19	161	2 3	1 1	3	27	543		3,840		1		5		
EASTERN BENGAL }	7,118	233	15		2,017	42	75 32	82 23	191	1,433 60	516 9	3		6 1	134	306		G,528 227	5	1 1		5		261
BENGAL	15,565 {	3	1,10 62	20 16	3,856	53	200 78	133 36	432	2,8:8	1,491	2 2	9	17	214 15	893		14,474 492		100			100	
PROVINCES.	28,308{	133	17	9 2	7,963	279	79	139	39	1,318	655	3	5		13	2,380	4 2	19,217	13	8	4 /		2 15	875
PUNJAB NW. FRONTIER }	11,919	33	5 1	2 4	:,960 5	109	70	54 33	3:8	586 45	382 13	1	8		157	971		6,927 280	***	***	48		2	309
PROVINCE. 5	1,345	19		3 1	961		1 40	6 20	3	181	114		-		50	201		1,643 21 2,537	-	***	9		1 3	51
PROVINCES.	4,013	1		2 1	4		16	4	6	21	2					600	2	89					5	84
BOMBAY	7.930	***	1	5 3	997	55	52 24	130	9	7 7	379		22	33 2	83	678		5,183		2	143	2000	= }	259
MADRAS	10,638 {	1	15: 75	2 21		143	80 34	89	8	682 75	74			2	217	304		4,797 317	3	10	189	2	4 }	243
Andamans	14.067 }			3	31	132		143	635	1,559	500			31	5	1,405	4 2	20,236 375	3			10	- }	1,105
* Remaining from 1967. Admissions Total deaths . Deaths out of hospital	15,403 {	26 420 4	337		779 32,087 136	114 1,086 2 			225 3,001 119	284 9×355 534 	85 4,300 105	10	3	16 00 3	56	330 8,010 8	13 6	3,421 85,691 2,824 57		1 1	4	70 1		4,014

^{*} Remaining + admitted = total treated; Remaining + admitted + died out of hospital = total cases.
† Including Ajmer, Sibi, Quetta, Secunderabad, and Mercara, and excluding Andamans.
† Including Ajmer, Sibi, Quetta, Secunderabad, Mercara and Andamans.
† Including the subsidiary jails, the total figures are:—Average strength, 107,271. Average constantly sick, 2,998. Number of deaths, 2,584. Number of admissions, 60,844.

(b) Including the subsidiary jails, the total figures are:—Average strength, 121,338. Average constantly sick, 4,103. Number of deaths, 2,959. Number of admissions, 90,480.

				ı. Av	ERAGE STR.	ENOTH,	s. Con	STANTLY SI	CK.				
GROGRAPHICAL GROUPS,	January.	February.	March,	April,	May.	June.	July.	August.	September,	October,	November.	December,	Average fer the year,
GROUP IBURMA COAST AND BAY	9,663	9,482	9,570	9,585	9,641	9,843	9,105	9,675	9,563	9,551	9,053	9,150	9,540
SECUP II.—BURMA INLAND	4,260	4,224	4,261	4,296	4,301	4,348 61	4,354	4+453	4.537	4,489	4,183	4,223	4,329
BEOUF III,—ARSAN	1,631	1,608	1,597	1,600	1,589	1,600	1,603	1,597	1,501	1,447	1,303	1,316	1,537
BOUP IVBENGAL AND ORISSA .	12,344	12,544	19,552	12,664	12,756 517	12,978	13,243	13,442	13,827	13,721	13,753	12,953	12,98
ROUP VGANGETIC PEAIN AND CHUITA NAGFOR.	23,437	24,689 625	25,473 679	26,005 758	16,058 740	27,159 737	27,564 803	18,189 848	28,4\$5 810	27,797 900	25,675	25,263 758	16,31
BOUP VIUPPER SUB-HIMALAYA .	12,486	12,795	13,210	13,135	13,425	13,683	13,865	14,021	14,055	13,718	12,813	12,065	13,64
BOUF VIINW. FRONTIER, INDES VALLET, AND NW. RAI-	7,864	8,025	8,319	8,50:	8,590	8,513	8,500	8,423	3,568 :68	8,550	7,935	7,774	8,20
CENTRAL INDIA, AND GUJARAT,	4,317	4,300	4,503	4.743	4,843	4,863	4,917	4,976	4.978	4,836	4.417	4+799 180	4,66
ROUP IX-DECCAN	6,900	6,947	7,065	7,164	7,510	7,702	7,887	8,044	8,016	5,125	7,629	7,500	7.51
ROUP XWESTERN COAST	1000	2,322	2,379	3,403	2,443	3,403	2,418	2,432	275 2,510	2,415	2,283	2,323	3,40
ROUP XI,-SOUTHERN INDIA	9,641	9,635	9,544	9,485	9,469	9,525	9,528	9,430	9,675	10,180	9,648	9,8;3	9,63
ROUP XII.—Hitts	597	603	593	170 548	758	741	235 784	278 773	245 842	369 609	530	\$30	6
NDIA* · · · · {	95,557	97,253	99,121	1,00,689	1,01,347	1,03,476	1,04,447	1,05,523 3,183	1,06,615 3,308	1,05,563	98,195	21 58,007 2,948	1,01,3
					I. AVERA	SE STRENGT	тн. :	2. CONSTAN	TLY SICK.				
ADMINISTRATIONS,	.6.	uy.						2	tember.		per.	per.	Average for
	annary.	chruary	5	ej.	:	.2		100	25	25		6	95.
	-	75	March	April.	May	June.	Jely.	August.	dy.	October,	November	December,	Aver
GRMA	13.913	13,705	13,831	13,881	13,913	14,191	14,050	14,118	14,100	14,040	13,250	13.378	
	13,923 189 7,192	13,705 195 7,219	13,831 216 7,093			14,191 211 7,186			The state of the			1000000	15,87
ASTERN BENGAL AND ASPAM . {	13,923	13,705	15,831	13,881	13,919	14,191	14,050	14,118	313	14,040	13,250	13,378	19,87
ASTERN BRIGHL AND ANNAM	13,913 189 7,192 197 14,351 480	13,705 195 7,219 185	13,831 216 7,093 233	13,881 195 7,070 217	13,913 104 7,074 245	14,191 211 7,186 252	14,050 244 7,219 297	14,118 244 7,311 291	24,100 213 7,327 311	14,040 21\$ 7,205 325	13,250 237 6,686 272	13,378 220 6,840 248	15,8
SHEERN BRIGHT AND ASSAM	13,923 189 7,192 197 14,351 480 25,030 789	13,706 195 7,319 185 14,708 481	13,831 216 7,093 233 14,572 50)	13,881 195 7,070 257 15,041 551	13,913 194 2,024 245 15,158 577	14,191 211 7,186 252 15,534 598	14,050 244 7,219 297 15,893 711	14,118 244 7,311 291 16,211 719	.14,100 313 7,327 311 15,739 660 30,441 1,001	14,040 215 7,205 325 16,719 671 29,354 1,093	13,250 237 6,686 272 15,626 603 27,123 1,039	13,378 220 6,840 248 15,880 (03 26,193 922	15,87
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ENGAL	13,923 189 7,192 197 14,351 480 25,030 789 11,263 318 1,243 41	13,705 195 7,219 185 14,708 481 26,438 793 11,360 283 1,305	13,831 216 7,093 233 14,972 500 27,714 745 11,474 261 1,501	13,881 195 7,070 257 15,041 551 28,974 227 11,785 263 14421 43	13,943 194 7,074 245 15,158 577 28,654 814 11,609 263 1,393 34	14,191 211 7,186 252 15,534 \$98 29,372 817 12,159 253 1,279	14,050 244 7,219 297 15,893 711 29,856 8 12,461 263 1,253 38	14,118 244 7,311 291 16,221 719 30,316 895 12,469 293 1,314	14,100 213 7,327 311 15,739 650 20,441 1,051 3,532 3,65 1,410 68	14,040 21\$ 7,305 335 16,719 671 29,584 1,093 12,373 407 1,403 5\$	13,250 237 6,686 272 15,626 603 27,13 1,039 11,674 410 1,305	13,378 230 6,840 248 15,880 (03 26,393 923 11,557 334 1,305 53	15,81 1 1 20 15,50 60 28,30 81 11,91 11,91
ASTERN BENGAL AND ASPAM	13,923 189 7,192 197 14,351 480 25,030 789 11,263 318 1,243 41 3,451 56	13,705 195 7,319 185 14,708 481 26,438 103 11,360 283 1,305 35 3,539 28	13,831 216 7,093 233 14,572 500 27,714 745 11,474 261 1,502 35 3,674 69	13,881 195 7,070 257 15,041 551 28,574 817 11,785 263 1,421 42 3,871 71	13,913 194 7,074 245 15,158 577 38,654 814 11,609 263 1,393 34 4,019 74	14,191 211 7,186 252 15,534 \$98 29,373 817 12,159 255 1,279 39 4,131 83	14,050 244 7,219 297 15,893 711 29,856 8 12,461 263 38 4,255 74	14,118 244 7,311 291 16,221 719 30,316 895 12,469 293 1,314 41 4,315	14,100 213 7,327 311 15,739 650 30,441 1,051 3,532 385 1,410 68 4,343 120	14,040 21\$ 7,305 335 16,719 671 29,584 1,093 12,373 407 1,403 58 4,359 121	13,250 237 6,686 272 15,616 663 27,113 1,039 11,674 410 1,305 79 4,009	13,378 230 6,840 248 15,880 (cc) 35,393 923 11,557 324 1,305 53 4,095	15,87 20 15,50 60 28,30 87 11,90 1,3
ENGAL	13,923 189 7,192 197 14,351 480 25,000 789 11,263 318 1,243 41 3,451 56 7,722 253	13,705 195 7,219 185 14,708 481 26,438 703 11,360 283 1,305 35 3,539 28 7,644 269	13,831 216 7,093 233 14,572 500 27,714 745 11,474 261 1,501 35 3,674 69 7,291 285	13,881 195 7,070 257 15,041 551 28,974 827 11,785 263 1,421 43 3,871 71 7,940 263	13,913 194 7,074 245 15,158 577 38,654 814 11,609 263 1,393 34 4,019 74 8,018	14,191 211 7,186 252 15,534 \$98 20,372 817 12,150 255 1,270 39 4,131 83 8,217 243	14,050 244 7,219 207 15,893 711 29,856 8 12,461 1,253 38 4,255 74 8,227 288	14,118 244 7,311 291 16,221 719 30,326 895 12,469 293 1,314 41 4,315 94 8,197 284	14,100 213 7,327 311 15,739 660 30,441 1,001 13,532 385 1,410 68 4,743 120 8,259 264	14,040 215 7,005 335 16,719 671 29,554 1,033 12,373 407 1,402 55 4,359 121 8,169 246	13,250 237 6,686 272 15,656 663 27,113 1,039 11,674 410 1,305 79 104 7,435 320	13,378 230 6,840 248 15,880 (02 26,393 923 11,557 334 1,305 53	19,8) 1 1 1 20 15,50 60 28,30 8) 11,91 1,3
ASTERN BENGAL AND ASPAM ENGAL	13,923 189 7,192 197 14,351 480 25,030 789 11,263 318 1,243 41 3,451 56	13,705 195 7,319 185 14,708 481 26,438 703 11,360 283 1,305 35 3,539 28 7,644	13,831 216 7,093 233 14,572 500 27,714 745 11,474 261 1,502 25 3,674 69 7,291	13,881 195 7,070 257 15,041 551 28,974 897 11,785 263 1,421 42 3,871 71	13,913 194 7,074 245 15,158 577 28,654 814 11,609 263 1,393 34 4,019 74 8,008	14,191 211 7,186 252 15,534 \$98 20,372 817 12,150 255 1,270 39 4,131 83 8,217	14,050 244 7,219 297 15,893 711 29,856 8 12,461 263 38 4,255 74 8,227	14,118 244 7,311 291 16,221 719 30,316 895 12,469 293 1,314 41 4,315 94	14,100 213 7,327 311 15,739 660 30,441 1,051 2,532 385 1,410 68 4,343 120 8,259	14,040 21\$ 7,000 33\$ 16,719 671 29,584 1,033 12,373 407 1,403 58 4,359 121 8,169	13,250 237 6,686 272 15,656 663 27,113 1,039 11,674 410 1,305 79 4,009 104 7,435	13,378 230 6,840 248 15,880 cos 35,393 923 11,557 234 1,305 53 4,095 89	13,8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ASTERN BRNGAL AND ANDAM RNGAL	13,923 189 7,192 197 14,351 480 25,030 789 11,263 318 1,243 41 3,451 56 7,722 252 20,713 214	13,705 195 7,219 185 14,708 481 26,438 703 11,360 283 1,305 35 3,539 98 7,644 269 10,658 199	13,831 216 7,093 233 14,872 503 27,714 745 11,474 261 1,502 25 3,674 69 7,791 285 10,544 212	13,881 195 7,070 257 15,041 551 28,974 827 11,785 263 1,421 43 3,871 71 7,940 263 10,474 187	13,943 194 7,074 245 15,158 577 28,694 814 11,599 263 1,393 34 4,019 74 8,018 251 10,480 213	14,191 211 7,186 253 15,534 598 29,373 827 12,159 255 1,279 39 4,131 83 8,227 243 10,571 247	14,050 244 7,219 297 15,893 711 29,856 8 12,461 263 1,253 38 4,255 74 8,227 288 10,594 254 1,04,447	14,118 244 7,311 291 16,221 719 30,316 895 12,469 293 1,314 41 4,315 94 8,107 184 10,504 311 1,05,523	14,100 213 7,327 311 15,739 660 30,441 2,001 13,532 385 1,420 68 4,743 120 8,259 264 10,795 272 1,00,615	14,040 21\$ 7,305 33\$ 16,719 671 29,354 1,093 17,373 407 1,402 5\$ 4,359 131 8,169 246 11,091 300	13,250 237 6,686 272 15,626 603 27,13 1,039 11,674 410 1,305 79 4,009 104 7,435 220 10,490 250 25,805	13,378 220 6,840 248 15,880 (02 26,193 912 11,557 234 1,305 53 4,093 89 7,343 225 10,719 254	13,8) 1 1 21 15,5) 6 28,3) 8 11,9) 7,9 2 10,6 1 1,01,1
INITED PROVINCES	13,923 189 7,192 197 14,351 480 25,030 789 11,263 318 1,243 41 3,451 56 7,722 252 20,713 214 95,557 2,548 14,279	13,705 195 7,219 185 14,708 481 26,438 703 11,360 283 1,305 35 3,539 98 7,444 249 10,658 199	13,831 216 7,093 233 14,972 503 27,714 745 11,474 261 1,501 35 3,674 69 7,792 285 10,544 212 2,577 14,240	13,881 195 7,070 257 15,041 551 28,574 227 11,785 263 1,421 43 3,871 71 7,940 263 10,474 187 2,0,689 2,669	13,913 194 7,074 245 15,158 577 28,654 814 11,609 263 1,393 34 4,019 74 8,058 251 104,80 213 109,347 2,675 14,179	14,191 211 7,186 253 15,534 598 29,373 827 12,159 255 1,279 39 4,131 83 8,227 243 10,571 247 103,476 2,787 14,110	14,050 244 7,219 297 15,893 711 29,856 8 12,461 263 1,253 38 4,255 74 8,227 288 10,594 254 1,04,447 3,014 14,114	14,118 244 7,311 291 16,221 719 30,316 895 12,469 293 1,314 41 4,315 04 8,107 184 10,50, 311 1,05,523 3,183	14,100 213 7,327 311 15,739 660 20,441 1,051 13,532 385 1,410 68 4,743 110 8,259 264 10,796 271 1,05,615 3,08 14,055	14,040 21\$ 7,205 32\$ 16,719 671 29,554 1,093 12,373 407 1,402 5\$ 4,359 121 8,169 246 11,091 300 1,05,553 3,484 13,999	13,250 237 6,686 272 15,626 603 27,123 1,039 11,674 410 1,205 79 4,009 104 7,435 220 10,490 250 98,205 2,214	13,378 220 6,840 248 15,880 (02 26,293 922 11,557 324 11,305 52 4,095 89 7,343 225 10,719 254 98,007 2,548 13,464	15,87 15,87 11 12 15,50 60 18,30 11,91 10,6 2 10,6 2 10,6 2 10,6 2 10,6 1
ASTERN BENGAL AND ANDAM ENGAL	13,923 189 7,192 197 14,354 480 25,030 789 11,263 318 1,243 41 3,451 56 7,712 254 25,030 1,243 41 3,451 56 1,713 214 95,557 2,43 14,79 1,130	13,705 195 7,219 185 14,708 481 26,438 703 11,360 283 1,305 35 3,539 98 7,644 269 10,658 199	13,831 216 7,093 233 14,972 503 27,714 745 11,474 261 1,501 35 3,674 69 7,792 285 10,544 212	13,881 195 7,070 257 15,041 551 28,974 227 11,785 263 1442 43 3,871 71 7,940 263 10,474 187 1,0,689 2,669	13,913 194 7,074 245 15,158 577 28,694 814 11,509 263 1,393 34 4,019 74 8,018 251 104,80 213	14,191 211 7,186 253 15,534 598 29,372 827 12,159 255 1,279 39 4,131 83 8,227 243 10,571 247	14,050 244 7,219 297 15,893 711 29,856 8 12,461 263 1,253 38 4,215 74 8,227 288 10,594 264 1,04,447 3,014	14,118 244 7,311 291 16,221 719 30,316 895 12,469 293 1,314 41 4,315 04 8,107 184 10,504 311 1,05,523 3,183	14,100 213 7,327 311 15,739 660 30,441 1,001 11,532 385 1,410 68 4,343 130 8,259 264 10,795 272 1,06,615 3,08	14,040 21\$ 7,305 335 16,719 671 29,554 1,093 12,373 407 1,402 5\$ 4,359 131 8,169 246 11,091 300	13,250 237 6,686 272 15,626 603 27,13 1,039 11,674 410 1,305 79 4,009 104 7,435 220 10,490 250 25,214	13,378 220 6,840 248 15,880 (02 26,293 922 11,557 324 1,305 52 4,095 89 7,343 225 10,719 254 98,007 2,548	13,87 1 1 1 20 15,50 60 28,30 31,30 1,30 1,30 1,30 1,30 1,30 1,30

^{*} Including Aden, and excluding Andamans.
† Including Adamans, Secunderabad, and Mercara and excluding Andamans,

TABLE XLIV.

ABSTRACT of the SANITARY SHEETS of the most UNHEALTHY JAILS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.

