

Vital Statistics & Sanitation.

MORTALITY OF PRESIDENCY TOWNS.

CALCUTTA INCLUDING SUBURBS (Population 681,560).

Weeks ending	SPECIAL DISEASES.						Annual ratio per 1,000 of population.	Average death-rate for corresponding weeks of previous 5 years.
	Cholera.	Bowel-Complaints.	Fevers.	Small-pox.	All other causes.	TOTAL.		
13th February 1892	20	45	180	..	177	422	32.3	40.4
20th "	31	53	218	..	191	493	37.7	34.8
27th "	35	34	170	..	163	402	30.7	32.5
5th March	65	54	180	1	204	504	38.5	30.1
12th "	61	28	213	1	162	465	35.5	29.7
19th "	119	44	195	1	160	519	39.7	30.7
26th "	111	49	176	4	178	518	39.6	30.0

MADRAS (Population, 398,777).

8th January	18	120	166	1	231	536	61.5	39.0
	8	108	144	..	239	499	57.3	42.7
	1	103	142	..	157	443	50.9	37.6
	2	77	109	..	181	369	42.4	39.7
	12	56	113	1	189	371	42.6	38.4

BOMBAY (Population, 821,764).

19th January 1892	..	22	173	8	360	563	35.62	27.97
26th "	..	1	34	195	9	323	562	35.56
2nd February	25	187	18	352	582	36.82
9th "	..	1	28	219	15	345	608	38.47
16th "	21	173	23	332	549	34.73

NORTH-WESTERN PROVINCES FOR OCTOBER 1891.

	Area in acres.	Population.	Number of persons to an acre.	Death-rate per 1,000 of population for the month.	Annual death-rate per 1,000 of population.
Moradabad	1,660	72,009	43	3.55	42.60
Dareilly	2,785	108,870	39	2.91	34.92
Shajehanpore	5,625	76,676	13	2.43	29.16
Meerut	401	73,125	185	6.38	76.56
Koel	400	60,557	157	4.90	58.80
Muttra	1,146	55,259	48	4.40	40.80
Furruckabad	2,551	73,115	28	6.43	77.16
Agra	14,452	145,475	10	2.71	32.52
Cawnpore	2,381	159,808	67	4.87	58.44
Allahabad	19,747	164,513	8	3.32	39.84
Goruckpore	2,990	64,398	21	1.82	21.84
Benares	3,141	214,834	68	4.70	56.40
Mirzapore	3,376	82,709	24	3.40	40.80

(PUNJAB FROM 29TH AUGUST TO 19TH SEPT. 1891.)

Delhi	1,437	117,363	81	3.36	40.28
Amritsur	807	144,216	178	4.34	52.08
Lahore	461	97,208	210	4.61	55.30
Peshawar	500	59,292	118	4.67	56.06

RECLAMATION BY GARBAGE.

It is curious to observe how favorably the abominable system of dumping of refuse, is received by some municipal authorities, though this method of disposal of refuse has been shown to be one of the most prolific sources of disease. We are sorry to see from the subjoined letter of Dr. Pedley that Rangoon proposes to adopt a system which it must in the future regret.

Sir,—Six months ago I wrote to the President of the Municipality protesting most earnestly against the burying of the garbage of the town in Poozoondoung. Later, as this had no effect, I appealed to the Local Government, but with

a similar result. Your article of yesterday pretty fully states the arguments used by the President of the Municipality in answer to my objections. I beg now to protest publicly and appeal to public opinion through your columns against the action of the Municipality in this matter.

For several months the garbage of the town has, at the rate of 4,000 tons a month, been carted on to Block K and buried under one or two feet of the tenacious clayey soil of the paddy fields, well rammed down and made as hard and smooth as a tennis court. This, it is the intention of the Municipality to continue for the next three years, and so to cover some 14 acres of land. Houses are fast springing up in near proximity to this huge muck heap, and if the land around continues to be taken up for housebuilding during the next ten years as it has the last ten, there will be crowded streets all around this land. Not far from the spot are several mills each with thousands of hands.

When I ask you or any of your readers whether you would object to have a few cartloads of filth from the drainage spaces of the town buried within a yard or two of your front or back doors, I am sure of the nature of the answer you would give; but this is how the Municipal Committee has recently served hundreds of poor people in Poozoondoung. I have not the time to write a long sanitary dissertation on the subject, and I am sure that it would be wholly unnecessary,—our common sense, and experiences of every-day life compel us to keep our surroundings as clean as possible. To my mind it is inexplicable how any one should attempt such an awful experiment as you describe. Awful, because in the light of elementary sanitary science the lives of thousands and the public health of Rangoon are jeopardized.

