the institute carried out considerable routine diagnostic work. The serum department was expanded to meet war demands. During the year 2,040 litres of serum were prepared for transfusion services, and a large scale serum drying plant was completed. Also very large quantities of stock and autogenous vaccine were produced to meet the growing demands, including typhus vaccine of which nearly 40,000 doses were being prepared each month prepared each month.

45TH ANNUAL REPORT OF THE INCOR-PORATED LIVERPOOL SCHOOL OF TROPICAL MEDICINE, 1943-44

AFTER recording deaths and changes in the staff, the report states that short courses of tropical medicine and parasitology for medical officers of the services were continued until December 1943. During the year under review five such courses were held with an attendance of 182 officers. Moreover, a number of officers attended the school to see the work and get what instruction could be given them in the course of the daily routine. Arrangements were made whereby the duties within the department of tropical medicine in future are broadly to be subdivided into (a) research, (b) teaching, and (c) clinical out-patient and hospital work and consultation practice. War conditions have enormously increased the incidence of tropical diseases in Europeans particularly those in the services. Some 1,400 in-patient cases were treated, and there were more than 2,000 out-patient attendances at the school. In addition, about 20,000 specimens for clinical pathological examinations were dealt with. A very considerable amount of time and effort were devoted to investigation of the treatment of malaria, in conjunction with Imperial Chemical Industries Ltd.; sundry new compounds were treated for their value as antimalarial therapeutic agents. The work shows much promise. At the invitation of the Colonial Office, Professor Blacklock visited West Africa to report on progress there in the prevention of mosquito-borne diseases, especially malaria. He is also serving in a Colonial Office Committee, the object being to inaugurate a scheme of research with a view to the development of suitable research with a view to the development of suitable and safe types of houses for the indigenous people. Professor Davey at the request of the War Office, devoted a great part of his time during the year to the preparation of new specifications for substitute mosquito- and sandfly-netting; these specifications have now been adopted by the army. The work on scabies, which is being carried out for the War Office, is nearing completion, and a number of papers have been published. Various methods of breeding and infecting with malaria sterile mosquitoes are being investigated, with the object of studying the early stages of development of the malaria parasites in tissue culture. A new department of chemotherapy has been created in order to continue the researches on chemotherapy carried out under the Late Professor Warrington Yorke and here some interesting investigations are proceeding.

THE MISSION TO LEPERS

A REPORT OF THE SEVENTIETH YEAR'S WORK IN INDIA AND BURMA. SEPTEMBER 1943 TO AUGUST 1944

This report maintains its usual attractive form. The mission maintains institutions with nearly 7,000 patients

mission maintains institutions with nearly 7,000 patients in different parts of India and also gives aid to other institutions with 2,700 patients.

This report records the tragic death of Dr. G. B. Archer, M.D., at the home at Purulia. His work is being carried on by Dr. A. T. Roy. Another sad loss by death is that of Rai Sahib Dr. S. M. Ghosh, medical superintendent of the Leper Home, Raniganj. The report also records the death of Dr. Sudarsana Rao of Salur.

of Salur.

The report gives details of the work done in the homes of the mission and in the aided homes in Assam, Bengal, Bihar, Bombay, Central Provinces, Berar, Madras, Orissa, Punjab, United Provinces, and Indian States. The report is illustrated with excellent

photographs illustrating the medical, religious, educational, agricultural, and other activities of these homes. In addition to treatment of the in-patients, over 9,000 out-patients are also treated.

In these pages we have frequently referred to the great quantity and the fine quality of the work done by this institution for those suffering from leprosy in this country. The budget for the work in India for the year 1943 was over 11½ lacs of rupees.

Correspondence

CEREBRAL MALARIA

Sir,-I have read Colonel Viswanathan's paper on Sir,—I have read Coionel Viswanathan's paper of 'Cerebral malaria' (I.M.G., October 1944, p. 455) with much interest. With reference to his statement on page 456, lines 33–35 that '... the red cells containing the subtertian parasites are smaller in size than normal ...', I would like to point out that the corpuscles parasitized by large ring forms of Plasmodium

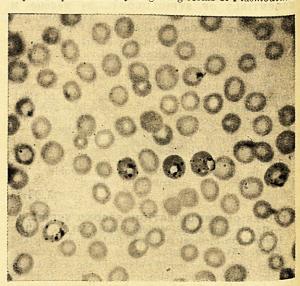


Figure showing blood smear from a case of *P. falciparum* infection. Photomicrograph (× 900 approx.).

falciparum are, however, often somewhat enlarged but never reduced in size as will be seen from the photomicrograph of a blood film showing P. falciparum infection.

B. M. DAS GUPTA.

CALCUTTA, 16th February, 1945.

QUININE SULPHATE FOR INTRAMUSCULAR INJECTIONS

SIR,—Christie McGuire and others described in the December 1943 issue of the *Indian Medical Gazette* a method for preparing a solution from quinine sulphate a method for preparing a solution from quinine sulphate for intramuscular use. I have not got this particular issue, but I am sure that they did not give any reference from the past. They seem to think (or at any rate convey the impression to the reader) that this is entirely a new method evolved by them. It is nothing of the kind.

only this afternoon, I was reading 'Tropical Diseases' (1903) by Sir Patrick Manson. He writes on page 158, 'if neither of these salts (viz, quinine, acid hydrochloride and hydrobromide) can be procured, the sulphate may be used, solution being effected by adding the salt its weight of tartaria acid.'

half its weight of tartaric acid'.