BENGAL.

Jessore.—Overcrowding lasted for four months and eight days during the year in all the wards allotted for convicts and in one of the under-trial wards. There is no separate accommodation in the hospital for cases of infectious disease. At present nightsoil from the hospital privies has to be carried through two wards, which is objectionable. The smaller drains inside the jail are defective in slope and fall. The sickness and mortality are said to have been due partly to an extraordinary invasion of flies during January and February. Two skylights were opened in one of the hospital wards, improving the ventilation and the entry of light. Double fly-proof doors were provided to both the hospital and the general kitchens. The Inspector-General remarks that prisoners in this jail come from an unhealthy district.

Baraset.—The jail was overcrowded during part or the whole of March, May, June, July, August and September. Heavy rains and imperfect drainage outside the jail were said to be the chief cause of malaria. It is said that most of the prisoners who come to this jail from the locality and from the sub-jails are affected with dysentery and malaria. The Inspector-General remarks that it is an unhealthy district.

Howrah.—The convict and under-trial wards were overcrowded almost throughout the year. The jail is surrounded on two sides by a number of wretched huts, inhabited by a poor class of people and among the huts there are many katcha drains, where filthy water accumulates and forms a great breeding ground for mosquitoes. Electric lighting was provided during the year.

Krishnagar.—A kutcha shed in the inner yard of the jail, capable of accommodating 32 prisoners, was insufficient to relieve the overcrowding, which lasted throughout the year. The Public Works Department has submitted estimates for erecting another shed. The dormitory accommodation is said to be insufficient, and in the factory and work sheds the floors are damp, walls bad, and roofs not always water-tight or sun-proof; the hospital accommodation is inadequate and unsatisfactory. The ground on which the jail is built is flat and the drainage is not very good, particularly to the west and south, so that water-logging occurs occasionally in the garden after heavy rain. The surface drainage has been cut off from the Laldigh's reserved for drinking water for the public. A pucca drain along the outside of the northern side of the main jail wall is said to be needed, as the present kutcha drain continually silts up. A mehtar colony and a neglected tank within 200 yards of the jail are too insanitary areas to which the attention of the local municipality has been frequently drawn. The sickness and mortality were attributed to:—(1) Lowered vitality and consequent diminished power of resistence to disease, the result of scarcity and high prices of food in the district. (2) Malarial infection, the dristrict of Nadia being notoriously malarious. (3) Cholera in the municipal area to the west of the jail. Several minor sanitary improvements in connection with drainage, clearance of jungle, etc., were effected during the year. The Inspector-General remarks:—" Generally an unhealthy jail. Application has been made for funds for a much needed new hospital".

Naya Dunka.—Overcrowding lasted for 225 days during the year. The sickness and mortality were abnormally high, due, it is said, to the majority of the prisoners having been admitted into the jail in bad health and to the overcrowding of the jail. Many of the prisoners were admitted to hospital on arrival at the jail. The Inspector-General remarks:—"The bad results of the year were largely due to a serious cholera outbreak, origin not traced. The jail urgently needs extension and funds are awaited".

Suri .- There was no overcrowding and no important defects were reported.

Midnapore Central.—The jail was overcrowded on 114 days. Six of the dormitories were reconstructed during the year, but the ventilation of wards Nos. 7, 8, 9 and 10 is still defective. Malaria and dysentery were the prevailing diseases.

Balasore.—There was overcrowding almost throughout the year. The convict warders and night guards were allowed to sleep a night in the workshed to relieve the overcrowding. Gastro-intestinal troubles are said to be most frequent among the opium-eaters, who form a large percentage of admissions into the jail and hospital. Worm-out, old and debilitated men, who have not sufficient strength or vitality to recover from any severe form of illness, are admitted into the jail and increase the death-rate. The number of dysentery cases and bowel complaints increased during the rainy season owing to the sudden variations of temperature. The health of the prisoners was much affected during this time and meat was issued to them. The Inspector-General remarks that the district is unhealthy.

Cuttack.—Overcrowding lasted from the 27th April to the 10th November and from the 20th November to the 23rd December. It was relieved by using two temporary sheds. The dormitories are insufficient in number and defective in structure. The factories are insufficient in number and size; work has to be carried on in the dormitories during the rainy season. There are no separate wards for infective diseases in the hospital. The ventilation is generally defective, as the jail is situated in the middle of the town and surrounded by court buildings. The ventilation of the wards is also defective, as in all of them, with the exception of No. 2, there are four rows of beds. The Inspector-General states that large extensions are in progress.

EASTERN BENGAL AND ASSAM.

Dibrugarh.—There was overcrowding for 112 days in the convict ward and for 85 days in the under-trial ward. The accommodation in the dormitories and hospital is at times insufficient. The drainage around the jail is very defective. It is said that the jail is old and constructed on a pattern that is now obsolete.

Gauhati.—This jail was overcrowded throughout the year. The dormitories are said to be infested with fleas and to be very draughty. The site of the jail is low and the factory sheds are damp. The drains inside the jail are out of repair and are lower than those outside so that during the rains they become flooded. Villages, bazaars and low-lying Bheel land surround the jail. The prevalence of dysentery was attributed to the dampness of the jail buildings and defective drainage.

Mymensingh.—The shed used to prevent overcrowding of the barracks was said to be quite unsuitable. The drainage outside the jail is very unsatisfactory. Cholera was the chief cause of the unhealthiness of this jail during the year.

Dacca.—There was overcrowding throughout the year and some prisoners had to be accommodated in the workshops. The drainage around the jail is very defective due, in the opinion of the Inspector-General, to the indifference of the Municipal Committee of Dacca town.

Rampur Boalia.—Overcrowding lasted for 51 days. The jail is situated in the native town and it is said that the site is below the level of the river. The transfer of sick and aged prisoners from the district jails in part accounted for the increased sickness and mortality.

UNITED PROVINCES.

Meerut -No important defects were reported.

Muttra.-The jail was overcrowded for about 20 days in April. No important defects were reported.

TABLE XLIV—continued

ABSTRACT of the SANITARY SHEETS of the most UNHEALTHY FAILS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.—continued.

Agra Central and District.—No important defects were reported. In these jails as well as in those at Meerut and Muttra malaria was the chief cause of the unhealthiness.

Jhansi.—Overcrowding lasted for 45 days. The high death-rate was attributed to the admission of prisoners who were already broken down in health.

Ghazipur.—The jail is said to be old fashioned but improvements are being carried out. The number of old and infirm prisoners was unusually large during the year.

Gorakhpur.—There was overcrowding for 72 days. No defects were reported and the jail was described by the Inspector-General as a well built modern jail in excellent sanitary condition.

PUNJAB.

Delhi.—Overcrowding, which lasted for 223 days, was relieved by using tents. The year was marked by a heavy rainfall, which led to a severe epidemic of malarial fevers in the district and city, but owing to the prophylactic use of quinine the jail suffered to a slight extent only. Dysentery was also very prevalent in the district and city, as a separate disease and as a sequala of malarial fevers. Pneumonia, too, caused a large number of admissions. Apart from the epidemic of malarial fevers, no particular local causes are assigned for the sickness and mortality. The Inspector General remarks:—"Sanitary condition sound; but buildings not suitable for prison requirements. Mortality rate practically always above that of the provincial prison rate, the general physique of the new admissions is very poor and probably to that may be attributed the comparatively high death-rate".

Karnal.—The excess number of under-trial prisoners was accommodated inside the jail in the barracks for convicts. The ventilation of barrack No. 7 for under-trials and in the women's barracks is defective. A very large number of prisoners were admitted in indifferent health owing to malaria, which was prevalent in the district from August to November. The Inspector-General remarks:—"There are many requirements, but as it is intended to convert this jail into a subsidiary, no money is being spent on construction, The mortality rate is very high, but the daily population is small so that the six deaths give a high figure of 47-62. The physique of those admitted is lower than in any other district and has been lower this year than usual, and I find that, of the six prisoners who died, four were admitted in bad and two in indifferent health".

Ambala.—Some of the cells are built "back-to-back", thus preventing through ventilation and proper lighting. Nos. 2 and 5 double barracks are not well constructed and the arrangement of the building does not permit free ventilation of the site. As far as malaria was concerned, though the surrounding civil population suffered badly, the prisoners scarcely suffered at all; there were only 62 admissious compared with 121 in the previous year. The medical officer in charge states that this was no doubt due to the efficient prophylactic use of quinine. The Inspector-General remarks:—The daily population of this jail was much raised, as there was a general increase of prisoners, but there was never actual overcrowding. I do not consider that the general health was adversely affected by the number accommodated. The medical officer who held charge most of the year informed me that there was not the slightest indication of lowered health brought, about by the occupancy of barracks Nos. 2 and 5".

Lahore Central.—There was no actual overcrowding, as the under-trial prisoners were accommodated in the barracks allotted for the convicts and tents were used when the number of the prisoners was in excess of that which could be accommodated in barracks. The Inspector-General remarks:—"The death-rate for the past year was 36'42 against 25'16 and was the highest for many years past. It was brought about by the prevalence of dysentery, pneumonia and tubercle. I considered that the high mortality was in a measure due to the breakdown of the medical arrangements owing to sickness and change of staff whereby careful supervision just at the unhealthiest time of the year was wanting. The general sanitary condition of the institution is excellent".

Lahore Female.—The medical officer in charge states that the increased death-rate was due to the exceedingly unhealthy year in Lahore following the unusually heavy rainfall. Some of the buildings, e.g., worksheds, let the rain through the roofs and walls. Nearly all the deaths recorded were in old and infirm women, who were admired to jail in indifferent or bad health and who quickly succumbed to the prevailing unhealthy conditions. The Inspector-General remarks:—"A very high mortality rate recorded, but every single death adds 8 to the rate so that in a small jail the figure is of no very great significance; especially here, as there are many old, feeble and broken down women with long terms".

Jhelum.—The overcrowing was relieved by accommodating the excess number in other available barracks. The sickness and mortality are not attributed to any particular condition. The Inspector-General remarks:—" Jail on a healthy site and sanitary state good. The high mortality rate due mainly to adventitious causes."

Montgomery Central.—The overcrowding which lasted throughout the year was relieved by accommodating the prisoners in barracks, as heavy rainfall and bad drainage rendered tents uninhabitable. The drainage outside the jail is bad and at times of heavy rainfall all drainage finds its way to the back of the jail enclosure and water tends to accumulate. Tubercle, as in past years, was the chief cause of a high mortality. The medical officer states that as tuberculous prisoners are kept in part of a general hospital, this probably accounts for the want of success that has attended all efforts to cope with these affections. To this want of separation he attributes the spread of the disease, as 19 out of the 28 who died would appear to have contracted the disease in the jail. The Inspector-General remarks:—"This jail invariably has more convicts than it is intended to hold and is therefore technically always overcrowded; however, under ordinary circumstances, the overflow is accommodated in tents, and taking into consideration the site, I don't think has the slightest effect on the general health. Funds were again allotted and again withdrawn for the tubercular ward; undue stress, however, need not be placed on isolation, it has in no way affected tubercle in the Lahore Central Jail. The defects in drainage will be removed by the excavation of the Montgomery canal which is now in hand."

NORTH-WEST FRONTIER PROVINCE.

Kohat.—The overcrowding in the convict and under-trial wards which lasted for 90 days, was relieved by using workshops or other buildings. The jail is built on the outside of the city wall and in an unsatisfactory position.

CENTRAL PROVINCES.

Saugor.—The excess number of under-trial prisoners were locked up in an empty convict barrack. The sickness and mortality are said to have been due to "climatic conditions".

TABLE XLIV—continued.

ABSTRACT of the SANITARY SHEETS of the most UNHEALTHY FAILS, SANITARY DEFECTS, IMPROVEMENTS, SUGGESTIONS, etc.—continued.

Narsinghpur.—The medical officer in charge is of opinion that one of the causes which contributed to the large number of admissions to hospital was the use of the grosser kinds of grain for food during the period when prices ran high, added to the natural ill-effects from the use of dirty water, in regard to which the people are careless.

Mandla.—There was crowding in the under-trial and female wards for 104 days. Malaria was the principal cause of sickness, and was said to be due to innumerable breeding places for mosquitoes in the civil station.

Raipur Central.—Owing to scarcity in the district, the condition of prisoners on admission was bad and the deaths that occurred in the majority of cases resulted after short periods of confinement in jail. The number of admissions for malaria increased from 89 in 1907 to 129. The Inspector-General remarks:—"A special report on the jail as regards its mortality is necessary and this I shall submit after the annual report has been sent in. I do not consider that the rice fields have anything to say to the mortality. The jail is in an excellent position. Until the wash water from the jail was led into sub-soil drains and the kitchen water also, the water collected in an insanitary pond, which I think had more to say to its unhealthiness (malaria) than the rice fields. There are other causes of unhealthiness which I will take up in the report".

BOMBAY.

Hyderabad.—Overcrowding lasted from January to October and some prisoners had to be kept in tents. The hospital accommodation is said to be insufficient. An outbreak of cerebro-spinal meningitis accounted for 12 of the 34 deaths during the year.

Karwar.—The jail site is said to be low lying in comparison with the surrounding country and drainage is defective. Efforts are being made to fill up depressions.

MADRAS.

Bellary.--Worksheds were occupied to relieve overcrowding. No defects of ventilation, drainage or conservancy were reported. The water-supply was said to be very liable to contamination.

Rajahmundry.—A severe outbreak of cholera occurred during the year and dysentery and other bowel affections were unusually prevalent. The Inspector-General says that so far as the water-supply, drainage, ventilation etc., of the jail is concerned, no deterioration has taken place. Famine and cholera prevailed in the surrounding districts.

Vizagapatam.—There was overcrowding throughout the year; it was relieved by housing prisoners in temporary sheds. Sickness and mortality were attributed chiefly to conditions of scarcity as a result of which prisoners were in a half-starved condition on their admission to jail.

Berhampur. - The accommodation in both barracks and hospital is said to be insufficient. Cholera caused 18 deaths and malaria and dysentery were prevalent.

BURMA.

Mergui — The convict ward was overcrowded throughout the year and the under-trial ward for 113 days. It is said that there was no particular local cause of the sickness and mortality. There were fifteen cases of dysentery under treatment during the year. These were chiefly Karens from the interior of the district, some of whom appeared to have suffered from the disease previous to their admission into jail. Three deaths occurred from this cause, in two of which well-marked signs of former dysenteric lesions were found in the large intestine. The medical officer in charge recommends the provision of (1) a new well in the garden for the wants of the jail staff, as the present one cannot be depended on or improved; (2) a bathing shed and place for boiling prisoners' clothing outside the jail; (3) an incinerator for destroying the excreta and discharges of patients suffering from infectious diseases; (4) the extension of the drains, beyond the jailors' quarters. The Inspector-General remarks: —"The estimate for providing additional accommodation for 24 convicts and 10 under-trial prisoners has not yet been sanctioned".

Maubin.—There was no actual overcrowding as the excess number was always accommodated in one of the vacant barracks. The jail wall on the west side is too high and dangerous as no air can enter the building from that side. The single storied barracks being placed behind the others are under a still greater disadvantage. The drains inside the jail require graduating, as water does not flow in them. The jail site is damp in the rains, as the ground around is water-logged. The health of the prisoners on the whole has been bad. The medical officer in charge recommends (1) the removal of one of the single-storied barracks from the main enclosure and its re-crection in the work-yard enclosure; (2) the removal of one of the worksheds which lies unusedowing to the great reduction of the jail population; (3) the provision of separate bathing troughs in each enclosure instead of one in the work-yard only; (4) the provision of separate latrines for each class of prisoners instead of one general latrine which is badly situated. The Inspector-General remarks:—" The Chief Engineer, Public Works Department, Burma, has intimated that there is no prospect of funds being available either this year (1909-1910) or the following year for the work of certain proposed additions and alterations to the jail."

Paungde.—There was slight overcrowding, which was relieved by putting the excess number in hospital and cells and by transfers to other jails. It is said that the six prisoners admitted for malaria had the disease in their systems before admission into the jail and that the dysentery cases were mainly due to "climatic causes." The Inspector-General remarks:—"The high mortality was due to an outbreak of cholera. The water-supply question is still under consideration. A tube well was sunk by the municipality near the jail, but the result was not successful."

Prome.—There was always overcrowding on account of frequent admissions, but it was relieved once or twice a month by transferring prisoners to a central jail. In cells the ventilation was not considered sufficient by the Sanitary Commissioner, but improvements will be effected as soon as funds permit. The conditions to which dysentery, diarrhea, dyspepsia and some of the fever and pneumonia cases were chiefly due, were the admission into jail of a large proportion of prisoners in indifferent and bad health, resulting from the opium and liquor habits, malaria and semi-starvation. The short sharp epidemic of cholera in the town from 1st April to 20th May affected the prisoners at its commencement. Within 4 days (25th to 28th April) ten prisoners were attacked, of whom seven died. The epidemic was caused through a breakdown of the municipal water works, resulting in supplies being drawn direct from the Irrawaddy, along the shore, where the river was at its lowest and was stagnant and polluted.

TABLE XLIV-concluded.

ABSTRACT of the SANITARY SHEETS of the most UNHEALTHY FAILS, SANITARY DEFECTS, IMPROVEMENTS SUGGESTIONS, etc.—concluded.

Myingyan Central.—There was no overcrowding. According to the latest chemical report, the water from all the wells in the jail is unfit for potable purposes. The sickness and mortality were said to have been due to :—(1) the transfer@from other jails of tubercular prisoners of whom some were in a very advanced stage of the disease, and to there being no separate building for such cases; (2) the large number of admissions of prisoners in indifferent health; (3) the climate, which is hot and trying to men on hard labour under corrugated iron roofs. Twenty solitary cells of an improved pattern were constructed and a steam disinfector was erected during the year. The medical officer in charge recommends that a small condensor should be provided to condense water for drinking and culinary purposes. The Inspector General remarks:—"With a view to reducing the sickness and mortality in this jail, special orders were issued to the Superintendent about the prompt admission into hospital of prisoners falling sick, and their care and treatment when convalescing. The proposal mentioned last year about the construction of a ward for the accommodation of 50 tubercular prisoners (but capable of being further extended) is under consideration of the local Government, and it is probable that Yamethin, instead of Myingyan, will be selected as a jail for the reception of tubercular prisoners".

TABLE XLV.

TABLE XLVI.

INFLUENZA by months, Jails, Groups, and Administrations.

CHOLERA by months. Fails, Groups, and Administrations.