This would be an interesting experiment if carried out twenty miles from Rangoon for those who are not satisfied with the results obtained by hundreds of workers in agricultural science, but I'll warrant that there is not a medical man or a sanitary officer of any standing outside Rangoon who would sanction its being carried out in Poozoondoung. I am quite sure that my colleagues in the profession here would not allow it if they could help it.

Ten years ago the Municipality laid aside Rs. 12,000 for the construction of a furnace to burn the material. The money has been spent in other ways probably for tree gabelions or to beautify Dalhousie Park.

In my letter to the Municipality on the subject, I suggested two alternatives to the method recently adopted. First that a furnace should be constructed in which, with the aid of a blast from the air compressors of the drainage system, the rubbish should be destroyed. I have spoken to several practical engineers on this matter, and have been assured that such a furnace could be arranged which would easily consume the material at all seasons of the year. So that in Rangoon we have facilities for destroying the rubbish by fire which no other city in the East possesses. Secondly, the material should be taken twenty miles from Rangoon, far away from all human dwellings by rail and spread over a tract of land which the Municipality could acquire tomorrow for the purpose. I have been informed that the Burma State Railway authorities would willingly arrange for its removal if the Municipal Committee provided suitable waggons for its carriage.

Neither of those methods need involve greater expense than this City should be able to bear to thoroughly rid itself of a great danger.—I am, Yours faithfully, T. F. PEDLEY.

RANGOON, 18th February 1892.

Correspondence.

ANCHYLOSTOMA DUODENALIS IN TEA GARDENS.

TO THE EDITOR, "INDIAN MEDICAL GAZETTE."

SIR,—To reply in detail to Dr. Forbes' remarks on my last report, on Anchylostomiasis would occupy too much of your valuable space than it is desirable in view of the fact that I have recently placed in your hands a *resumé* of my investigations on the subject; but it may be well to point out that my impressions were based not upon the two

Sibsagar gardens, he mentions, in particular, as I saw less of this district than of any other, but in those of the province generally.

One thing, however, is absolutely certain, and that is that infection can only take place through the products of the ova contained in the faeces, of patients, and hence, whatever view we may take of the life history of the parasite, or whether, like Dr. Forbes, we fancy the agency of pigs and puddles as the vehicles of infection, or, like myself, prefer to believe in that of mud and splay feet; the primary source of infection is faecal matter in the wrong place, and hence the very fact of the existence and spread of the disease is a sufficient condemnation of the sanitary arrangements of any community in which it appears.

The deep drains from which Dr. Forbes obtains the earth for his plinths were condemned by every tea garden medical man whom I had the opportunity of consulting, as offering only too convenient hiding places for filth; and though I was at first favourably impressed by their advantages in drying a site, I felt the reasons advanced against them were too cogent to be overcome, for I found that the allegation was a true one, and that too on a large garden covered by a considerable firm.

Whatever may be the case in Sibsagar, even two-foot plinths are certainly hard to find elsewhere, and I look upon that as insufficient and a one-foot plinth as unworthy of the name. Besides no plinths can be as effectual in cutting off subsoil emanations as the free current of air beneath the floor of a *chung*, and I fail to see why huts constructed on that principle should be harder to keep clean or more liable to catch fire than other bamboo and thatch structures.

The danger of tanks too is not a question of percolation, but lies in their being stagnant and in the difficulty of keeping their banks clean and I know well that no ordinary fence will prevent the native from indulging in the convenience of washing himself after easing himself on the very brink.

SANAWAR, 18th March 1892.

G. M. GILES, M.B., F.R.C.S.,
SURG.-CAPT. I. M. S.

Appointments, Leave, &c.

The Commander-in-Chief is pleased to make the following appointments:—

LANE, Surgeon W. B., to officiating charge of 14th Sikhs, *vice* Surgeon G. B. Irvine.

CLOSE, Surgeon J. K., to officiating charge of 21st Punjab Infantry, *vice* Surgeon C. R. M. Green.

BUCHANAN, Surgeon W. J., to officiating medical charge of 2nd Bengal Light Infantry, *vice* Surgeon-Major G. A. Cones.

MACNAB, Surgeon J. J., to officiating medical charge of Corps of Guides, *vice* Surgeon-Major A. Duncan.

MACWATT, the services of Surgeon R. C., M.B., Indian Medical Service (Bengal), are replaced at the disposal of the Military Department.

WILLCOCKS, Surgeon-Major A. J., M.D., is appointed to officiate as Professor of Midwifery, Medical College, and Obstetric Physician, Eden Hospital, Calcutta.

GUPTA, Surgeon-Major K. P., to officiate as Civil Surgeon of Backergunge.

O'GORMAN, Surgeon P. W., to be medical officer of the Muskaf-Bolan State Railway.

