

over by Government from the Rangoon Municipality. There appears to be some difficulty in recruiting Civil Hospital Assistants for service in Burma, so there is a proposal to start a local medical school.

NOTES ON THE ANNUAL STATEMENTS OF THE DISPENSARIES AND CHARITABLE INSTITUTIONS OF THE PUNJAB FOR 1902.

THERE were 249 dispensaries, the in-patients treated numbered 50,138, which is somewhat less than in the previous year, the diminution being, to some extent, due to plague, because the other patients are apt to hurry away from hospital as soon as they hear of a plague death, and for some time afterwards they are shy to seek admission. The number of beds available was 2,939, including 901 for women. There were 2,968,988 out-patients treated. There were 475,935 entries for malarial fevers—a decrease of no less than 74,734 to the previous year. On the other hand, there was an increase of over 60,000 eye cases treated, including 5,700 extractions of the lens for cataract. There were 153,408 surgical operations, including 2,031 for stone in the bladder with 63 deaths, 111 herniotomies with 5 deaths, and 134 for abscess of the liver with 6 deaths. The expenditure was Rs. 5,43,907. The total investments in Government securities was Rs. 1,20,783-14-0. The voluntary subscriptions by natives of India fell to Rs. 8,291, or only 1.5 per cent of the total dispensary income; but the proportion contributed by local bodies had risen to 91.9 per cent.

REPORT ON THE ADMINISTRATION OF THE SALT DEPARTMENT DURING 1902-1903.

THE rate of duty upon salt manufactured in British India (excepting Burma, Kohat and Aden), or imported by land, was reduced from Rs. 2-8 to Rs. 2 per maund in March 1903. Nearly half the total imports came from the United Kingdom; but salt from Aden and the Red Sea is steadily displacing British salt. Imports from the Persian Gulf ports have also decreased. The varieties of salt which usually show least wastage are known as Hamburg, Salif and Muskat Salt. In Calcutta the annual average consumption of salt came to about 14 lbs. per head of the population. The general health of the Salt Department's officials was bad, many suffered severely from malarial fever, and several from cholera.

TRIENNIAL REPORT ON THE LUNATIC ASYLUMS IN THE MADRAS PRESIDENCY FOR 1902.

THERE are three asylums—at Madras, Vizagapatam and Calicut, having a combined total population of 736 for the year—564 males and 172 females. The daily average number was 579-95. There has been a steady rise in numbers during the past three years. The maximum number confined at one time in the Madras Asylum was 410, in Vizagapatam 80, and 107 in Calicut. Criminal lunatics are not received in the two last-named asylums, in the Madras Asylum alone are they admitted, and here there were only 37 admissions. There were 132 admissions for mania, 14 for melancholia, 9 for dementia, and 6 for idiocy. Of the 736 treated 70 per cent. had mania, 7 per cent. melancholia, and 15 per cent. dementia. In all three asylums the dry-earth system is carried out, and is worked satisfactorily. The chief employments were gardening, weaving, dairy-farming, sewing, knitting, tape-making and coir twisting. Patients were also employed for domestic purposes, cooking, tailoring, washing, &c. A good deal seems to be done to enliven the lot of these unfortunates in the way of amusements. The average daily sick of the three asylums was 47.91, and the chief diseases were malarial fevers, mania, epilepsy, tubercle, surfeit, dysentery, diarrhoea and wounds. The total number of deaths was only 45. The Madras death-rate was 9.66, Calicut 4.97, and Vizagapatam 1.32. The chief causes of mortality were tubercle of the lung, dementia, epilepsy, dysentery and valvular diseases of the heart. Captain C. B. Harrison, I.M.S., was in charge of the Madras Asylum, Major. W. C. Vickers, I.M.S., at Vizagapatam, and Lieutenant-Colonel T. J. Hackett Wilkins, I.M.S., at Calicut. In the Madras Asylum there is a special nursing establishment for patients on the sick list.

Correspondence.

LEISHMAN-DONOVAN BODIES IN "MALARIAL CACHEXIA" AND KALA-AZAR.