Line and the contract of		A	DMIS	SION	S FR	DM.I	NEL	ENZ	A IN	EAC	H Mc	NTH.	-		A	DMISS	HONS	s FR	ом (Снов	ERA	IN S	EACH	MOS	TH.	
JAILS® AND GROUPS.	Jasoary.	February.	March.	April.	May.	June.	Joly.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	Aprill.	May.	June.	July.	August.	September.	October.	November,	December.	TOTAL.
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GROUP I.—BURMA COAST AND BAY ISLANDS.						***				1	2	3	6	1		1		1								
Paungde						***				-										-			3			
GROUP IL-BURMA INLAND.		-										-					10	-		-			3	1		
Cachar											-							1 1							11	
GROUP III.—ASSAM			-					-						1				2	1			-				
lymensingh nacca, Central residency, Central (Europeans) lipore, Central rishnagar anidpur tajshahi, Central laya Dumka uri talasore uttack	4	2	1	3	15			61	66	69	12		15 208 1	4				7	28	-11-111111		11111111111				
Angul	5	2	1	3	15			61	66	69	12		234	4		4	3	18	28	5 8		-				3
Chaibassa		-	=			1411					1111			::::			1	2 ::::		3		1111			1111	
B Gaya Shagalpur, Central Darbhanga duraffarpur Patna Grangarh Sorakhpur Hlahabad, Central Do, District Sanda Jamirpur Jarabanki							1011111111		11111-11111				2 :: :: :: :: :: :: :: :: :: :: :: :: ::			1 1			7	10	38					
Mainpuri	7	6	9	13	6	4							51 3							=						
GROUP V.—GANGETIC PLAIN AND CHUTIA NAGPUR.	10	7	10	15	8	6	5	2	1	1			65	-		3	3	2	11	33	26	1		***		3
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abore, Central	9	10	6	1									26													
ROUP VIUPPER SUB- HIMALAYA.	28	"	9	5	19	6				5	io	4	97	-			-				-	1	-			
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yderabad, Central																			-			-				
ROUP VIINW. FRENTIER, INDUS VALLEY, AND NW. RAJPUTANA.	1				1							6	8					3			1					

		ADM	tissi-	ONS	FROM	IN	LUE	NZA :	IN E.	АСН	MON	ти.			ADM	tssto	NS F	ROM	Сис	OLER.	A IN	EAC	н мс	NTH		_
JAILS, GROUPS, AND ADMINISTRATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June. e	July.	August.	September,	October,	November.	December.	TOTAL.
B Muttra	-				***	-	-	-		-		-	-	-			1		1	-			-			,
GROUP VIII.—S. E. RAJPUT- ANA, CENTRAL INDIX AND GUJARAT.			-							-	-		-	- :	-				1					-	-	1
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C Rajahmundry, Central Vizagapatam Berhamper	=		1111		::				111				=			111	:::		2	43 23 	18		1	2		64 25 32
GROUP XISOUTHERN INDIA.							-		1				1			1			2	66	50	1		2	,	125
Russellkonda	,																-		22	2	3					27
GROUP XIIHILLS	-	-		-			-												22	2	3					27
INDIA* .	44	21	27	23	43	12	5	63	74	76	29	13	430	6		10	16	33	65	114	Sı	3	4	3	1	337
BURMA	4 1 29	8	1	3 2 17	15 27		5	61	66	69 6	12 10	3 4	6 233 3 133	5		8	10 5	9 20	1 39	46	12		3			17 15 130
PUNJAB	9	10	7 7								5	6	33 2		-			3		-		1				5
MADRAS															1	1			24	68	53	1		2	1	152

TABLE XLVII.

TABLE XLVIII.

ENTERIC FEVER by months, Jails, Groups, and PYREXIA OF UNCERTAIN ORIGIN by months, Jails, Administrations.

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Jails* and Groups.	January.	Februarys	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Mergui Tavoy Moulmein Toungoo Rangoon, Central (Natives) Bassein, Central Insein, Central Henrada Akyab							1						 1 1 2 1	14	1 : 1 : 6 : 1 : 1	13	12 4	2 4 3 	20 2	23				4	1 1 3 9 1 1 1 1	6 5 137 10
GROUP 1.—BURMA COAST AND BAY ISLANDS.		1				1	3		2			1	8	14	6	13	16	9	23	24	12	5	12	14	12	160
Thayetmyo, Central Myingyan, Central Mandalay, Central Shwebo Bhamo Katha	 2 					::::		3 :: : :	3				9 1 3 		2 2 1 5 1 1	 3 1	721			16 :::	3 3 : : :	28	1 2 :: ::	5 3	: :6 - : :	2 14 36 13 2
GROUP II.—BURMA INLAND	2	1			***	1	2	3	3	1			13	2	9	5	10	1	1	6	6	10	3	8	7	68
Mymensingh Jessore Alipore Central Howrah Krishnagar Rajshabi, Central Malda Dinajpur Cuttack						:::::::::::::::::::::::::::::::::::::::	3						2 10 27			7 4	13:::::::::::::::::::::::::::::::::::::	7	111111111111111111111111111111111111111		111111411	6	8		3 4	21 3 1 2 4 ²
GROUP IV.—BENGAL AND ORISSA.	,			6	,	6	4	3	8	7	2	2	40	1	5	11	3	7	4	11	4	9	9	2	7	73
Chaibassa		-		-:				ï				11				2	2	1			111		5	6	5	21
Gaya B Gaya Mezaffarpur Buxar, Central Azamgarh Sultanpur Benares District Allahabad, Central Orai Sitapur Mainpuri				1									1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			1 4	12	18	 20 2 1 4	1 2			145	29	111011111	1 1 249 2 22
GROUP V.—GANGETIC PLAIN			1	2	1			1				1	6	4	8	8	16	22	27	4	5	5	150	35	14	238
Pilibhit Bareilly, Central								111			1111	111		1111		1			-11			111				
Ludhiana Ferezepore Lahore, Central District Fernale Sialkot Ihelum Rawalpindi Campbellpore					7	11111111		-		 1 2 1 		111111111	1 . 3	8	2	1 1 		3 12	931	3 5 2 5	10	14		3		26 53 7 9
GROUP VIUPPER SUB-			1		1	3		1	1	4	1		12	8	2	5	6	17	14	15	12	15	3	4	1	102

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Jails, Groups, and Administrations.	January.	February.	March.	Aprill	May.	June.	July.	August,	September.	October,	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	Scotember	October	November	December.	Town
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derabad, Central		1		1									2		5	8		2			3	1 3	2			2
OUP VII.—NW. FRONTIER, INDUS VALLEY, AND NW. RAJPUTANA	-		1	1		1						-	4	-	5	8	1	4		2	6	4	2	3		3
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ra, Central									5				5.								_				-	
OUP VIII.—S. E. RAJ- PUTANA, CENTRAL INDIA, AND GUJARAT	}				***				5				5													
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dura																					3	1	1 1	4	2	11
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OUP XI.—SOUTHERN	1	,			1	1	1	2	3	2		1	12	7		9	9	12	3	6	11	17	22	15	18	125
INDIA*	5	8	3	9	5	13	11	13	24	14	3	5	113	35	35	61	68	77	79	78	69	66	208	97	29	95
EMA	2	2				2	5	3	5	,	-	,	21	16	15	18	26	10	24	30	18	15	15	22	19	22
STERN BENGAL AND ASSAM	· · ·			6 2		4 2 1	3	4	6 2 5	6	1	1	30 16	1	5 8	14	5	7 1 22	28	10	4	30 -	6	6 29	8 9	5: 27!
GIAB RIH-WEST FRONTIER			1		1	2			-	4	1		11	8	2	4	7	18	13	16	15	15	3	7		10
STRAL PROVINCES	2			1	1			1 3					3 21	7	5	2 8 9	7 9	5 2 12	6 4	10 6	13 3 11	 4 18	8 22	14 17	10 28	5 14
	-	-			-	100	-	3	1	-		-	3	80	27	2	3	5	6	-6	2	1	-		-	3

TABLE XLIX.

TABLE L.

MALARIA by months, Jails, Groups, and Administrations.

PNEUMONIA by months, Jails Groups, and Administrations.

					Admi	nistra	mons.							Groups, and Administrations.
		I I pe	AD	MISSIO	NS FRO	ом Ма	LARIA	IN RA	си мо	NTH.				Admissions from Pheumonia in each month.
JAHAS AND GROUPS.	January.	February.	March.	April.	May.	Jane.	July.	August.	September.	October.	November.	December.	TOTAL.	January. February. March. May. June. July. September. October. November. Torat.
Mergui	1 1 1 5	 		 2 	 5 1 	7 1 2	 3 1 	 1 2	 3 1	 5 1	7	4	2 1 31 6 8 2	
Maubin Myoungmya Jassein, Crotral Insein Henzada Myanaung Sandoway Kyaukpyu Akyab	13		***		3	11	7 12 5	3 14 :: 5	3 5 :: : : : : : : : : : : : : : : : : :	2 5 6 12 	4 4 3 15 1 1 	5 4 2 8 5	11 17 27 103 1 1 18 5	
GROUP I.—BURMA COAST AND BAY ISLANDS	} 21	10	8	5	11	39	50	36	27	39	39	34	319	2 2 4
Paung de Prome Thayetmyo, Central Magwe Yamethin Meiktila Pagan Myng yan, Central Mandelay Monoywa Shwebo Mogok Bhamo Katha Kindat	3	4 2	5	3	. 5- !!!! 4 !!!!	1 1 1 1 2 1 1 2 1 1 1 2 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	92 : 4 : -5 2	5 ; 2 ; ; 4 2 ; 1 ; 2	2 3 1 3 2 10	7 4 2 5 3		6 33 17 11 2 13 60 1 5 3 13 17	
GROUP II.—BURMA	} 10	10	8	8	11	18	13	25	17	21	23	11	175	6 2 3 4 1 2 2 3 5 3 31
Cachar	2 2 	3 3 5	1 2 5 17	5 2 1 5 1 21	2 1 5 78	2 7 2 20 3 113	5 50 8 28 9 115	5 31 5 8 8 71	3 4 9 3 3 3 47	7 4 2 3 54	3 7 5 4 3 55	2 4 2 4 4 33	31 19 129 31 89 40 622	
GROUP III.—ASSAM	17	13	25	39	94	149	224	130	72	72	77	49	961	1 2 1 3 1 2 2 13
Mymensingh Dacca, Central Tippera Chistagong Noakhali Bakarganj Khulna lecsore Baraset Presidency, Central, (Europeans) Presidency, Central, (Natives) Alipore, Central Juvenile Howrah Hooghly Burdwan Krishnagar Faridpur Pabna Murshidabad Rajshahi, Central Bogra Malda Dinajpur Rangpor Ialpaiguri Purneah Naya Dumka Suri Bankerah Midaapore, Central Balasore Cuttack Puri Angul Group IV.— Revand Avy	14 2 1 1 1 3 1 4 6 5 1 1 7 8 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	12 33 33 32 32 32 32 32 32 32 32 32 32 32	9 15 2 3 2 2 3 3 2 6 2 2 2 2 3 3 7 7 6 6 2 1 2 2 2 3 3 7 7 6 6 2 1 2 2 2 3 3 7 7 6 6 2 1 2 2 2 3 3 7 7 6 6 2 1 2 2 2 3 3 7 7 7 6 6 2 1 2 2 2 3 3 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8 3 1 1 7 14 11 24 13 3 3 3 3 7 7 1 20 1 3 3 1 2 2	14 2 2 6 6 1 1 1 3 3 8 8 1 1 1 1 7 7 2 2 1 1 1 1 2 2 2 2 1 1 1 1	36 13 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 21 4 2 1 8 28 7 2 26 55 10 7 7 7 7 7 8 8 7 2 9 9 1 7 7 2	9 31 7 7 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	21 35 4 5 23 13 18 25 25 3 40 79 22 26 6 10 27 16 17 17 18 18 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19	18 20 9 2 2 5 5 6 9 9 16 6 1 1 2 5 5 142 2 3 1 1 1 1 1 3 3 1 5 5 1 2 4 4 1 1 3 3 1 5 5 1 2 2 2 6 6 2 2 2 2	25 9 6 6 9 19 9 31 17 72 32 110 32 11 1 1 2 9 9 5 6 4 4 22 2 10 7 7 2 1 1	244 18 8 1 1 33 26 6 7 7 7 1 1 2 7 7 7 1 1 8 8 5 5 40 3 3 5 5 1 1	188 51 27, 78, 58, 184 91 11 316 663 3 14 101 93 63 254 78 25 25 21 27 27 27 27 27 27 27 27 27 27	
BENGAL AND ORISSA	183	138	192	181	205	161	277	353	405	547	367	256	3,266	5 10 15 12 10 6 7 9 15 7 12 21 12

		8 8													
Jates and Groups.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January, February, March, April. May, Jare, Isly. Angust. September, October. November, December,	
Chaibassa Purulia Ranchi Palamau Hazaribagh, Central	3 2	4 1 5	3 1 4	4 2 7	1	3	3 2 2	10 9	2 1 9	9 5 5	4	6	48 31 48	1 1 3 2 6	
B Gaya Bhagalpur, Central Mosghyr Darbhanga Champarun Muzaffarpur Patna Arrah Chapra Buxar, Central Korantadih Ghazipur Azamgarh Gorakhpur Basti Fyzabad Sultanpur Rai Bareli Partabgarh Jaunpur Benares, Central Mirzaper Allahabad, Cestral Mirzaper Allahabad, Cestral District Karwi Banda Fatehpur Hamirpur Orai Cawnpore Unao Lucknow, Central District Barabanki Gonda Bahraich Kheri Sitapur Haridoi Etawh Mainpuri Etah Mainpuri Etah Fatehgarh, Central Fatehgarh, Central Lucknow, Central Barabanki Gonda Bahraich Kheri Sitapur Haridoi Etawah Mainpuri Etah Fatehgarh, Central	12 6 6 6 2 16 1 4 13 6 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	15 10 2 1 1 2 5 4 4 3 3 2 18 10 10 1 1 11 12 2 2 1 1 1 11 18 18 13 3	25 10 1 1 1 1 1 1 1 6 6 4 1 1 6 6 9 9 1 2 2 2 1 1 4 4 1 1 1 1 5 6 6 3	50 95 32 28 6 6 32 27 71 4 4 5 33 4 4 6 8 4 3	50 4 1 57 7 9 4 1 1 1 4 1 6 6 6 6 6 6 6 6 6 6 7 7 7 7 7 7 8 1 1 1 1 1 1 1 1 1 1 1 1 1	21 47 73 48 34 2 2 9 10 14 8 2 4 5 12 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	22 7 7 16 6 10 5 5 5 17 12 2 2 2 3 7 7 1 8 2 2 2 2 2 3 7 7 3 16	23 9 10 10 13 10 11 17 17 13 18 15 15 15 15 15 15 15 15 15 15 15 15 15	333 72 11 74 33 46 66 75 66 75 66 75 66 75 66 75 66 75 66 75 66 75 75 75 75 75 75 75 75 75 75 75 75 75	28 17 4 2 11 30 159 10 10 29 11 10 9 71 11 12 23 10 11 11 12 23 11 11 12 23 11 11 11 11 11 11 11 11 11 11 11 11 11	16 23 6 5 8 8 3 5 5 90 550 517 99 155 111 18 8 8 7 7 7 3 3 15 15 16 4 2 2 2 3 3 3 16 4 3 8 3 8 3 16 4 3 8 3 8 3 8 16 4 3 8 3 8 3 8 16 4 3 8 3 8 3 8 16 4 3 8 16 4 6 4 6 4 6 6 6 6 6 6 6 6 6 6 6 6 6	10 2 2 2 3	305 102 38 44 78 59 54 248 248 248 35 61 74 85 66 67 77 79 200 24 14 13 20 75 143 35 61 107 75 60 24 107 107 107 107 107 107 107 107 107 107	3 2 3 1 1 1 2 2 2 17 1 1	
GROUP V.—GAN- GETIC PLAIN AND CHUTIA NAGPUR	207	167	213	326	313	300	261	413	775	1,091	825	488	5,389	46 21 49 23 12 18 21 9 9 19 29 41 307	
A Shahjahanpur Pilibhit Bareilly, Central District Bedaun Aligarhi Bulandshahr Meradabad Hijnor Dehra Dun Saharanpur Muzaffarnagar Meerut Delhi Rohtak Hissar Karnal Ambala B Ludhiana Hoshiarpur Iellundur Ferozapore Amritsar Lahore, Central	3 78 78 22 8 8 5 2 43 7 7 1 1 1 1 1 2 2 3 2 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 578 3 1 1 6 1 1 6 1 1 1 1	2 1 47 144 3 3 1 4 4 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	5 63 11 19 2 8 2 2 4 4 15 5 5 5 1 4 2 1 3 3 3 2 4 1	5 61 14 21 6 6 6 2 2 5 5 5 12 6 12 12 12 12 12 13 14 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	13 46 19 25 4 7 1 1 2 16 13 5 6 1 1 3 8	20 1 34 35 23 4 9 15 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	38 1 15 71 20 22 32 82 82 83 5 44 18 30 2 14 10	45 21 83 59 61 87 140 23 23 53 60 32 21 26 5 7	32 34 84 84 81 41 69 79 25 40 25 40 25 40 11 12 6	29	15 165 12 46 14 23 17 29 8 6 2 2 2 1 3 1 2 2 1 2 3 1 2 2 2 2 2 2 2 2	210 3 832 400 333 182 286 400 72 45 128 201 163 142 33 1 90 63 15 31 27 54 48 48 49 48 48 49 48 48 48 48 48 48 48 48 48 48	1	
District Female Gerdaspur Gejranwala Sialkot Gujrat Jhelum Rawalpindi Campbellpur	3 : 4 7 7 3 4	5 13 1	11 3 1 2 2 0 2	1 2 4 4 1 4	5 3 6	33338	5 3 3 1	5 3 1 5 2 1	13 6 2 13 2 18 4 3	3 6 4 9 43 11 5 4 2	1 3 25 53 17 5 9 5	16 22 9 6	39 24 14 86 138 76 33 68 27	1 3 1 5 3 10 1 1 2 2 3 3 2 1 1 2 6 1 6	
GROUP VIUPPER	3 204	121	137	180	189	203	207	471	928	869	731	459	4,693	58 28 29 11 15 15 13 10 18 41 33 72 343	

TABLE &-constituent

S 2

TABLE XLIX—concluded.

TABLE L-concluded.

MALARIA by months, Jails, Groups and Administrations.

PNEUMONIA by months, Jails, Groups and Administrations.