O'BRIEN, Surgeon-Major B., to officiate as Civil Surgeon of Agra.

WILLIAMS, Apothecary W. A., to be Deputy Superintendent, Dullanda Asylum.

COOPER, pensioned Apothecary A. D., to be Civil Surgeon of Tharawady.

MORRIS, Surgeon H. M., to be Civil Surgeon of Minbu.

MADDOX, J. A., to be Civil Surgeon of Magwe.

BANERJI, Surgeon H. C., Civil Surgeon, Sibsagar, is transferred to the Sylhet district.

AHMED, Hospital Assistant Munshi Khairuddin, in subordinate medical charge of the dispensary at Sibsagar, is appointed temporarily to the charge of the civil medical duties at that station.

MACNAMARA, Surgeon-Major J. W. U., M.D., Civil Surgeon, Sylhet, on being relieved by Surgeon H. C. Banerji, is transferred to the Kamrup district.

FURLOUGH LEAVE, &c.

LAMONT, Surgeon-Captain J. C., furlough, 6 months (*m.c.*)
MACLEOD, Surgn.-Capt. H. W. G., furlough, 9 months (*m.c.*)
WYVILLE-THOMSON, Surgeon-Captain F., M.B., extension of furlough, 1 month (*m.c.*)

WESTON, Assistant Apothecary, 6 months (*m.c.*)

RAE, Surgeon-Major W. A. C., 10 months (*sp. l.*)

GRAY, Surgeon-Captain W. L., furlough, 182 days (*m.c.*)

Medical News.

BOMBAY VACCINATION BILL.—The Grant College Medical Society, Bombay, has forwarded a memorial to the Local Government, assuring it of its approval of the District Vaccination Bill, and expressing the hope that it will soon pass into law.

A NEW DISPENSARY FOR POONA.—The Poona Cantonment Committee have accepted the generous offer of Sir Dinshaw Petit to give Rs. 10,000 for building a new charitable dispensary.

THE LADY DUFFERIN FUND.—The sum of Rs. 20,000 has been placed in the hands of Mr. H. W. Gibson, Deputy Commissioner of Bahraich, by Raja Jang Bahadur Khan, C.I.E., talukdar of Nanpara, in that district, towards the Endowment Fund of the Lady Dufferin Hospital. The Raja has already subscribed Rs. 10,000 to the Hospital Fund.

DR. LETHBRIDGE.—It having been settled that Colonel Henderson becomes Resident at Mysore, the appointment of Superintendent of Thuggi and Dacoity has been offered to, and accepted by Dr. Lethbridge. The Andaman's appointment will now be filled by General Stedman.

LADY ROBERTS' FUND.—The Nizam's Government have subscribed Rs. 500 to Lady Roberts' Fund.

A PASTEUR INSTITUTE FOR INDIA.—It is not improbable that a Pasteur Institute will be established before long in India, as a Punjab Civil Surgeon, now on leave in Europe, has just been granted ten months' extension of leave to study under Pasteur.

A PRIZE IN HYGIENE.—The sum of Rs. 2,664 has been subscribed to the credit of the "Hewlett Memorial Fund" for establishing a prize in Hygiene in Bombay.

MUNICIPAL CONTRIBUTIONS TO HOSPITALS.—The Madras Government has moved the Government of India to relieve the Madras Municipality of its annual contribution of Rs. 50,000 for hospitals. This matter has formed a bone of contention between the Municipality and Government for a long time.

ATTACKED BY BEES.—Lady Havelock was giving a reception at Kandy the other day when a swarm of bees came on the scene, and stung all and sundry. Lady and Miss Havelock were stung, and the horses, harnessed to the visitors' carriages were also badly stung and some of the horse-keepers. The reception was abruptly brought to an end.

THE INFLUENCE OF INFLUENZA ON DEATH-RATE.—*Apropos* of the influenza scare in London the *Daily News* did a service in reminding its readers of the exact nature of the Registrar-General's returns of mortality. How many people, when they read that the death-rate in London for the week before the last mail left was 46 per thousand, and in Brighton 60 per thousand, know what is meant? Two out of three people, we imagine, forget that the Registrar-General is dealing with annual rates. Not 40 in every 1,000 died in London that week, but the fifty-second part of that number. The Registrar-General's death-rate of 60.9 per thousand for Brighton means that if the people kept on dying for the whole fifty-two weeks at the same rate as that in which they died in the week in question, 60.9 out of every thousand, or 690 out of every ten thousand, or 6,900 out of a hundred thousand, would be carried off in the year. The deaths from influenza in the week in London were 506, or one in every 8,426 of the total population. The figure for the next week was 436—a marked decrease. It would seem that the worst has passed.