To the Editor of "THE INDIAN MEDICAL GAZETTE."

SIR,—The discovery by Leishman of parasite-like bodies in a case of chronic fever from Lower Bengal, and more specially the work of Donovan in showing that these bodies are commonly present in the spleens of very chronic fevers with great enlargement of that organ in Madras, has raised the

very important question as to whether the class of cases always hitherto known as "Malarial cachexia," together with the epidemic form of the disease in Assam known as Kala-azar, might not be due to the new parasite. On my return from leave recently, I was fortunate enough to have an opportunity of investigating the prevalence of fevers in one of the very districts in which kala-azar took its origin in the early seventies, while thanks to the kindness of my old friend Dr. Dodds Price of Nowgong (whose experience of the disease is unique), in sending me some slides of spleen punctures made in kala-azar cases, I have been able to find the bodies in the spleens in both the endemic and epidemic forms of the disease. I found them to be identical with each other and with to agree exactly with those in a slide shown me by Major Leishman, and also in one kindly sent me by Major Donovan, as well as with those recently figured by Manson and Low. So far I have only found them in a small proportion of cases of fever with a large spleen, some of the others having been ordinary malarial cases, and much further work will be required to differentiate the two diseases, in the earlier stages more specially. Should, however, further experience prove all the markedly cachexial cases to be due to the new parasite a most important advance will have been made.

It will be remembered that the main argument in my original report on kala-azar was that individual cases, both clinically and pathologically, were indistinguishable from ordinary "malarial cachexia," only the disease was present in Assam in an epidemic spreading form. If, however the endemic form is really a special fever with a parasite differing somewhat from the malarial one, although closely related to it among the protozoa, then my main argument will not be affected, while the practical results obtained in Assam on the tea gardens by Dr. Dodds Price and others will receive an extended application. These include the very successful segregation measures and the absolute value of quinine as a prophylactic, first demonstrated by Dr. Dodds Price, and its great value in large doses in the treatment of cases not too advanced. The exact manner of origin of the epidemic form will still have to be explained, as the finding of a form of protozoa differing from the malarial parasite will not *per se* throw much light on the matter.

As the highest authorities on the subject are at variance with regard to the nature of the parasites, it will be useless at this stage to add one more to the guesses already made, but one thing is clear that no forms resembling full-grown trypanosoma have been found by any observer. I should add that the observations referred to in this communication were all made before the appearance of Dr. Bentley's recent announcement of his abandonment of his Malta fever theory in favour of that of Major Donovan that the disease is due to the new form of parasite.

Finally, I would suggest the term "Cachexial Fever" as a convenient name for the endemic form of the disease until further advances in our knowledge admit of a more suitable one being agreed on.

CALCUTTA,
March 1904.

I am, etc.,
LEONARD ROGERS,
M.D., I.M.S.

THE PIROPLASMATA IN MAN.

DEAR SIR,—Will you spare a small space in your next number for this letter?

A species of Piroplasma has been found in several cases both by Dr. A. Lingard, Imperial Bacteriologist, and myself in human blood. Dr. Lingard has found the Piroplasma Bigeminum in every animal that he has under observation, and in two men also working in his Laboratory.

I have seen it in the blood of several prisoners. This has been verified by Dr. A. Lingard. The intermediate host I believe is a Culex. A paper on the above subject will be sent as soon as the facts in relation to the intermediate host have been worked out.

BAREILLY,
March 11th, 1904.

E. JENNINGS,
Major, I. M. S.

PIROPLASMATA IN MAN AND THE LOWER ANIMALS.

In 1902 I reported the presence of the *Piroplasma bigeminum* in cattle brought from the neighbourhood of the Jamna and Ramganga rivers, and in 1903 described a spontaneous form of Piroplasmosis in country-bred donkeys from the Bareilly District.

Up to date several different species of Piroplasmata have been described as affecting animals in various countries, viz. :—
Piroplasma bigeminum.

„ ovis.
„ canis.
„ equi.