-						ration		_					-	Annestrations.
			A	DMISSIC	NS FR	ом Мл	LARIA	IN EA	сн мо	NTH.		100		ADMISSIONS FROM PHRUMONIA IN RACH MONTH.
JAILS AND GROUPS,	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January. February. March. April. May. June. July. August. September. October. November. December.
Peshawar Kohat Bannu Shahpur Mianwali Lyalipur Jhang Montgomery,Central Mooltan, Central District Dera Ismail Khan Dera Ghazi Khan	15 2 3 2 1 24 5 3 5	9 3 21 1 	13 1 2 2 2 2 7 11 8 3	8 1 2 1 6 9	12 3 2 1 3 11 6 17 4	10 2 1 1 2 16 5 15 4	8 2	40 1 1 7 14 1 5 3 7	146 9 8 2 3 2 7 16 1	252 39 1 7 15 7 8 34 14 3	164 1 166 1 3 14 111 19 12 19 3	60 4 2 12 12 14 19 8 16 22	737 15 7 83 10 62 52 148 73 70 135 26	6 4 2 2 1 1 2 3 21 1 1 1 1 1 1 1 2 1 2 1 2 1
Sibi	3	1			2	1		1		2	3	***	14	
Sukkur Sind Gang Hyderabad, Central Karachi	1 9 8 	7 13 	4 7 15 	5 7 9 	3 13 14 	1 12 16	1 7 10	1 8 7 	5 8 7 	3 11 15 	6 11 4	36	26 98 131 4	3 1 1 1 1 2 9 8 14 3 3 1 2 1 2 4 6 44 10 5 6 4 2 1 3 3 2 3 4 13 56 1 1
GROUP VII. ANW. FRONTIER, INDUS VALLEY, AND NW. RAJPUTANA.	} 81	57	77	60	91	87	49	96	215	402	288	188	1,691	35 27 19 12 5 7 12 7 6 9 11 38 183
Rajkot . Ahmedabad, Central	4			3		,	,	10	3	5	5	5	43	
Ajmer	2 12 3 1 6	2 6 16 2 3	1 3 15 3 7	10 2 20 2 6	 6 18 6 9	1 10 5 3 5	2 4 15 9	12 19 47 7 11	9 113 100 9 14 5	5 70 61 16 10 3	28 37 4 4	15 27 3 7	45 288 364 56 91 14	
GROUP VIII.—SE. RAIPUTANA, CENTRAL INDIA, AND GUJARAT		30	30	43	39	26	37	107	253	170	79	58	902	19 5 10 7 5 1 7 6 14 15 89
Damob Saugor Jubbulpore, Central Narsinghpur Mandla Bilaspur Sambalpur Raiper, Central Balaghat Seoni Chhindwara Hoshangabad Nimar Betul Nag pur, Central Wardha Chanda	55 1	1 4 3	2 4 1 4 8 1 1 3 3	2 4 1 2 5 4 1 1	3 : - 4 5	1 - 2 - 8 1 4 - 2	5 3	2 1 11 15 3 15 37	6 15 56 1 2 2 1 8 31 4 	12 9 61 2 10 29 1 1 130	 4 43 1 1 5 18 	5 :: 8 9 :: 3 :: 59 :: 59	30 52 192 3 5 10 77 77 130 8 1 5 11 6 4 461 3 8	
B Secunderabad Veotmal Amraoti Akola Buldana Dhulia Yerrowda, Central Bijapur Deccan Gang Dharwar	2 1 8 42 15	 1 3 31 2 1	3 4 6 15 6 36	1 1 1 20 20 6	1 1 18 2 7 4	1 13 t	 2 1 3 14 6 2 6	 2 14 9 1	4 2 1 1 12 9 8 5	6 3 3 1 23 1 22 4	 1 2 2 35 1 16 9	2 29 15	17 11 3 15 3 28 272 39 84 111	3
GROUP IX DECCAN .	}101	68	95	68	53	53	66	109	279	322	235	140	1,589	4 2 6 1 2 2 1 3 3 3 5 32
Thana Bombay, Common Correction Ratnagiri Karwar Mangalore Cannanore, Central			5	8 4 1 1 2 1 3	4 11 7 1 2	3 5	14 2 6 5	13 5	6 6 8	10 8 1 	 1 28	4 3	76 48 3 4 26 3 102	3 4
GROUP XWEST-	11	12	10	20	25	10	28	30	27	44	36	10	262	1 2 1 3 2 1 3 1 2 16

				ADMIS	SIONS	FHOM	MALAS	HA IN	EACH	MONTH					A	DMI			FROM			MON	14	
JAILS, GROUPS, AND ADMINIS- TRATIONS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	April.	May.	June.	July.	August.	September.	October,	December.	TOTAL.
Bellary, Central . Salem "Coimbatore, Central	10 5 4	7 1 5	2 2 5	3 2 2	4 6 1	5 3 1	4 4 2	7 4 1	12 17 3	4 5 	12 5 1	5	75 55 25		1	4 1 2	1	4			1	3	1 1	
Palamcottah	234 4 1	 2 1 2	-	2 1 1 3		2 3	3 2		" 1 " " 2 " 1 " " " 1 " " " " " " " " "	 5 2 2	1 10	9 2	8 12 32 8 20		1112	2 2	1111	1		1		3	. 1	15
C Rajahmundry, Cen- tral Vizagapatam	10 8	9 3	5 5	8 4	66	148	4 19	3 7	3 24 1	6 15 2	11 16 5	13 12 9	74 327 19				3	1	2	1	1			11
GROUP XI SOUTHERN INDIA	} 51	31	22	31	82	165	40	23	64	42	61	54	666	2	10	2 3	6	8	4	6	4	8	8 11	8:
Aijal K ohima Shillong Darjeeling Almora Pauri Naini Tal Abbottabad Quetta Mercara Russellkonda	1 1 2	2	 1 2	2 		2 2 1 1	1 1 4 2	3	2 1 2 3 2 1 10 1 5	11 3			5 3 9 17 7 6 26 11 31 4			1	1 ! !					1		
GROUP XII	} 10	5	7	5	8	6	15	10	28	15	7	7	123	-	-	, ,	4	2	-	-		2		,
EXTRA INDIA:-	}.			1								,	3			-								
INDIA.	926	662	824	957	1,132	1,217	1,267	1,803	3,084	3,634	2,768	1,755	20,039	175	108	48 73	66	62	64	49	70	105	210	1,25
BURMA EASTERN BENGAL AND ASSAM BENGAL UNITED PROVINCES NW. F. PROV- INCE CENTRAL INCES BOMBAY MADRAS	31 82 217 292 95 18 32 92 58	20 53 120 202 64 10 18 71 40	16 98 221 235 76 23 28 95 28	13 117 266 337 63 19 19 84 35	22 180 242 391 70 33 17 83 86	57 216 231 352 79 30 21 62 166	63 312 305 351 59 17 30 79 46	61 221 421 739 121 51 62 78 33	44 211 389 1,565 311 164 232 77 72	60 215 577 1,602 471 267 255 105 66	62 191 461 1,173 335 185 167 97 89	45 121 346 724 216 88 80 74 56	494 2,017 3,856 7,963 1,960 905 961 907 775	6 1 12 80 43 6 3 22 2	4 10 32 21 4 2 21 10	74 6	5 8 27 7 3 1 4 7	9 24 7 1 2 5 11	8 2 1 7 5	2 12 8 1 3 4 7	5 12 12 31 7 2 5 5	4 71 43.4 22: 2 1 5:	5 4 8 13 16 19 17 92 15 34 2 6 1 3 14 26 8 11	13 51 19 3 13 8
ANDAMANS	813	749	955	907	1,115	1.557 2.774	1,683	1,176	946 4,030	728 4,352	758 3,526	661 2,416	12,048 32,087	15	118	30 8	70	60	19 83	16	98	116	218 00	1,4

Including Ajmer, Sibi, Quetta, Secunderabad and Mercara and excluding Andamans.
 † Including Ajmer, Sibi, Quetta, Secunderabad, Mercara and Andamans.

TABLE LI.

TABLE LII.

DYSENTERY by months, Jails, Groups and Administrations.

DIARRHEA by months, Jails, Groups and Administrations.

Second	-		ADS	ttsst	ons	PRON	4 Dy	SENT	ERY	IN 8	ACH	MON	ern.		1	1143	At	DMIS	SION	S FRO	ом Оп	ARRIGE	A IN E	ACH M	ONTH.	N. C.	-
Tayon Control		January.	February.	March.	April.	May.	June.	July.	August.	September.	October,	November.	December.	Torat.	January.	February.	March,	April.	May.	June.	July.	August.	September.	October.	November.	December.	FOTAL.
Cacher And BAY 4 3 10 1 15 25 17 15 12 13 14 5 134 7 9 5 9 14 12 8 4 12 13 12 10 113 Paungde	Tavoy Moulmein Toingco Rangoon, Cen- tral (Europeans) Rangoon, Cen- tral (Natives) Maubin Myaungmya Bassein, Central Myanaung Sandoway Kyaukpyu			3 1	-	3 1 15 1 13	6 3 10 2 2	6	3 :: 3 :: 2	2 1 2 4	4	1 3 4	12 11 11 11 11	33 4 32 22 1	3	5	3	1 6	9 3	6	7	3	6	8	6 3 1	1 8 1	
Prome Taysetsys, Central Taysets	COAST AND BAY	}4	3	10	1	15	25	17	15	12	13	14	5	134	7	9	5	9	14	12	8	4	12	41	12	10	113
Cachar Cachar	Prome Thayetmyo, Central Yamethin Meiktila Pagan Myingyan, Central Mandalay Monywa Bhamo Katha	3 : 2 : : 9 : : : :	7	8 2 1	1 2	1	10		7 1	12 3	1111 1000 111	18	4 3	4 5 3 1 96 16 	1	-	6 : ::	6	3	1 3	2		"!!!""!!!!	1 1 1 1 1 1 1 1 1 3			10 4 1 23 4 1 5
Sibsagar		14	7	11	6	9	16	12	9	16	9	19	7	135	2	,	8	s	3	6	2	1	2	7	6	2	48
Dacca, Central	Sibsagar Dibrugarh Tezpur Nowgong Gauhati Dhubri Sylhet GROUP III.—)	 1 3 2 10	1	1 1 2 5	2 4 1 9	3	8	1	1 3 1 6	1 2 4	1 2 1 4	3 1 5	111014	16 2 2 1 22 15 78		2 1 2		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 4 9	4 4 8	1 12 1	13 2 1	11 4 3	6	2 1 1 3	1 1 5	5 11 4 1 55 11 49
OR SEA . 3 133 106 144 193 199 203 298 275 301 243 237 224 2,556 66 57 110 115 75 120 164 143 88 95 70 46 1,150	Dacca, Central Tippera Chittagong Neakhali Bakarganj Khulna Jessore Baraset Presidency, Cen- tral, (Europeans) Presidency, Cen- tral, (Europeans) Presidency, Cen- tral, (Natives) Alipore, Central Juvenile Howrah Howrah Hooghly Burdwan Krishnagar Faridpur Pahna Murshidabad Rajebahi, Central Bogra Madda Dinajpur Rangpar Jalpauguri Purneah Naya Dumka Suri Bankura Midnapore, Centra Balassore Cuttack Puri Angul	18 3 2 2 1 7 2 2 1 7 2 2 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3128	11 1 1 5 2 2 16 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	34 4 2 6 10 5 15 7 7 7 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15 15	31 6 8 6 18 4 6 11 22 6 11 12 22 4 26 5 5 3 2 2	13 3 5 7 2 5 6 11 15 2 1 6 15 2 15 2 16 2 15 2 16 2 15 2 16 2 15 2 16 2 15 2 16 15 7 4 7 1	15 16 20 18 18 9 27 38 31 15 5 13 21 15 6 6 16 17 18 18 18 18 18 18 18 18 18 18	35 2 4 26 27 27 19 23 4 4 1 15 2 1 2 2 1 2 6 9 1 1 4 5 10 10 10 10 10 10 10 10 10 10 10 10 10	39 18 4 3 3 3 8 19 26 2 2 3 1 1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	32 6 2 17 10 5 15 21 25 3 1 1 1 1 2 1 3 1 1 1 1 1 1 1 1 1 1 1 1	44 11 11 17 7 	23 1 15 15 2 22 21 12 11 1 1 1 3 4 3 8 1 6 1 10 5 4 1	2,8 57 38 135 254 50 14 22 44 41 22 44 25 10 14 27 146 14 17 27 146 14 17 27 146 14 14 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	7 7 16	5	15 2 2 1	4 4 27 4 3 3 4 3 3 1 1 2 2 5 7 7 7 7 3 3	6 7 7 6 2 1 3 3 5 9 4 4 4 4 4	3	12 2 2 31 35 15 2 4 9 2 1 2 2 1 8 8 8 1 1 1 8 8 1 1	18	13	10 4 2 1 7 7 13 10 8 3	14	7 2 1 2 2 4 1 1 3 3 3 4 4 1 6 6 1 5 5	116

		AD	MISS	ions	FRO	м D	YSEN	TERY	IN	EACH	1 10	NTH.	1			At	MISS	SIONS	FHO	M DIA	RRHOL	IN EA	CH MO	NTH.		
Jails and Groups.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Chaibassa	8	1 4 6	1 10 3 23	5 5 21	 4 2 35	2 1 3 2 57	1 5 17 6 55	5 7 23 13 24	2 4 13 2 28	4 5 3 21	3 1 5 1 21	7 3 24	24 20 89 41 324	9	5	1 11 2 1 7	1 5 4 1 18	36 5 3 17	6 10 1 21	1 1 3 4 44	3 6 5 1 23	3 3 2 4 14	1 1 3 3 11	1 9	2 2 1 5	14 43 37 19 183
Gaya Bhagalpur, Central Monghyr Darbhanga Champarun Muraffarpur Patea Arrah Chapra Buxar, Central Korantadih Ghazipur	3 2 4 1 3 4 6	3 4 1 1 6	3 9 4 4 11 9 18 2 3	3 4 3 6 4 6 33	5 6 7 2 3 4 1 10 5 27	3 13 5 3 8 2 21 	9 35 4 5 :: 5 1: 96 4: :: 1	6 45 7 4 2 7 11 9 47 4	23 23 8 4 - 4 9 5 9 :: -	7 10 16 16 1 2 6 2 5 2 3	90 10 0 0 0 0 0 4 4 5 1 0	10 4 2 9 3 5 5 3 4 39 5	66 170 86 77 19 44 50 81 60 344 2	1 2 3 1 1 1 1 1		9 10 3 1 6 1 6 1 4 : 2	17 3 6 1 7 6 3 1 3	21 0 3 :: 3 6 :: 4	3 2 1 2 1 2	1 14 2 1 4 3 7 8	5 4 2	3 4	19 5 3 1 5	12 2 2 : : : 5	9	2 160 37 44 0 19 28 18 13 49
Azamgarh Gorakhpur Basti Fyzabad Seltanpur Rai Bareli Partabgarh Jaunpur Benares, Central , District Mirzapur Allahabad, Central	1 14 3	3 : 1 : 2 3 : 2	9 1 1 4 1 2	9 2 1 6 1 7 1 2	6 :: 2 4 :: 3 :: :	7 1 3 1 1	3 5 2 2 1 1 4 1	3 10 1 15	1 1 3 5 2 3		5 2 4 9	7 1 4 2 4 1 : 5	15 83 18 10 3 20 17 14 46 9	2	2 2 1 1 1 1	7	: 2 : 3 : 4 3 : : .	1		" 1 " " 1 " " " 2 " " " 2 " " " 2 " " " "	9 : : : : : : : : : : : : : : : : : : :	"6 "1 ": "3 ":	2 2 1 2 2 1 2 2 2 1		1 1 1 1	5 5 33 7 10 3 10 2 14 17 6
Karwi Banda Fatehpur Hamirpur Orai Cawnpore Unao Lucknow, Central Barabanki		4	2 1 2 1 2 1 3 1 1 2	6 : 2 2 : : : : 2	3 : 2 : 2 : 3 : : 1 2	3	6 2 1 1 1 1 1 1 I I I I I I I I I I I I I	14 5 1 7 3	5 :: 1 3 - : 5 2 ::	72 : 5 : 2 2 2 : 4 2 3	3 - 76 : 15 4 2	3 : 1 4 : 8 7 5	50 48 1 26 5 13 17 27 1 36 21 20	1		4 1 2 1 4	3 4	2 7 3	3 1 2 2		13 3 4 6 8 8 1	5 2	3		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29 7 3 11 27 2 36 6
Gonda		1	1 5 2 1 1 2 1	4 1 2 2 3 2 2	5 1 1 2 2 2 2	2 1 2 1 3	4 1 1 1 1	4 : 2 : 8 : 2 3 2	3 10 4 9 2	1 1 2 3 12 2 9 7	2 52 6 11 4 15 7	7 16 3 9 2	7 34 4 27 4 27 59 21 53 25	4 1 2 1 1 1 1	1 1 2	7	3 5	3	9 1 3 7 4 2	2 2 4 	₃ ₂ ₅ ₄	3 1 2	2	2 1 1 2 1 1	2 4 2 3	2 29 7 14 13 26 9 12 10
AND CHUTIA NAGPUR	72	1 55	156	196	159	161	254	326	238	197	250	219	2,283	32	35	97	108	115	120	117	136	83	92	54	68	1,057
Dehra Dun Sabaranpur Muzaffarnagar Meerut Delhi Rohtak Hissar Karnal Ambala	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 6	11 11 11 11 11 11 11 11 11 11 11 11 11	4 4	1 2 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 : 1 5.1 3	2 3 3 5 6 1 27 1 4 1 1	3 7 4 7 28 11 3 13 2 5 2 15	7 3 13 4 17 6 24 5 2 3 6 5	4 3 2 1 1 1 1 1 1 2 4 21 4 21 4 1 1	1 10 5 4 10 3 9 3 10 9 1 1 5 1 1 5 1	111 2 54 211 6 6 30 30 4 2 137 137 139 0 17 19 29	1	3 3		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3 3 3 1 1 1 1		2	6 1		1 2 4 6 2 5 1 4	1 1 5 2 2 2 1 5 1 6	3 3 3	8 1 19 5 9 1 24 20 1 6 22 14 17 8 5 3 7
Juliondur Ferozepore Amritsar Lahore, Central District Female Gurdaspur Gujranwala Sialkot Gujrat Jhelum		3	1	1 1 2 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 2 1 2 1 3 2	11 11 14 1	8 4 2 1 5 4 5 I	2 3 1 47 5 3 2 9 2 11 8 3	1 2 1 36 2 3 2 6 3 2 1 2 3 2 3 2 3 2 1 2 2 3 2 3 2 3 2 3	3 10 3 1 1 4 4 7	4 1 1 1 1 5 1 5 1	7 9 12 7 2 110 18 11 3 6 6 31 1 22 9 37 22	11011-111111111111111111111111111111111		3		3 4				1 4 10 3 1 1	3 5 5 5 1 1 1 1 1 1	7 2 2 1 2 2 1 1	3 1 1 1 1 4 1	1 4 6 32 3 21 17 2 4 7 5 9 8
GROUP VI.— UPPER SUB- HIMALAYA	} -9	20	23	24	46	28	26	88	197	158	121	77	827	13	9	14	15	27	13	20	47	65	42	44	36	345

TABLE LI-concluded.