Further on we read, 'Benson, speaking from an experience of 1,390 cases, says that the hypodermic injection of quinine is by far the most effectual, as well well as the most economical way of treating malarial fevers. He used the sulphate dissolved in water with the aid of hydrochloric acid, the strength of the solution being fifteen grains to the drachm; of this he injected to the distribution of the solution of the strength of the strength of the solution being fifteen grains to the drachm; of this he injected to the strength of th injected twenty minims between the scapulæ, or into the outer surface of the arm. In 614 consecutive cases so treated not a single untoward accident occurred, one injection usually sufficing'.

I do not know who Benson is (or was), nor does

Sir Patrick give any reference.

K. A. SHAH.

RANCHHODLAL DISPENSARY, 11th November, 1944.

[While we publish this letter, we regret in many ways so much discussion in our pages of intramuscular injections of quinine which are very rarely needed and which are so much abused. We have recently treated one patient with a very serious necrosis and abscess of the contract the gluteus maximus resulting from an intramuscular injection of quinine, and several such cases have recently been seen in Calcutta hospitals. The abuse of intramuscular injections of quinine seems to us to be on the increase and it cannot be too strongly condemned. Not one patient of malaria in a thousand needs intramuscular quinine.—Editor, I.M.G.]

Service Notes

APPOINTMENTS AND TRANSFERS

LIEUTENANT-GENERAL J. B. HANCE, C.I.E., O.B.E., K.H.S., is appointed Officer on Special Duty in the office of the Director-General, Indian Medical Service, with effect from the 2nd December, 1944.

The services of Major-General W. C. Paton, C.I.E., M.C., K.H.P., are placed at the disposal of the Government of Bengal, with effect from the 24th December, 1944 1944.

The Viceroy and Governor-General has been pleased to make the following appointment on His Excellency's Personal Staff:—

To be Honorary Surgeon

Colonel N. Briggs. Dated 17th July, 1944, vice Major-General J. P. Huban, O.B.E., vacated.
Lieutenant-Colonel P. A. Dargan, I.M.S. (Retd.), is appointed to officiate as Chief Medical Officer and Civil Surgeon, Delhi, with effect from the afternoon of the 30th November, 1944, vice Lieutenant-Colonel R. McRobert, whose services are replaced at the disposal of the Government of Burma from that date.
Major Jaswant Singh, Assistant Director, Malaria Institute of India, is appointed Deputy Director of the Institute, with effect from the 1st September, 1944.

The probationary appointments of the undermentioned officers are confirmed with effect from the dates specified :-

27th September, 1939

Captain W. M. McCutcheon. Captain G. S. Michelson.

Captain G. S. Michelson.
Captain J. Aitken.
Captain P. W. Kent.
Captain P. J. Wormald.
Captain G. T. M. Hayes.
Captain J. P. O'Riordan.
Captain H. Rees.
Captain D. S. Wilson.

12th May, 1939

Captain D. F. Eastcott. Captain L. H. Cooper. Captain A. M. McGavin. Dated 15th May, 1937.

Captain A. S. Brown. Dated 19th October, 1939. INDIAN LAND FORCES-INDIAN MEDICAL SERVICE SECONDED TO THE INDIAN ABMY MEDICAL CORPS

(Emergency Commissions)

To be Captains

Sukomal Sen. Dated 6th July, 1943. Pradyumna Narayan Singh Jayaswal. Dated 17th

September, 1944. Digamber Narayan Mazumdar. Dated 20th Septem-

ber, 1944. Sudhir Kumar Saha. Dated 20th September, 1944. Srinivasa Annaswamy. Dated Vengangudi

October, 1944. Audiseshaiah Marella. Dated 20th October, 1944.

5th February, 1944

Ghulam Mohd. Pirthvi Nath Kanwar. Hafiz-Ur-Rahman. Ghulam Nabi.

14th November, 1944

Jogendra Lal Basak. Bhagwandas Wadhumal Advani. Subodh Chandra Kar. Krishna Rao Purohit. Dated 19th October, 1944. Angara Satyagnana Rao. Dated 24th November, 1944.

> To be Lieutenants 14th November, 1944

Mushtaq Ahmad Chaudhri. Sahibzada Rashid-Ul-Mushtaq Ahmad. Hamid.

Rashid Ahmed Khan.

Mohd. Sadiq Khan. Dated 15th November, 1944. Iqbal Singh Dhingra. Dated 16th November, 1944.

19th November, 1944

Kanwar Sain Isar. Asghar Nizami. Ahmad Din Salah-Ud-Din. Jai Krishan Sehgal. Mahendar Pal Bhalla. Khalil Ahmad Malik. Mohammad Anwar Choudhrie. Dated 18th November, 1944.

21st November, 1944

Bhagat Chand Bhoil. S. Mohammad Hasanain Bokhari.

INDIAN MEDICAL SERVICE (Emergency Commissions)

To be Lieutenants

A. B. Philip. Dated 6th November, 1943.

6th October, 1944 Mervyn David Sopher. Asoke Kumar Mitra.
Dinendra Narayan Bhowmik.
Anil Baran Ray. Dated 14th October, 1944.
Adhir Kumar Ganguly. Dated 20th October, 1944.
Bhupendra Kumar Bardhan. Dated 24th October,

Perumaulpeta Dorai Raj. Dated 19th November,

INDIAN LAND FORCES—INDIAN MEDICAL SERVICE (Emergency Commission) To be Lieutenant (on probation)

Krishna Gopal Kapoor. Dated 15th March, 1942.

INDIAN MEDICAL SERVICE SECONDED TO THE INDIAN ARMY MEDICAL CORPS (Emergency Commissions) (Women's Branch)

To be Lieutenants

(Miss) Soona Jamshedji Mistry. Dated 3rd November, 1944. (Miss) Una Hargreaves. Dated 11th November, 1944.

PROMOTIONS

Colonel (Tempy. Major-General) Sir John Taylor, C.I.E., p.S.o., is granted the honorary rank of Major-General on reversion to Retired List. Dated 14th February, 1944.