TABLE LII-concluded.

DYSENTERY by months, Jails, Groups, and Administrations.

DIARRHŒA by months, Jails, Groups, and Administrations.

-		An		· ·		0								-	-	Ani		ONE	2001	. Desa	-	-	CH MO	-		-
	-	AD	MISS	IONS	FRO	M D	KSED	TER	Y IN	EACI	H MC	NTH.				ADI	41550	ONS	FROS	DIAR	KHŒA	IN EA	CH MO	NTH.		-
JAILS AND GROUPS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.	January.	February.	March.	April.	May.	Jone.	July.	August.	September.	October.	November,	December.	FOTAL.
Peshawar Kohat Banno Shahpur Mianwali Lyallpur Ihang Montgomery, Central Mooltan, Central Dera Ismail Khan Dera Ghazi Khan	6 :: 5 4	1 4 3	3	2 1 1 2 1 1 28 	3 1 2 21 4	6 2 1 4 4 1	- 14- 11 - 110-	2 2 2	5 1 2 2 1 2 4 1 1	8 1 4 1 3 4 2	6 1 1 2 1 2 1 4 3	7 1 :: 2 :: : 3 13 :: 6 5 3	47 5 13 17 2 1 8 97 2 20 36 20	5 2 1 1	13	3 :: 1 :: 6 :: 4	3 1 36	 1 1 29 1 4 2	3 : 3			3 1 4		9 2 2 2 1	5 5 7	2 9 22 3 4 3 118 10 13
Sibi C Sukkur Sind Gang Hyderabad, Central Karachi GROUP VII.— NW. FRON- TIER, INDUS VALLEY, AND NW. RAJ- PUTANA	3 1 1 21	3 1 3	 1 3 1 1	3 1 1	 1 1 2 	 5 1 1	:: 2 588	 3 21 3	38	 1 8 8 8	1 2 5 2	1 2 6 3 53	7 29 59 31 396	12	 2 2	16	 2 48	 4 1 	 8 1 4	2 2 1	3 4	1 1 14	 ₂ ₁	 1 17	3	2 25 16 11 260
Aginer Ajmer Muttra Agra, Central District Jhansi Lalitpur GROUP VIII.— SE. RAJPUT ANA, CENTRAL	1	1 2 1	1 4 1				1 2	16 134341	5 1 4 5 1 1	12 3 2 3 ::	8 6 2 1	1 :: 4 :: 3 ::	2 11 5 43 24 16 18 1	9	3	7 7	1 1 2 1 2 2	4 - 1 4	1 2	2 3 8 3 1 3	1 6 2 5 2 6 	1 1 8 1 3 1	9 1	2 1 2 4 	 1 3 5 	8 17 5 24 33 14 35 1
INDIA AND GUJARAT .	3	4	7	7	6	3	•	23	17	20	17	9	120	9	7											
Damoh Saugor Jubbulpore, Central Narsinghpur Mandla Bilaspur Sambalpur Raipur, Central Balaghat Seoos Chhindwara Hoshangabad Nimar Betul Nagpur, Central Bhandara Wardha Chanda	1 1 2	16	2 2 1		3 1	1 2	6 77 1 2	3 7 7 7 4 1 1 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	:	3 12 8 1 3 3	3 1 8 5 3	4 4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6 25 9 3 1 17 53 43 4 7 1 6 3 1 3 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	13 111111111111111111111111111111111111	12 5 1 1 1 2 5 1 1 1 1 2 1 1 1 1 1 1 1 1	+	10 11 10 20 11 11 11 11 11	111111111111111111111111111111111111111	5 3	2 2 1 4 5	2		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	3 2 1	6 17 3 1 16 26 2 2 11 13 14 1 10 2 2
Secunderabad Yeotmal Amraoti Akola Buldana Dhulia Yerrowda, Central Bijapur Deccan Gang Dharwar	1 4 2 -		1 2	2 1 4	1	5 2 1 7	3 23 8 1 4	3 ::8 3 2 3	4	2 7 3	1	3	11 2 6 7 2 77 21 17 24	1		 2 7 	9 9	 1 8 2	16	 51 2 1 3	 5 32 2	 25 		6 7 5	3 5 4	 9 1 4 1 179 3 34 23
GROUP IX.— DECCAN	} 16	10	15	14	15	22	75	73	51	45	31	17	384	22	11	22	21	22	28	69	54	40	35	23	21	373
Thana Bombay, Common House of Correction Ratnagiri Karwar Mangalore Cannanore, Centra	1	1 3	117	2 1	2 7	5 3	17 1 1 11 6	7 1 5 9 2 15	1 5 3 9	10 24	1 1 2 7	1 2	30 7 9 2 42 16 86	2		-	2	1 1 5		13 1	9	4 2 	3 3		3	38 11 6 17
GROUP XWEST		5	6	5	9	8	40	39	20	35	13	5	192	3	2		2	7	2	16	11	10	11	3	5	73

Proposition		AD	MISSI	ons	FRO	M DY	SENT	TERY	IN E	ACH	MOI	TH.				Авм	128510	NS I	ROM	DIARR	RHŒA I	N EAC	H MON	TH.		
Jails, Groups, and Adminis- trations.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December,	TOTAL.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
dellary, Central .	3 7	4 2 1	6 4	1 5	3	3 6	5 5	3 14	862	6 4 3	2 8 1	5 1	40 51 29	1		-	3		1				***			
Palamcottah . Madura . Frichinopoly,	4	1			1	7	1	1		1	3	4	16	11	-						***		***			
Central	12	5 7	3 5	1 2	4 3	2 :1	4	6 2	13	22	17	6	\$3 3 39	11				1								3
Vellore, Central . Madras Peniten- tiary, Central . }	1	2				1		4			3	1	19	5	1	4				3			3			
C Rajahmundry, Central . } Vizagapatam . Berhampur .	35	1 4 1	3	2 7 1	4 13	3 21 1	20 16 3	70 13 3	19	6 1 3	10 5 3	19 5	158 94 20				:::			 14 	6				3	37
GROUP XI SOUTHERN INDIA	41	28	21	20	32	47	56	116	54	50	54	47	565	7		6	5	2	2	17	8	2	3	1	3	57
Aljal	-			2	1	3		1	1 3	2			4 1 11				1	3	1				***		1	
Shillong Darjeeling	-					3	3	3	3		1	1	7					***	1	1	4 3			***		
Imora			***	1		***			1		2	***	3			***			1	***	,	5	3		***	,
Vaini Tal Abbottabad	***	***			***	***	1	***	"	***			2	-					***		2	***			***	
Quetta	1	***	2	***	***	***			1	I	1	1	4	***	***			1		***	2	***		111	***	
Russellkonda .	-	***	***	***	***	***	11	3			444	***	14			***	***	***	***	***	***	***	***	***	***	-
GROUP XII	2		2	3	1	6	18	8	10	4	4	3	61	2	***		1	5	6	3	13	6	4	- 1	1	-
EXTRA INDIA }	2	***											2								1					
INDIA.	350	200	422	539	543	559	837	1023	953	824	810	676	7,796	177	167	297	359	336	354	454	472	355	335	254	235	3,8
BURMA EASTERNBENGAL ?	18	10	21	1 7	24	41	29	24	28	22	33	12	269	9	10	13	17	17	18	10	5	14	18	18	12	10
BENGAL	90	54 87	74	136 213	120	125	1	128	159 316	151	158	132	1,433	32 56	59	137	145	137	179	58 219	177	47	38	35 78	76	1,4
PROV NCES . S PUNJAB	53	42 14	69	84	50	49	12	181	162	95	71	155	1,318 586	14	18	47 23	49	51	15	49 18	93 45	76 48	74 32	35	55 36	3
PROVINCE .	6	1	8	10	8	8	. 8	7	10	13	11	13	103	2	1	4	4	5	3	1	3	,		***	-	
PROVINCES	8 14 48	8 11 31	10	5 15 22	7 12 39	6 27 50	29 74 84	40 82 136	21 42 66	39 74	17 21 61	10 19 49	181 370 682	10 17 8	5 10 3	11 6	17	7 20 7	7 32 3	83 17	60	13 43 3	7 40 8	10 25 1	8 21 4	3
ANDAMANS	141	157	114	124	211	180		103	-	-	111	96	1,559	33	32	48	61	7:	57	45	26	31	34	38	2.4	1

^{*} Including Ajmer, Sibi, Quetta, Secunderabad and Mercara and excluding Andamans.

† Including Ajmer, Sibi, Quetta, Secunderabad, Mercara and Andamans.

TABLE LIII.

-			orton consumers	TAIL o	-			-	-				
			EUROPE	AN ARM			la		Present	ARMY OF	126,975	TION OF	POPULA-
DISEASES.		MEN, 6	8,522.		2000		CHILDRE	IN, 5,819.	Enrolled		150,778	115	1.403.
	Admis- sions.	Constantly sick.	Deaths.	Invalids.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Invalids.	Admis- sions.	Death
CENEDAL DISPASES													
GENERAL DISEASES.				613			3.10	1 13	233				
Infective Diseases :-			1									179	
Anthrax					***			***	4	***		1	
Blackwater fever					***		***	***	1	***		***	
Beri-beri	35	4'93		5	***			***	13	***		17	14
Cerebrospinal fever					***	***			2	1	***	24	12
Chicken-pox	17	1.58		***		***	20	***	205		***	647	***
Cholera	43	1'46	35		4	3	5	3	174	116		337	170
Cow-pox	4	*06	-		1		7	***	48	***		6	***
Distalacia	165	4'17		***	7	***	1	**	15	***	***	***	
Dysentery	g86	*04	20		37	***	11	4				***	***
Vederaditis infestion		77'35				-	47	15	5,019	28	7	9,355	534
Enteric fever	993	184'71	188	21	49	7	21	2	350			116	***
Enteritis, infective	13	39	4				9	5	12	73		143	35
Epidemic Dropsy		39				-				5000		10	14
Erysipelas	15	118			3				23			95	12
Gangrene, acute infective		'13							2			1	-
German measles	5	*22			***	***			34				***
Gonorrheea	2,597	328'68	-	15			9		768		10	455	-
Influenza	432	14'58		***	10	***	4		482	3		430	
Kala-Azar	4	*64	1	2		***			9	4	2	1	
Leprosy			***	***		100	***	***	7		6	97	14
Madura disease				***			***	-	t	***		1	
Malaria	16,763	572'17	35	62	319	6	361	13	33,797	74	44	32,087	135
Measles	45	2,36	1		4	***	190	4	317	1		101	***
Malta fover	3	1.10	***	2				***	23				***
Mumps	10	1'0)	***		2		11		914	***		635	
Osteo-myelitis and Periostitis, acute infective						1 1001			2			,	
Phaseless		***									-	2	
Plague	2	*07							36	14		10	Carrier Services
Pneumonia	256	24'58	27	-1	.8	3	17	5	1,623	270	10	1,402	386
Pyzemia	3	'81	2	2					5	2		10	6
Pyrexia of uncertain origin	5.077	166'59		1	63		128	1	2,056	11		1,086	,
Rables	2	101	2	***					2		***		
Relapsing fever	1	*02		***	***			***	2	1		3	
Rheumatic fever	498	38'06		26	9		3		784	1	38	972	4
Scarlet fever	11	1'97		***	2	1	2			***		***	
Septiczemia	2	.03	2		1	1			2	1	-	8	7
" puerperal ,					2	1					***	6	4
Small-pox	53	571	2		36	7	8	1	103	3	***	123	15
Syphilis	1,085	16266	3	59	3				625	2	42	1,499	21
" inherited							2	1		***			
Tetanus	***				***				5	5		12	6
Tubercle of the bones	1	.00		1					1			1	***
Tubercle of brain and its mem- branes	-	***					3	3				2	3
" general	3	*20		1			1	1					
" of intestines	1	102	1									24	14
" " joints	9	1'42	***	7					1	***		3	
-		-			1		-			1	1		1000

^{*} Details of the European Army of India: exclude troops on Field Service,
† Details of the Native Army of India: include troops out of India and on Field Service.

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			EUROP	EAN AR	MY OF	INDIA.		-	1		-	1 .	
Section of Section 2		Мв	N.	NAME OF	Wo	MEN.	CHIL	DREN.	NATIVE	ARMY (F INDIA.	POPU	LATION NDIA.
DISEASES.							500000						
	Admis- sions.	Constantly sick.	Deaths.	Invalids.	Admis- sions.	Deaths.	Admis- sions.	Death s.	A dmis- sions.	Deaths.	Invalids.	Admis- sions.	Deaths.
	,			1									
Infective Diseases—contd.		-								and the		45.23	
		'36	,	1 14 3			1				-		-
Tubercle of kidney	93	23 '40	16	73	10	2	3	2	378	53	191	1,070	461
, and intestines .												20	17
" " lungs and kidneys .							***					2	1
lymphatic	1	3000			200	200	2000					5	
glands ,			-									1	1
tomobatic glands .	3	*49		1					14		1	62	9
Tubercle of lymphatic glands and					-								11016
intesines							3	2	-	-			
" " and testicles	1	-66	1		***		***						
" " pancreas	2	113						-	3	2		2	4
" " peritoneum	2	13			***								-
abdominal viscera .						***		***				,	- 1
" " pleura	***		-	***					2	1	1	4	3
" "skin	2	.30		1	***	***		***				3	
" " spine	1	*15		1				***	1		1	3	
" testicle	5	1'14		2					13		6		
		***	-						4	2		6	,
Typhus fever							35	3	1				
Yaws												2	
													and the same
		1	9								100		
INTOXICATIONS :-					13	-							X0.05
Alcoholism	70	5,61	3	1		1			3			***	
Delirium tremens	1						***		-			3	***
Lathyrism				-	-				-			19	
Morphinism			-	-	***		101	-	-	-	-		
				1					13				
			1 3	3									
											- 35		
General Diseases not classified as above:—												-	
Anzemia	105	6-39		5	54		10	2	944	13	17	612	29
" chronic splenic			***				+		2	*	1.		
" pernicious	2	*08	2		1				2			5	5
Chlorosis												,	1
Debility · · · · ·	1,245	66:35		70	1,049	,	278	11	594	. 3	52	567	17
Diabetes mellitus	5	'53	1	1				***	п	1	2	25	5
Exophthalmic goitre	72	.13		,	8				1			1	
Gout	13	'41			1				5			1	ine.
Hæmophilia	1	'21		***			-		1	1	***		
Leucocythaemia							1		3				
Lymphadenoma				***					1	*	",		
Old age												20	10
					100		1					The same of	

T 2

		Е	UROPE	AN ARM	Y OF I	NDIA.						1	NIE.
Diseases.		ME	N.	parent.	Wo	MEN.	Сип	DREN.	NATIVE	ARMY O	F INDIA.	POPUL OF I	LATION NDIA.
	Admis- sions.	Constantly sick.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Admis-	Deaths.	Invalids.	Admis- sions.	Deaths
General diseases not classi- fied as above—contd.										32-			
Osteo-arthritis · · ·	4	.58		1	***			***	28		2		123
Purpura	2	.09							4	***		3	1
Rickets	***		***				4						
Scurvy	5	-56		-					191		4	100	3
Morbid conditions incident										- 10	- ing		
to various parts:	- 1	1		-					- 13	1 177	-		ma
Congenital malformation car imperfect with occulsion of meatus .	***						1		***	***			***
" foramen ovale persistent .	***	-						1		***			
» harelip	***	-						101				3	
" fined" not de-		4		1 1					- 1	1 120	7 24	1534	-
persistent urachus .		- "		-			***	201	1		-		
" phimosis	40	2'14				-	16	***	3				
" septa incomplete		-		***			1	1				-	
" spina bifida . "· ·	***	-					1	,	440				
" supernumerary digits .	***												
" talipes equinus				1						***	***		100
" testicle absent					-	441	***	***	1		1	***	
" diminutive	1	'11						***		***			1
" " undescended .		*17						200	1			1	
, tongue tied						-	,				4		
" ureter absent		1 .						***	1,	***		***	
Cysts	31	1'54		1	1				42			18	
New Growth Malignant (n. d.).						/ ***			2			9	
" Carcinoma .	1	*20	1		***				1	- 1		16	1
" " Encephaloid car- cinoma	***								1	1			***
" " Epithelioma .	***	-							1	***	***	5	-
" " Lympho-sarcoma	***					144		***	1	1		***	***
" Sarcoma	101						***		5	***		6	1
New Growth non malignant (n. d.) .	2	'10				-	***	***	14			39	
" " Adenoma	***		***	***	1		***					***	
" " Fibroma	18	1,38	***		3			***	14			8	150
" " Chondroma .	***	-	***	-		***	-		***	***	-	1	
" " Glioma	2			1		***							-
, Hæmangioma .	1			***		***		***	***				-
" " Lipoma	7	'47					100		12			15	***
" " Myoma										***		1	
	2			1	***		***					3	
Olester		-							1		1	-	1
,, Osteoma	6	*27					***		-1		-	-	
, , Papilloma	17	1 "		1	***	_	-		1	-		1	-
" " Polypus		47		1 3								5	1
				***	100	-	1		1		1 20	1	
" Pterygium	***		1			210		200	25		985	9	100

			EUROPI	EAN AR	IY OF	INDIA.						JA	IL
DISEASES.	12.00	Мез		Name of Street,	Wos	EN.	Сни	DREN.	NATIVE	ARMY O	F INDIA.	OF I	NDIA.
union The annual cont	Admis- sions.	Constantly sick.	Deaths.	Invalids.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Invalids.	Admis- sions.	Deaths.
Morbid conditions incident to various parts—contd.											Many		
New Growth non malignant, Warts.	139	7'98			***						***		
Parasites :- Acanthia lectularia .	***						***		1			***	
" Ascaris lumbricoides Linnœus	-						1					122	
" Bilharzia hæmatobia .	7 4	'47		2	***				43			1	
" Bothriocephalus latus .		*52										3	
" Culex pipiens		'02				***							
Echinococcus hominis .	3	'26			***	***	***	***				2	
" Erythrasma	5	*08							3	***			
" Favus		10							4			16	
" Filaria sanguinis homi-	1				1		3 30			1		-	- CONTRACTOR OF THE PARTY OF TH
nis			***	***								1	
" Guinea-worm									522		2	411	
							***				***	***	
		'02	***				2		***	***		101	
Pentastomum denticula- tum Rudolphi	2	'93					*					***	
» Phthirius inguinalis .	30	*46											
Ringworm	356	14'34	-		2			441	416			155	
" Scabies	296	15'27			1				1,364		3	736	
» Screw worm			***				***		3		1		
" Staphylococcus pyogenes										1			
" Strongylus duodenalis .	4	.30			***	***		***	6			70	5
. Tænia saginata Goeze .	12	'19			3	***	-	***	3			2	
solium Linnæus .	100	3'72			8	-	111		20			59	
, Thread-worm					1	- ""			1			105	1
" Tinea versicolor	2	103			1		2		4			-	
" Trichocephalus dispar .	1 00	-				1						1	-
General Diseases not specified					-				8				
					1						1		1
				1					1	1	lane.	1	100%
	-			luc luc	10		1 2					1 10	100
LOCAL DISEASES.				1 10	11111		100		1			100	100
NERVOUS SYSTEM -													1
Abscess of the brain	. 5	29								1		9	10
Acute ascending paralysis .	. ,	102	,		***				***	/			***
Acute delirium	. ,	102							- ,		1		
Ansemia of the brain		.02									***		
									2		1		
Anterior poliomyelitis	. :	2 '22					2		1		1	- 1	
ALCOHOLD ON THE PARTY OF THE PA	. 1	1 103							1		1	1	
					***		***		1		1	1 9	
Associated nuclear paralysis .		1 '22	-	,	***							-	-
		/								-		2	
		7 7:	5	1					***	1		3	
		1 '00							,			***	
Convulsions		2 .1			-		21	21	1				-
			-	-	1	3 3	2			***		-	-
Degeneration of the nerves .		-		1 -	-	-					1	1	

NAME OF TAXABLE PARTY.			EUROPE	AN ARM	SY OF I	NDIA.		-	Name	ARMY O	w Lunes	Porm	ATION
DISPASES.		Mes	×.	- Treated	Wor	IEN.	CHIL	DREN.	NATIVE	ARMY O	FINDIA.	or In	DIA.
	Admis-	Constantly sick.	Deaths.	Invalids.	Admis- sions.	Deaths.	Admissions.	Deaths.	Admis- sions.	Deaths.	Invalids.	Admis- sions.	Deaths
NERVOUS SYSTEM—contd.									19	roples	19971		
Delirium	***				***				2		***	***	
Delusional insanity	13	- 2'86		16					8		4		
Dementia	5	1,10		4					2		2	9	1
Encephalitis	1	*05			***								***
Epilepsy	51	5'29	1	36	3		,		27		7	135	
Facial spasm	-						4.		2				
General paralysis of the insane .							4.					1	-
Hæmorrhage into the membranes of the brain									,			3	-
Headache	125	3'64	-	2	7	-			1 2			24	
Hemiplegia	8	1'05	- "	4		-		1	59	3	4	22	1
Hiccough									The same of			1	
Hydrocephalus													
Hyperæmia of the brain						-					4	1	1
Hyperzesthesia													
Hysteria	10	*90		1	4	-	1		8			4	
Idiocy			-				1 100						***
Impulsive insanity	1	-26			***				2		1	-	
Laryngismus stridulus			1						1	100			
Leptomeningitis (cerebral)	1			-	***		1	,		-			100
Local paralysis :	1	*04		,				1	1		1 4	8	1
Mania	15	.10		10	***		***		41	-	8	1	-
Melancholia	21	3.69	1000	19	2	1			14	1	1	16	
Meningitis, cerebral	3	6.07					6		14				
. suppurative .	1	'02	1		***			4	5	7		13	
		1 99	1	-						***	1 333		1
Mental stupor	3				***	***	-		- 4	1			
Monoplegia	1	1'14		3	***			***	***		100	2	
	28	'05	***		2 6				1	***		'	-
	3	4*29		6	2 6	***		200	19	***	3	1	
		*67		3		4	***	***	3	2		4	-
			100			***			1				
Neuralgia		6-37		6	20		1	***	328	2772	7	128	-
	32	2.20	***	11	8	***	***		12		3		
	25	2'14	***	2	1		***	***	57		6	10	
Obsessive insanity	1	'42	***	,		1.0	107	***	t	***	1	***	
Pachymeningitis (cerebral)	2	'21	2			1.5	3	3	1	1	***	,	
" (spinal)	1 20				***	***		***	1		***	3	
Paralysis		,03		***	***	***			2	***	***	21	
			***		340		***	**	2	****	2	3	
Paramyoclonus multiplex		.03	""			***		-			***		-
Paraplegia	1 1000	.11	-	***		***			5		1	27	
				***					2		**		-
		'55		2					5		3	6	
		14		1					1		1	1	
Primary , ,		*24		1							-4.	. 11	
Progressive muscular atrophy									4				-
Sanguineous apoplexy			6						6	2	. 2	. 11	
Sclerosis of the brain		-				***			- 2	*			
Sick headache	4	60.							.30		***	19	
Softening of the brain	***	-	***			-					***	1	1

and the second			100	EAN AR	-	00100	1		NATIVE	ARMY OF	INDIA	Popul	ATION
DISEASES.		Mg	N.	MARKETY.	Wo	MEN.	Сип	DREN.		NAME OF	TADIA.	or l	NDIA.
	Admis- sions,	Constantly sick.	Deaths.	Invalids.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Invalids.	Admis- sions.	Deaths
											-		
ERVOUS SYSTEM—confd.											1	-	-
Stammering	***		***	1	***	***	***			****	***	***	
Syringo-myelia	***				***				1		-		
Trance	***				***	***	***		***		***	3	
Tremor	***				***	***	in .		3		1		
Vertigo	12	.33			1				15	***		4	
Writer's cramp		- 400					***		1		1	***	
Wry neck	3	'21				***			6			4	
Maria Carlo de Carlo			1		1000	1					100	1004	
		100		1 74							W 1		100
TE DISEASES-		1	-				100		1 1 3	-		16	101
Abscess of the eyelids	2	*05											
Abscess of the lacrymal gland .	2	*10							1				
sac						***	***	,	1			9	
Acquired deformities of the cornea .	***								1				
Amblyopia and amaurosis	2	714		1			1000		13		6		
Ametropia	6	'16		1				-	2		1		
Astigmatism	42	2'35								1	,		1
Atrophy and degeneration of choroid	2			11			1	"	3				
Atrophy and degeneration of optic-		*07	-	'	***		***		***				
nerve	4	.33		4			***		1		***	***	
Blepharitis marginalis	20	*87		2	***				4			36	
Blinding from intense light	1	*03	***		***				1			***	
Capsular cataract									1				
Chemosis of conjunctiva	***	-										1	
Choroiditis	7	'42		2				1113	" 1			3	
Chronic dacryo-cystitis	3	.31		1 100	1000	The state of the s		***	6	10000			
Chronic hypersemia of the conjunc-												-	-
tiva	-94								1				
Congestion of optic disc	1	'02			•••			***			***		
Conjunctivitis	297	12'71		2	54		204		2,131		- 2	1,082	
e granular							***	***	110		5	59	
Degeneration and atrophy of retina	1	12		1					1				
Degeneration of the conjunctiva .					***		***		1		***	1	
Diptopia			***		***				1	***	***		
Ecchymosis of the conjunctiva .	1	*02	***						5		***	1	
" " eyelids									1				
Entropion					***							8	
Eye diseases, not specified		-							2				
Fistula of lacrymal sac	1	*10										2	100
Formational state billions	2	10							16	***		15	
C		The same of	1000		***	***	***	***		***			1
							***		2	***		3	***
	2	*10	***		***		***	***	***	***		***	***
Hæmorrhage from the vitreous									3	***	***	***	
Hypermetropia	30	1"30		5	***	***	***			***	***	100	***
Нуроруов												2	
Inflammation of lacrymal gland .		*04			-								
Iritis	29	2'22		2				100	66		3	32	-
	-	1		1			Same?					100	
Keratitis .	20	1507	200	1 2	10000		100000		40.6			45	
Keratitis	39	1°95 4°85	-	1					74		8	35 257	

		1	EUROPE	AN ARM	AY OF I	NDIA.	918				1100		
DISEASES,		Me			Wor		CHILI	DREN.	NATIVE	ARMY OF	INDIA.	POPUL OF I	ATION NDIA.
	Admis- sions.	Constantly sick.	Deaths.	Invalids'	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Invalids	Admis-	Deaths.
EYE DISEASES-contd.								1311		177	Service .	artico)	- 14
Lenticular cataract	4	'51		1	***		***	***	13	***	6	43	
Myopia	22	-96		2	1		***	***	5		2	-	
Obstruction of ansal duct	1	.03		***	***	***		***	***			1	
Œdema of the cyclids			***		***		-		. 4			3	
Opacities of the vitreous humour .	***				***			***	2		441	1	
Opacity of the cornea	2	119	***	1	***	***		***	10		5	18	***
Optic neuritis	3	-80	***		***		***	***	4		1		-
Panophthalmitis	***			441		***		***	***	***		5	
Ptosis	1		***		***	***	***		1	***	***	1	***
Retinitis	2	'21	***		***				2				-
Scleritis		-07		1					2	-	***	2	
Squint	4	-69		1					***	***	1		
Staphyloma						***					1	2	
Stye	11	.38		aur.		***			83		***	26	***
Synechia			***						3			***	-
Trichiasis			495	***	***				2			12	
			1	1	37		li tele	100	110	1	100	1000	THE R
EAR DISEASES-			1				100	13	110	1	Totals	Sich	3 10
Accumulation in external meatus of wax or epidermis	10	*27							13	-	-	2	
Deafness	15	71	1	8	-	1000			17	-	5	,	-
Hæmatoma of the auricle	1000		***	100					4	-			
Inflammation of the external car .	553	23'66					8		149			195	
ear smoon-	333											1	
rative	14	*33			1				39		100	20	***
Inflammation of the internal ear .	6	*69		1			***	***	4	***	***	11	
purative , internal ear, sup-	,	'04	***	-					5				
Inflammation of the middle car .	221	14'12		13	3	***	3		63		3	29	
sun-		12-1					1 24	1 37	1 115	1	1	1-14/7	100
purative	47	5'23	2	22	1	***			49		1	59	
Perforation of the membrana tympani	114	7'33	***	24	***	***			24		2	1	144
Tinnitus	***	.39		***		***							***
	1911	1		12.19	1				1	1	12302	9199	100
Nose Diseases—	- 1	1			1111		1	1		1	1 3 13		1
Abscess of the nose		***	***			****		-		-		1	
Adenoid vegetations	4	.30			***								
Coryza	29	'58		***	***	***	1		136	1	-	64	***
Deviations of the septum	2	1				***		-	2	-		-	
	1 0	.05		***					1 22	-		10	1
Epistaxis	8	'17				***	1		13			19	-
sinuses									3			3	
Inflammation of the naso-pharynx .	7	.18							26	***	***	5	
Necrosis and caries of bones of	2	112	1	100000	1	1						,	
Ozzena		*30					-	-	7		1	33	90
Rhinitis	11	'57					3	1 2	7	-		13	
	1	3/			***		1	-	1	LONG B	THE REAL PROPERTY.		
		1		19 19	121	1.00	1117	1		1 3		1111	10
DISPASES OF THE CIRCULATORY		111	1 70		7 = 1	11/2	1	1	1	27.34	1 63	11 63	1933
Adherent pericardium		-		1	115		191		2			***	
Aneurysm	9	1'58	5	7			-					4	1
	1 9	. 20	1 3	1					***	1	1		1

	-		EUROP	BAN AK	OF	INDIA.	_		NATIVE	ARMY	F INDIA.	Popul	LATION
DISEASES,		Me	N.		Wo	MEN.	CHIL	DREN.	MAIIVE	ARMI C	, tabia.	OF I	NDIA.
	Admis-	Constantly sick,	Deaths.	Invalids.	Admis- sion s.	Deaths.	Admis-	Deaths.	Admis- sions.	Deaths,	Invalids.	Admissions.	Deaths
DISEASES OF THE CIRCULATORY													
System—contd.	1 38							-		111111	1 113		100
Aneurysm by anastomosis			***	***	***	***	***		***			1	**
Angina pectoris	1	.06	***		1	***	***		***	1	***	3	
Arterial nævus				***			1		***				
Atheroma of the heart	***						***	***	2	***	1	3	
Atrophy of " "	***						***	1				1	
Dilatation ,, ,	7	*65	***	3					19	***	5	15	
" " (orifice)	1		1		***								
Disordered action of the heart .	354	32'60	***	46	5		1		39	***	6	13	
Effects of strain on heart	4	'41							11		•••		***
Embolism of arteries	***								1	1	***	1	,
Embolus	***	***						-		***		.,	1
Endarteritis obliterans	***		***				***				***	2	:
Endocarditis		'05	***	1			1	1	1	1	***	***	
Fatty degeneration of the muscular substance of the heart	2	.01	2						3	4		12	5
Hydropericardium	***		***	١	***	***	***		1	***		1	1
Hypertrophy of the heart	1	*11				***	***		1		1	1	
Obliteration of veins	***	*03											
Pericarditis	4	*17	3		***				6	1		14	8
Phlebitis	20	1.63		4	2				14			8	1
Raynaud's disease												1	
Rupture of artery				100000	***							,	,
Rupture of the heart			***		***	1000							,
Syncope	6	'07	2		201		2	3	7	7		2	7
Thrombosis of arteries	7	-63		***	***		1000	August 1	3	1		1	,
" " veins	10	*67			***				8			,	
Thrombus	1			2	***		***					2	2
Valvular disease of the heart	80	***	***	***	***			***		6	15	161	45
M. dans assessed		10'55	3	51	9			**	45				
			***		***	***		No.	3		2	***	***
	94	699	112	6	7	***	***	***	9				
Venous nauves	1	'02		***				***	***			2	***
DISEASES OF THE RESPIRATORY SYSTEM-												i	
Abscess of the lungs			***		***	***			3	1		2	1
Atelectasis					***		3	3					
Bronchitis	992	44'30	1	5	24	***	183	10	1,895	5	15	1,960	30
Broacho-pneumonia	21	1'53	2	***	1		35	14	85	15		47	11
Cirrhosis of the lungs	1	*12	1		-							25	
Collapse of lung	***			-		***		***	1	100	1		
Congestion of the lungs	4	'34							6			18	
Dilatation of bronchi									1			7	9
Empyema of pleura	1	'45	2	2					6	2		7	3
Emphysema of the lungs	5	'31		3					5		1	4	-
Gangrene of the lungs					-500				1		***	23	21
Hæmoptysis		*08	Same of the same o	13.01					8			25	
Hydrothorax			***	***	- 1		-		2			1	
1 die		4740	***		***				145		-	13	10000
N Lie dal L.		2'32		3	***	***	1	***				2	
Character of the elettic			***	***	***	***		***	***	***	***		
	***		***	***	•••		***	***	***	***	***		
" " " lungs		***	***	***		***	***	***	***	***		2	

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				ETAIL				-	177	4	400	13 /2	14.4
			EUROPE	AN ARI	MY OF I	NDIA.			Name	ARMYO	n Iventa	J.	ATION
Diseases.		ME	۹.	111111111111111111111111111111111111111	Wo	MEN.	CHIL	DREM.	- Allva	ARMYO	F INDIA.	of 1	NDIA.
	Admis-	Constantly sick.	Deaths.	Invalids.	Admis- sions.	Deaths.	Admis-	Deat s.	Admis-	Deaths.	Invalids.	Admis- sions.	Deaths,
DISEASES OF THE RESPIRATORY SYSTEM—confd.									10	MANUAL ST	-		
Phthisis not defined as tubercle .	2	*58		6	1		,		3				
Pleurisy	93	6:17		3	4				297		9	193	15
Respiratory diseases, not specified .									4				***
Spasmodic asthma	38	3.10		8	5				132	1	8	672	41
Tracheitis	1	*02					***		10		***		-
										. 10	20		
7 - 4 4 4		- 2		181	100		- 4	7	0 3	4119	11119		
DISEASES OF THE DIGESTIVE SYSTEM-							160				100000		
Abscess of the liver	115	23'53	55	31	1	1			11	2		11	10
Adhesions of peritoneum	1	*09	***						***	,			***
Appendicitis	110	11.03	12	7	3	1			64	. 7	2	26	4
Ascites		***			***	***	***		6	-	1	30	4
Atrophy of the intestines		***	***	***	200	***	4	1		***			***
Atrophy of the liver			***	***		***	***	***				1	***
Biliary colic	1	*07	***		1	***	***	***	3			10	
	211	9.23	***	9	7	***	12	***	44			38	***
alveoli periosteum and	46	1'94				***			2			8	
Cholecystitis	15	-69	***		1	***			12			47	- 4
Cirrhosis of the liver	7	'54	2	1	***	***			4	2	1	27	34
Colic	413	9'07			11	***	3		268			337	2
Colitis	75	5'13	1		3		4	1	31			66	9
Compression of intestines												1	
Congestion of the liver	322	15'87		7	7		3		32		1	29	***
Constipation	177	5'25	***	***	9	***	10		229			256	***
Digestive diseases, not specified	1,169	35'27	1	***	51		303	46	1,115	8	1	4,306	105
atation of intestines				***	***		***		20			***	***
, the stomach	4	*84			***	***		***				3	
Displacement of the Stomach .				-					3				
Disorders of dentition							77	11			-		
Elongated uvula	1	.03	***	***					3			4	
Enteralgia									1	-			
Enteritis	114	3'93	6	344	9	2	97	51	92	16		260	26
Fascal accumulation in the intestines	5	'13		***	1	***	***		3	-		20	1
Fissure of the anus	16	191		***	3				13	***	***	15	
" " lips			***									1	
Fistula in ano	29	2'42		1			***		46	***	. 1	71	1
Gall stones	1	*06				***			5			2	
Gangrene of the intestines	***											1	
Gangrene of the mouth							***		1	1		8	1
Castralaia	1	'02	1	***									-
Gastritis	203	112			1	***			2		***	2	
Glossitis	4	9'04	-1-	1	24	***	and the same of	1	51			103	
Gum-boil	169	5'14			2		-		100			192	-
Hæmatemesis	3	'17	-						3			8	2
Hiemorrhage from the intestines .		'03							-1				
			1	Mar V			1			20036	1		

The same of		200		SAN ARI	ar Or	INDIA.	1	_	N.	Anne	Inne	Parl	LATIO
DISEASES.		Mar	۷.		Wo	MEN.	CHIL	DREN.	NATIVE	ARMY O	IN DIA.	OF I	INDIA.
	Admis- sions.	Constantly sick.	Deaths.	Invalids-	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Invalids.	Admis- sions.	Deat
											-	_	
SEASES OF THE DIGESTIVE SYSTEM-contd.											13 500		1
Hæmorrhage from the stomach .									1			***	
Heartburn												1	
Hepatitis	288	23.76	2	23	3				54	2		45	
Hernia	96	11,55	***	10	2		9		42	2	10	55	
Hypertrophy of the tonsils	6	*26				***	1	***	2			855	-
mpaction of teeth	584	19'86	***			***		***				3	
Indigestion	304	'11	***	2	46		16		296		3	700	
nerios.			***		***	***						9	
teum · · · ·	62	2'01		***		***	***	***	7			3	
Inflammation of the gum and periosteum	9	1'36					1		34			12	
Inflammation of the intestines .	17	*84			,		10	3				36	
" " jaw	***								3				
,, , lips	***						***		4			2	
" " pancreas						***				***		3	
esophagus! pharyox and	25	1'09			1		2		68			23	
nflammation of the salivary glands	3	'07					2		45			10	
ntestinal indigestion	1	101			1		5	5				2	
ntussusception							1	1	***	***		***	
schio-rectal abscess	8	'42							18			8	
aundice	156	8'42			2		2		286			296	
aceration of the anus	***								- 1				
oss of appetite	2	'16					1				***		
felæna	***		***		***							6	
Vecrosis of alveoli	***		***		***				1			2	
" " cement of dentine .	/	***	***		***						***	1	
" " jaw	5	'50	***	***	***		***	***	2	1		1	-
aresis	1	'07	***	***	***		***	***			***	10	
erforation of the intestines		.03			***		***		***			6	
" stomach							***		***			2	
erihepatitis	5	'45							3			2	
eriproctitis	7	395		2	***				14		1	8	
eritonitis	6	-63	***		2	2			12	7	1	15	
eritonsillar abscess	4	'12									***		
îles	404	22'60		1	10				173		7	432	
ost-pharyngeal abscess												1	
roctitis	3	*28							2			4	4,0
rolapse of the rectum and anus .	4	.16					5		1			25	
yorrhora alveolaris	7	'27	***	***	***								***
uinsy	So	2.35			1	***	3	1	14			48	
ecto-urethral fistula	***		***		***						***	1	
ecto-vesical fistula		*02	***		.	***	**		***			3	***
alivary calculus		-02				***	1			***		***	***
alivary fistula							***		1		***		***
ore throat	301	7'93			11		10		88	-		58	***
prue	1	.31	1	1					8	2	,	30	
tomatitis	15	'79			100	1000	9		80			89	-

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-		1	EUROPE	EAN ARM	Y OF	NDIA.						,	
DINEASES,	WALL BY	Мез		-	Wom	EN.	Сип	DREN.	NAT	INDIA.	IV OF	Popul of Is	ATION VDIA.
	Admis- sions.	Constantly sick.	Deaths.	Invalids	Admis- sions.	Deaths.	Admis- sions.	Death s.	Admis- sions,	Deaths.	Invalids.	Admis-	Deaths,
				1000									-
DISEASES OF THE DIGESTIVE SYSTEM—concid.						1 3				THE PERSON			7777
Stricture of the intestines		2					1	100		-369	1		1000
" " crsophagus												2	(God)
, pylorus						***							
Suppuration of the dental pulp .			***	-		***	***		- 1			***	
Suppuration of the periosteum, gums and alveoli									33		- 3	9	
Suppuration of the salivary glands .	***	***	***	***	***	and .			2		>	***	***
Tonsillitis	1,246	41'31	***		3.5		31	1	248			61	
Toothache		***		***	1	***			3	***		3	***
Tympanites			***	***	***	***	***	***	1			***	
Ulceration of the gums and periosteum	1	*08							3	***		49	
Ulceration of the intestines	1	,01					1	1		***		2	
" " perforating	1	.03	1		***							3	1
u lips			***						9		***	***	
" mouth	6	'25	***						15			5	1
" palate and fauces .	7	1'25	***	***			1	1	7	***			***
" pharynx rectum and anus .	1	*05		***	1			***	3	***			***
stomach	3	123	***			***	***		2	***		3	
" " perforating					3			***	. 1	2		4	2
" " tongue									6	-		4 2	1
Volvalus			***	***					1			13	13
Vomiting	***				3	***			7			1	
Yellow atrophy of the liver (acute) .	***				***						***	2	2
	88										1 3	-	
		100	1		1		10 16				733		10
DISEASES OF THE LYMPHATIC SYSTEM-	1						-			1	1		
Abscess of spleen					***	***	***					4	1
Atrophy of "			***	***		***	***					20	
Congestion of "	1 23	, '04	***			***			2		***		
Elephantiasis of the lymphatic vessels			***	777	***	***						17	1
Embolism of spleen	100	***	***		***	***			***			1	
Fibrosis of lymphatic glands					200		***		2		***		
Hypertrophy , ,	1000	61'94	***		**		***		5	***	1		***
" vessels .	1	*83		2			16		274	***	4	238	2
Lardaceous disease of spleen .	10.50								1000	***	***	13	***
Mechanical affections of spleen .	1 10 1												
Necrosis of lymphatic glands	1	*02											
Perisplenitis	2	106							1-			1	
Rupture of spleen	1	101	1									***	
Splenitis	21	1'47				***	1		135		7	26	
Suppuration of lymphatic glands .	40	4*82			***		1		49		. 1	139	
	-									100	-		
DISEASES OF THE THYROID GLAND-			Tell					-	1 3 3	1	5 3	- Ing	
Inflammation of the thyroid gland .	1	*33		***									
Goitre	. 4	'21	***	1			1		22		-	1	
Suppuration of the thyroid gland .	2	'05		***	***		***		***	***			***

			EUNOP	EAN AR	i or	- TOIA			Names	ARMY O	r Innia	Popul	LATION
DISEASES.		M	IN.	1000	Wo	MEN.	CHIL	DREN.	IVATIVE	E ARMY O	F INDIA.		NDIA.
and the second	Admis- sions.	Constantly sick.	Deaths.	Invalids.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions,	Deaths.	Invalids.	Admis- sions.	Deaths
								100				4	
DISEASES OF THE URINARY SYSTEM—	1				-53		- 3		. 8				1
Abscess of kidney					111		196	***	***			4	3
Acute nephritis	37	4'44	8	9	4	***			8		1	28	6
Albuminuria	5	*25			2		***		5			17	2
Bacilluria	2	*34					***		***			***	***
Bright's disease		.10							6			76	18
Calculus in kidney	6	*83		2	1				11		1	6	
" ureter of kidney			***					***	2		1		-
" in the bladder	4	'43				10	***	***	7		123	5	
Chrome nephritis	16	2'33	1	10	,				11		4	23	10
Chyleria								***			***	1	185
Congestion of kidney	2	'18						***	***			444	
Cystic disease of kidney	***				-							444	4,4
Diabetes insipidus	3	'31							2	2		16	
Disseminated suppurative nephritis .												1	,
Glycosuria			En. L					1	1			***	
Granular kidney		'51		2					2	1		4	3
Hæmaturia	17	'94							9			11	
Hæmoglobinuria	1			***	***			***	1			4-01	
	***	***	***				***						47
	38		***		***	***	***	***	8				100
	21	2'36		3				***		- 1		20	
Inflammation of the bladder	70	2.08		1	3		2		5				
I hitada	6	*25	***		1				1			3	***
Manual Manua	***		***		***	***			. 1			1	***
	2	.39	***		1		***		,	***	***	***	***
Nephralgia	***				***				1	***	***	1	***
Oxaluria	1	'02				***	-			***	***	***	***
Perinephritic abscess	2	*34								***		1	1
Phosphaturia	1	'02	***	***			***	***	. 1	***			***
Pyelitis	1	*12	***	***		***	***	***	***	***	***	1	***
Pyonephrosis	1	-311	***		1	201		***	***			2	2
Renal colic	11	.80	***	***	1	***	***	***	31			13	***
Retention of urine	6	17	***		***	***			1	***	***	16	***
Ulceration of the bladder	1	.07			***	***		***	***		***	***	-
							100	1		1192	-	and the	
	- 1							872			4		
DISEASES OF THE MALE ORGANS OF													110
Abscess of the penis											100		
	3	'14			***	***	***	***	1		***	8	***
4-4/-4-		16			***			***	4	***	***		
	2	.13	***			***			***			10	
	***							***	1			1	***
Atrophy of the testicle	2	*04	***	'		***							***
Balanitis	101	4'65							9	***	***	6	***
Calculus of prostate	***		***							***		2	100
Condyloma of penis	5	*22							- 2	***		6	
Epididymitis	22	1.71						***	33	***	***	9	***
Extravasation of urine	***							***	1	1		2	. 1
Fistula of scrotum			***		***			***	2				***
Gangrene of the penis		***		***					1	1	1	***	***

		EUROPEAN ARMY OF INDIA.											
DISEASES.	Mark 1	Me		I MARINE	1	MEN.	CRIL	DREN.	NATIVE	ARMY O	F INDIA.	Popul	LATION NDIA.
-	Admis- sions.	Constantly sick.	Deaths.	Invalids,	Admis- sions,	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Invalids.	Admis.	Deaths.
DISEASES OF THE MALE ORGANS OF GENERATION—concld.													-
Gleet	1	*23										2	
Hæmatocele of the spermatic cord .	1	*06								***		7	***
lis , tunica vagina-							-	-				2	
Hæmorrhage from the urethra .	1	.03		***	***							26	
	1	*03	***		***							1	
Hydrocese of the spermatic cord . " tunica vaginalis .	41	,13	***		***		***		4			***	-
Hypertrophy of the prostate		2,01	***				1	***	35			106	
Impacted calculus			***	***	***		***	***	***			4	
Inflammation of the prostate		:07		***								2	
scrotum	1	'01	***	***	***				1			1	
spermatic cord .	2	'15						-		***	***	1	
n n testicle		'04							6	***	***	***	***
" , tunica vaginalis		101								***	***	100	
Œdema of the penis		***											***
" " prepuce	1	'02	***				-			***	***	1	***
" " scrotum												2	
Orchitis	287	16:41		1			,		184			81	-
Paraphimosis	12	-87		***	***				6			16	
Phimosis	56	3,50		***				***	8		. 1	87	
Posthitis	1	*08	***	***			***		1				
Pruritus	1	*02							4			***	
Sloughings of the scrotum	***								1		***	2	1
Soft chancre of the penis	1,104	114'79							.541		1	135	***
n n scrotum'	***		***				**				***	5	
Spermaterrheea!	***	***							2				
Stricture of the urethra	44	3.33		3					12	***	1	49	
Ulcer of the penis	17	'99	***						34		***	31	
n n urethra	1	'04	***									1	***
Urethral fistula Urethritis		,'14	***		***				2			8	
Verlands 1	47	2'05	***		***		***	***	14		****	9	
varicoccie	85	5'99	***	3	***	***	,		8			3	
									1	-	33		
					77		1						
DISEASES OF THE FEMALE ORGANS OF GENERATION-		1					1					-	
Abertion					74	2					3		
Abscess of arcola	***		***									13	
" " breast					3								
Amenorrhoea				***	1							3	
Anteversion of uterus			-		1								
Asphyxia of infant												3	***
Cramp and spurious labour pains .													***
Discharge of watery fluid from				-	120		-	2 1		-	3	-	***
Displacement of uterus						-				-			
Dysmenorrhora	***				. 6					-			
Endometritis					24	-			-		-		-
Erosion of cervix uteri					4								-
Gangrene of uterus	-								-			-	,
	1-14	1	i			-		-			-	-	The same

	1		EUROPI	EAN ARM	Y OF	NDIA.	14		Nome	E ARMY O	n Iven	JAIL POPULATION		
DISEASES,		Мв	N.		Wo	MEN.	CHIL	DREN.	NATIVI	EARMYO	F INDIA.		OF INDIA	
and the Alaman and	Admis- sions.	Constantly sick.	Deaths.	Invalids.	Admissions.	Deaths.	Admissions.	Deaths.	Admis- sions,	Deaths.	Invalids.	Admis- sions,	Deaths	
DISPASSES OF THE FEMALE ORGANS OF GENERATION—concid.													1	
Hæmorrhage during parturition .		***			1				***			***		
" from uterus					1				***					
m from uterus during preg-														
nancy			***	***	5		***		***		***	1		
Hæmorrhagic mole	***		***	***		***	***	***	***				***	
Hypertrophy of vulva				***		***	***		***				***	
Inflammation of the ovary	***	***			4	***	***	***	***				***	
, uterus	***		***			***	***	***	***			1		
" " vagina	***				1		***	***	***			***		
, w vulva	~		***		1			***				1	100	
Laceration of the cervix uteri .	***	-			2				***					
Leucorrhœa			***		8				***			1		
Mastitis			***		5	***			***			1		
Mechanical obstacle to the expulsion of the foctus			4		1		200	100				4		
Menorrhagia		1 30 11	***	1100	23	1000				1999		7		
Metritis				***	6						***	,		
		-			1 300			***	***					
" in pregnancy	***		***		1				***	***				
Metrorrhagia	***				9				***					
Missed labour	***		***	***	1	***		***				***	***	
Over-distension of the uterus	***	***		***				***	***			1		
Parametritis	***	***	***	***	7		***	***			***	***		
Perimetritis	***				1		***				***	1	***	
Premature birth	***	***	-	***		141	17	17					***	
Procidentia of oterus					3		***	***	***		***		***	
Prolapse of vagina	***		***	***	3	***		***				***		
Prolapsus of uterus	***			***	3	***			***			2		
Puerperal sapræmia			***		1			***	***		***	3		
Retention of placenta		***	101		1				***			1	***	
Retroversion of uterus			***		3					***			***	
Rupture of perineum	***	***	***		4	***				***			***	
Sterility			·		2				***					
Still birth					5								***	
Stricture of cervicle canal					1	***			***				***	
, internal oo			***		1							***		
Subinvolution of the uterus					2			***		***				
Sudden death after delivery						1								
Ulcer of the vulva					2									
Vesicular mole		(1									
DISEASES OF THE FEMALE BREAST-					-			1						
												1		
inflammation of mammary glands .			***		3		1		***	100	***	2	***	
	***	***			3		***			***		***	***	
Suppuration of the mammary gland puerperal,					7					***		***	***	
7 7 1 7 1							1-51			*		Total		
	1 3		1		7	4	100							
DISEASES OF THE MALE BREAST-	1	-	7-3-	-								-		
Hypertrophy of the breast	1	.03	***										***	
Inflammation of the breast	1	'01	***		***				5				***	

			EUROF	PEAN AR	MY OF	INDIA.		17.3	N	ARMY O		JA	IL LATION
Diseases.		Me	N.		Wor	MEN.	CHILI	DREN.	NATIVE	ARMY O	F INDIA.	OF I	NOIA.
VIDEAGEN .	Admis- sions.	Constantly sick.	Deaths.	Invalids-	Admissions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Invalids.	Admis- sions.	Deaths
					-								
DISEASES OF THE ORGANS OF LOCOMOTION-										100	1000	Part of	123
Abscess of bursae	8	'34			1		***	***	27				***
Adhesions of tendons	1	'01	***			***	***		3				***
Angular curvature of spine		***				***		***		***		1	
Ankylosis	1	*01				***		***	5		3	25	
Atrophy of muscles	2	.10				***	1	***	2				***
Bunion	4	'16		1		-		***	1				
Bursal cyst	2	*17							3	***			***
Caries of bones	6	'46			***		***		4		***	18	1
, , spine	2	-17		1	***		1		2		1	1	
Club-foot				2									
Club-hand	3	*05											
Contraction of fascise	6	*58		2					3			1	***
Contraction of tendons	5	*30		1 2 2		200			,		1		***
Contracture of muscles									2				***
Coxa vara				***					2		1		
Deformities of the toes	4	124				***							
Degenerations of muscles				""	***			***					
Dislocation of intra-articular cartilage	10	1'22		1		***						1	***
			***		***	***	***					,	
Excessive formation of callus in bones	***				***	•••							
					***						***		
Flat foot	22	'99	***	19			***	***	2		***		
Ganglion	7	. 23	***		***	***		***	5		***		
Hallux valgus	11	*89	***	2	***	-		***			***	1000	
Hammer toe	53	4'55	***	2	***	***			2				-
Hypertrophy of bone	***	***	***		***	***	***	***	1				***
Idiopathic muscular atrophy			***		***	***		***	- 1		***	5	
Inflammation of bursa:	32	1'43	***		3				23		***	- 200	
,, fascize	***		***	***	100			***	1				
" joints (not defd.) .	14	1.62		1	1	***	***		35	-	2	8	
, muscles	100		***		***			***	8		***	11.00	
,, ,, spine	***		***		***	***			2	***	1	***	
Knock-knee	100				100				2	***		***	
Lateral curvature of the spine	1	*07	***	1		***			***			***	
Loose body	14	1.00	***	2			***			***	***		***
Lumbago	10	'62							220			***	
Myalgia	369	13,60		1	6		1		329		4	175	-
Myositis	4	.11			***			***		***	***	***	-
Necrosis of bones	4	'72	an.		***		***	***	5		1	24	
Osteitis	8	'45		2	***	***	***	***	10	***		4	
Osteo-myelitis (chronic)	1	'14			***			•••				***	
Periostitis	41	3.11		1	2			•••	51	***	2	15	-
" circumscribed		***	***			***			15		***	***	***
Psoas, lumber and post-pharyngeal									3			1	,
abscesses	5	1	1		***	***	1		4				
Rupture of muscles	3	.13	-		***	***							
, tendons	1	'05	***		***				11		2		
Stiff joint		1'02		5	***	***			2			. 1	
suppuration of muscles			***	8					554		14	152	4
Synovitis	902	51";3	100										

						UROPE	AIT ARS	OF I	MIJIA.			NATIVE	ARMY O	F INDIA	Popula	LATION
DISEA	SES.		5		Me	N.		Wo	MEN.	Сни	DREN.		ALMI O	r India.		NDIA.
				Admis- sions.	Constantly sick.	Deaths.	Invalids.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions,	Deaths.	Invalids.	Admis- sions.	Death
DISEASES OF THE C	RGANS	or Lo	00-										1			
MOTION—concld. Talipes cavus							1		1000	1						
Tenosynovitis				2	*08		-					***	***			
Thecal abscess				3	.11		***		***	200		13	***		6	***
I licent noscess				1	.03			***				3	***		10	***
DISEASES OF TH	нв Со	NNECT	IVE											1 8		
Abscess of the con	nective	tissue		824	42'52	1	1	10		22		1,529	1		3.843	
Elephantiasis		20										2		101	10	***
Gangrene												2			10	
Inflammation				872	38'93	1	1	16		9		370	1		823	25
Œdema	39		20	7	-46			***	***			4	100		32	***
DISEASES OF THE S	KIN-			HE		166								: (17.		
Acne																
Alopecia				12	'5'					2		16	***	***	11	***
Boil				1	.05	***	***					3			1 100	
Bromidrosis .				1,096	41'49	***		9		25	***	2,722			1,192	
Carbuncle .					,03			***	***	***			***			
Chilblain .				15	'75		1	***				35	***	-	176	1
Corn				***		***	***			***	***				2	***
Delhi boil .				22	. 59	-	***	***		***	***	19	***		13	
Dermatitis herpetif	ormis	200		9	'91		1	***	***		***	254	***		6	***
" seborr				7	'44	***		***	***		***	14	"	***	13	***
Eczema .							-	***			***	3		***	1	***
Erythema .				407	20'53	***	'	4	***	24		403		4	349	***
Folliculitis .				11	.57	-		1	***	2		10			4	
Frost-bite .				12	'49					***	***	1				
Gangrene .								***		***		3		-		***
Herpes								***		- 1	***	25	***	1		***
Hidrocysto ma				44	1.39			,			***	92			56	***
Hyperidrosis .				7	.31			***			***					***
Ichthyosis .				5	.13	***		***				4	***			***
Impetigo, contagios	a .				***	***	***		***			1	***		3	***
,, herpetifo				77	2'93			***		7		63	***	1	9	***
Keratosis				9	*37	***	***	***	***	1	***	5	***		**	***
Leucodermia						***		***	***			1		***	***	***
Lichen				2		***	***	***	***		***	2	***		2	***
Lupus erythematosi	15 .				10	***			***		***	7	***	***	9	
Molluscum contagio				2	'20	***	1	***	***			1	***	***	***	
Mycosis fungoides	1						***		***	2	-	1	***			***
Onychia .				267	*****				***			***			1	***
Pemphigus .				96	13'42			2	***		***	50		111	27	***
Pityriasis rosea .		7.		2	112					2		13		***	9	***
" rubra				6	'25		-					2	***	***		
Prickly heat				12	38				-		***	6	***	3000	4	6515
Prurigo .							***			***		1	***	-	6	***
Psoriasis				78	5*22		-	***	***		-	2	***	***	1	-
Seborrhœa				3	10000		-	***	-			19			12	- 175
Sudamina				1	'54		1	***	-			***	***	-		***
Sycosis				34	2'39	***						2			***	***
Ulcer					- 59	***	1	100	***	***	***	12	111	***	2	000

Diseases of the skin—confd. Urticaria	-	97 97	OF INDIA.
Diseases Admissions Constantily Deaths Invalids Admissions Death	Admissions. Deaths.	97 9 17	Admissions. Deaths.
Sions Sick Deates Invalids Sions Deates Invalids Sions Invalids Invalids Invalids Invalids Sions Invalids Invalid	I	97 9 17	sions. Deaths.
Urticaria		9	
Veldt sore		9	
Wart	1	9	
Wen	1	9	
Whitlow			3
Zona			10
* 1 P 1 de-13		302	453
Local diseases not defined		66	59
		100	
INJURIES (GENERAL AND LOCAL):-			
ACCIDENTAL -	. 3		
Abrasions 749 25-96 1	4	2,836	101
Brush-burn			
Burns and scalds 91 472 4 1 1 .	9	288 2	232
Complete crush of chest			
Compression of the brain 1 'ot 1		1 1	
" " nerves		1	
Concussion of the brain 34 2'38 2 1	3	46 2	6
" " spinal cord • 5 '42 1		3	1
Contusions 1,240 54'02 I 3 6	6	2,168 3	776
Dislocations		74 4	22 2
Effects of cold		1	
, chemical irritants and corrosives		5	
" irritants and corrosives . 3 '07	2		24
		1 2	
Foreign bodies in tissues and organs 17 64 1 1		24 1	22
Fractures	1 15	443 5 32	520 14
Fracture of the ribs with injury to pleara			
C - VA fortun	1		
tt		1	
Heat-stroke	1 5 2		48 19
to the second of breadalate of the		1	
Line of a booth and booth		1	
(cot defeed)		68	
· d d			- 1
Multiple injury		1	30
Posterior W Co.		4 2	5 4
" of bladder associated with fracture of pelvis			
Constitute of anticharteform have			
			3 2
Character			2
On the section of the section of	3	1,506	232
Sub-arachnoid hæmorrhage			1 1
Sub-conjunctival		1	
Suffocation from overlaying	1 2		

		EUROPEAN ARMY OF INDIA.							1			1 1		
DISEASES.		Men		Mal W	Wo	MEN.	CHIL	DREN.	NATIVE	ARMY O	FINDIA.	POPUL OF I	ATION NDIA.	
	Admis- sions.	Constantly sick.	Death's.	Invalids.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Admis- sions.	Deaths.	Invalids.	Admis- sions.	Daths.	
		14 1												
INJURIES ACCIDENTAL—concld.						9	1 5						miles.	
Suffocation from plugging of air- passages with foreign substance .				19				107						
	1		1		***		1	1	***					
Suffocation from submersion	1		21							5			. 2	
Sunstroke	46	1-39	1	1	***	***	***		22	1		42	13	
Wounds	1,446	70'34				***			21				15	
" gunshot	38	5'35		18	9	***	26		4395 136	6	51	3,229	10	
			3	15	***						2.	20	-7.	
					4	1839			1			man b		
INJURIES-HOMICIDAL-													100	
Gunshot wound		-							13			1	100	
Homicide (not defined)		-			***					3			3	
Wound			***		***	***		***				,	2	
										3	10000	Marie		
A 12/2 12/20														
Judiciat-							1					600.00		
Hanging			***							1			6	
Punished			***									37		
	-			4		-								
SUICIDAL—		1			19									
Burns			***		***	***	***		***				1	
Drowning		***	1		***				***			***	2	
Effects of irritants and corrosives .		***	2	***	***		***					177	1000	
Hanging			***			***				2	-	-	15	
Suffication from plugging of air-		1 1								1000				
Passages									***				1	
" cut-throat	3		***		***						***		1	
" gunshot	2	***	19			***	***	***					2	
		7.11	19							5			***	
IN ACTION—	634			-			100	3		1				
Injuries (not defined)				1				E	1 300			-		
Wounds		***			***	***	***		24				***	
" gunshot			***		***		***		131	37				
		777	***	-		***	***			3/	14	-	***	
		1 1 4		-			1112			134		-		
NOT DEFINED-						1 4 1	3434	14			-	1		
Cut-throat		-	-	1	4 -		1				-	5		
Hæmorrhaget					***		-							
A SIGNATURE OF	-					177			10000			19/9 1	10.00	
BEAL ROOM					113		3		- 13	-				
	1919		1						-		*			
Poisons-	7 100	100	1	1			11 11 11	1 Fin	13 10	2007				
Alcohol										1				
Arsenic	1	.03					-		5			2	2	
Carbolic acid	1		1						1.				***	
	1								-					

DETAIL of DISEASES.

EUROPEAN ARMY OF INDIA.													-
The state of the state of		E	UROPE	AN ARM	Y OF I	NDIA.	1174		Nation	ARMY O	- Ivnii	Popul	LATION
DISEASES.		Men			Wo	MEN.	CHIL	DREN.	MATIVE	ARMYO	INDIA.	or I	INDIA.
and the land of	Admissions.	Constantly sick.	Deaths	Invalids.	Admis- sions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Invalids.	Admissions.	Deaths.
Poisons - concid.							1						
LOI20N9_counter									1.1	1000	7-10-1		3881
Castor-oil seeds	***		***	***		-	***		3			1	1
Chapati (hand bread)	1	-06		1		***				· m	***		
Chloroform vapour	2		2	***		***				***			***
Colocynth	***								***			1	***
Croton leaves			***	***								1	"
Croton oil	***		***			***			1		***		***
Food, not defined	2	,04	2			***		***			***	***	
Indian hemp			***				***	***	4		1	***	***
fodine	1	-03		***	***	***							
Mercury	1	'04				•••			2	1		2	1
Narcotic poisoning	***		***			***			***	***	***	1	***
Opium	- 1	*02	***		***	***		***	4	3		***	1
Oxalic acid	. 1	*01		1	***	***	***				794		1
Poison (not defined)	1	*02	***		***		***		1		***		***
Potash			•••		***				,	1	***	-	-
Pounded glass	***		***					***					
Ptomaines	"	*32	1	***				•••		1		2	1
Quinine	'	.03	***				***				***	-	
Thorn apple	***				***	***	1					3	
								-			1		
			110										
									- 13.0		1		
POISONED WOUNDS-													
Poisoned wound by cat		*04											
" " centipedes .	***								,			42	***
" " dog	47	7'95			2		2		3			2	
" "fish												3	
" "horse)	3	*34											***
" "leech								!	1				
" " monkey												11	
Poisoned wound (not defined) .	2	*04											***
" by panther									1	1			
" " scorpions	***								1				***
" " snakes	2	.03	2						12	- 4		31	2
., , stinging insects .	3	*05				***			19			1	
" " wild boar				***		***			2	1	***		***
No appreciable disease	249	11.32			161		48		14.			19	***
Not yet diagnosed									12	***		27	
Cause unknown				***						5			***
Deaths while on leave, etc										339			
	-					1						100	
													-
TOTAL .	57,301	3139'08	623	• 1,078	2,660	50	2,619	292	85,637	1,280	842	85,691	2 824
			-	10/0	-,		-						

NorthernArmy . c9=16'06 Southern " . 489=16'17 India . 1,078=15'04

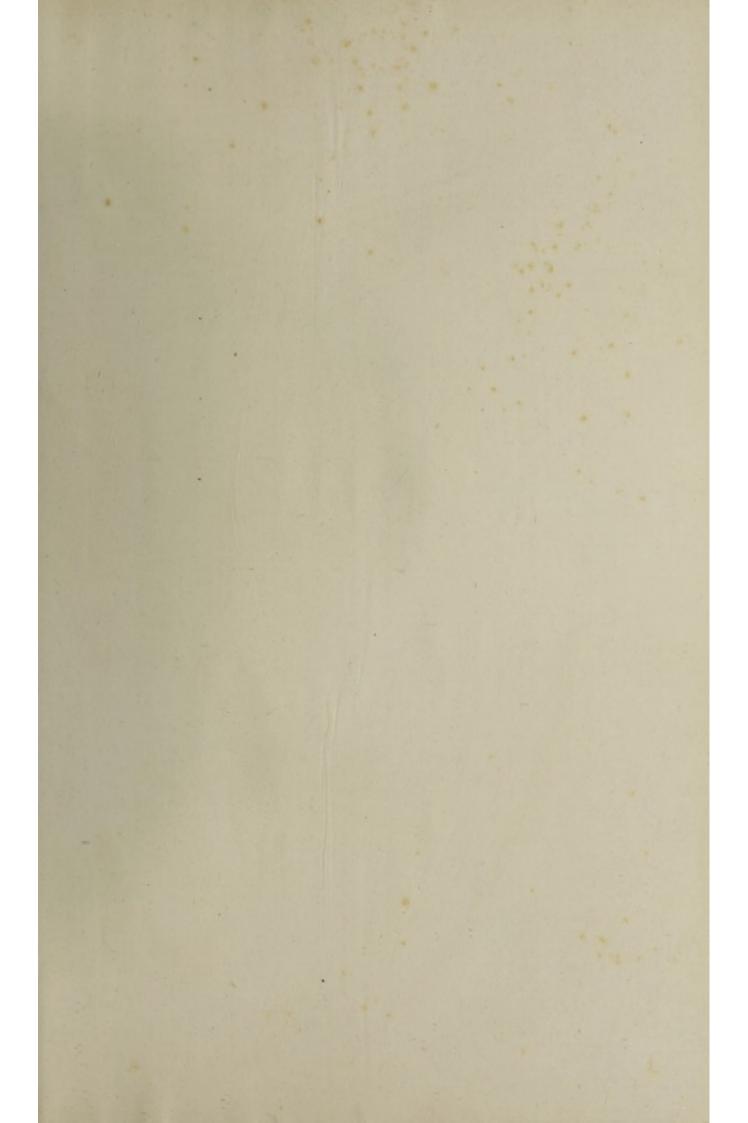
TROOPS ON FIELD SERVICE. DETAIL OF DISEASES.

	-		DEIAIL (OF DISEAS	ES.				
,			EUROPEA	N TROOPS.		1	NATIVE	TROOPS.	
		BAZAR VAL FOR	CE. FIELD	MOHMAND F	IELD FORCE,	BAZAR VAL	LEY FIELD	MOHMAND F	IELD FORCE
DISEASES.	7 1 1	Average strength	annual 97	Average strength	annual . 314	Average	annual	Average strength	annual
		Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deahs.
				_		-		-	
The state of the s				,					
GENERAL DISEASES.									
INPECTIVE DISEASES-	4								
Cholera				50	. 41		-	12	5
Dysentery			-	6		5		64	
Enteric fever			***	3	2			***	101
Fever, not defined				8		200	***		***
Generatea		***		10				1	***
Influenza		***	***	1				1.4	***
Malaria		10		51		1		109	1
Measles				***		7			
Mumps				***	***		***	2	***
Pneumonia		2		1	***	11	***	17	
Pyrexia of uncertain origin	. 1			10	***				
Rheumatic fever		1			***	1		5	
Septicaemia				,	1			-	
Small-pox						1			* ***
Syphilis			***	2	***	1		1	*
									1
GENERAL DISEASES NOT CLASSIFIED :-									
				1 -					
Debility Diseases, not specified				3	***	-			***
Diseases, not specially		-	***	35	***			8	1
- carr bronzena	,		-		H- 1			1 1000	
LOCAL DISEASES.		N. T.		1700					
NERVOUS DISEASES-									
Nervous disease, not specified .		-		-		***	***	1	***
			1						
EYE DISEASES-		100						1	
Conjunctivitis			***	3		-		15	
Eye diseases, not specified		-	***	***		101		2	***
The state of the s			1				THE YEAR	1	3000
DISEASES OF THE CIRCULATORY SYST	814-				100			4	
Disordered action of the heart .				3		-			***
Varicose veins				2		***	***	1 ***	
Circulatory diseases, not specified .				3					***
				1	1	1200		1 1000	
DISPASES OF THE PRODUCTIONS CO.									1/3
DISEASES OF THE RESPIRATORY SYSTEM	ем—		113						
Bronchitis		,,		1		,		4	
Bronchitis								1	
Bronchitis		1				10			
Bronchitis								1	
Bronchitis Pleurisy Respiratory diseases, not specified	-					910	-	3	
Bronchitis	-				***	915		3	-
Bronchitis	-			3 41		010	-	1 3 	-
Bronchitis Pleurisy Respiratory diseases, not specified DISEASES OF THE DIGESTIVE SYSTEM Colic Diarrhora	-			3 41	***	915		3	-

TABLE LIII-concluded.

TROOPS ON FIELD SERVICE. DETAIL OF DISEASES.

-		DETAIL	OF DISEAS	E5.			-	-
*		EUROPEA	N TROOFS		M	NATIVE	TROOPS.	
The same of the sa	BAZAR VAL		MOHMAND F	IELD FORCE.	BAZAR VAL FOR	CE. FIELD	MOHMAND F	IELD FORCE.
DISPASES.	Average strength	annual 97	Average	annual 314	Average strength		Average Strength	annual 1,185
	7.000			1				and the
200	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.	Admissions.	Deaths.
DISEASES OF THE DIGESTIVE SYSTEM -concld.					-			
Dispuse of the processing dispuse			*					
Inflammation of the dental periosteum	3,	***						***
intestines	***	***	1		***			***
Jaundice		***	1		***	***	***	101
Piles	1	***		***		***	***	
Sore throat	1	***		***	***	***	1	***
Tonsillitis		***	8			***	***	***
DISEASES OF THE LYMPHATIC SYSTEM-		ATT IN			4 .		-	
Inflammation of lymphatic glands .	***	***	2		400		-	***
Splenitis			1					***
DISEASES OF THE URINARY SYSTEM-				11511	100		No. of Lot	17 TO 18
Acute nephritis		-	2		100			THE STREET
Diseases of the Generative System			1					
Soft chancre		-				*	1	THE REAL PROPERTY.
Stricture of urethra							,	***
Stitute of orders		***			***	***		***
DISEASES OF THE ORGANS OF LOCOMOTION-			1					
Hammer toe	***		1				-	***
Synovitis			6					
DISEASES OF THE CONNECTIVE TISSUE-								
Inflammation of the connective tissue	1				1			Same a
DISEASES OF THE SKIN-		- 7						
Fczema						1 312		
Impetigo			1		***	***		
Onychia	1	7					***	***
Psoriasis	-		1					
Local diseases, not specified			20		4		96	
						***	70	***
INJURIES—GENERAL AND LOCAL—							-	
ACCIDENTAL-	1			1000			1 3 4 4	La
Abrasion			5					
Contusion	1		7					
		-	32		12		36	
	2		-				-	
Sunstroke and heatstroke		-	45				21	
Wounds	1	-	1				-	
" gunshot	* ***			1				3
INJURIES IN ACTION-				130	130 5		1000	
Injuries, not specified		1176				1		
Wounds, gunshot	. 6		28		17		7	
		100	20	4	***	2	131	31
Not yet diagnosed		***	94					
" " venereal sore			3					
TOTAL	45	1	524	50	64	2	607	42
And the second second	-	-	-	1	-	-	1	-







ANNUAL REPORT

OF THE

SANITARY COMMISSIONER WITH THE GOVERNMENT OF INDIA,

FOR

1908,

WITH

APPENDICES AND RETURNS OF SICKNESS AND MORTALITY AMONG EUROPEAN TROOPS, NATIVE TROOPS, AND PRISONERS IN INDIA, FOR THE YEAR.



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