

trained investigators is still small, but at least there are some, and, thanks to the co-ordination of our work with that of the Industrial Health Research Board, the number will increase. The organisation of the Medical Research Council has developed the co-operation of academic physiologists and the staffs of industrial organisations, so that joint work is possible in other branches of physiology than those with which Leonard Hill's name has been associated. In particular, the physiology of the special sense organs is now receiving adequate attention. A school such as ours, with its ample laboratory accommodation and its intimate relations with the public health and industrial medical services, is becoming a focal point, and upon our policy the future of applied physiology in England may largely depend. It is of happy augury that Sir David Munro, now a member of the Board of Management of the School, is Secretary of the Industrial Health Research Board.

While by 1918 applied physiology had already its Leonard Hill, psychology seemed either narrowly academic or a mere inferno of apparently very angry people shouting at one another. In the last thirteen years a great change has come over the scene. The Industrial Health Board realised from the beginning that the psychological aspects of industrial hygiene were in importance at least equal to the physiological aspects. The Board's reports on the causation of industrial accidents, on the aetiology of telegraphist's cramp, and, quite recently, on the nervous temperament, can leave no doubt of the value of what has already been done, and of the importance of what remains to be done.

We know that a great deal of the ill-health and worry which poison the happiness, and restrict the efficiency of a too large proportion of men and women in industry, is of psychological origin. We know that whether a person whose nervous make-up departs from the normal shall be able to lead a happy and efficient life is a question which can be answered, *not* with perfect confidence, but with fair accuracy, after skilled examination of the individual *and* his environment. A few years ago what was called psychology became a popular stunt. The nonsense of that period now hardly embarrasses real investigators. These have had to try to solve the following problem. Given that a great deal of inefficiency and ill-health are due to non-bodily causes, to 'nerves' or 'vapours', as one would have said in the eighteenth century: (1) Is it possible by clinical examination and laboratory testing to classify the 'nervous' types of the population at work; (2) Do the resultant classifications show substantial correlation with performance in or adaptation to actual industrial conditions. This problem has been so far solved that, as shown in recent reports of the Industrial Health Research Board, methods of examination have been perfected which enable us to correlate psychological type with effective performance.

The Industrial Health Research Board have devised a combination of clinical and experimental methods of research which is, I think, unique, and holds out hopes of advantages hard to exaggerate.

The part the School of Hygiene and Tropical Medicine is playing in this revolution is large. From the educational point of view we have to go further than was necessary in physiology. All medical students have at least received a training in laboratory physiology. No medical students have been trained at all in psychology of any kind, laboratory or clinical. A beginning was made last year at the School by introducing the elements of clinical psychology into the D.P.H. curriculum; but we have not been content with this modest instalment of reform. The Senate has been moved to establish a Chair of Medical Industrial Psychology in the School. The result is that the School is now able to take its fair share of the co-operation in psychological training, and the reproach is removed from the University that no teacher of professional rank is responsible for that kind of psychological instruction which is best fitted to give *medical* post-graduates an insight into a department

of research and prophylaxis which has been long neglected.

Correspondence

ATEBRIN IN MALARIA

To the Editor, THE INDIAN MEDICAL GAZETTE

SIR,—With reference to the most interesting paper by Lieutenant-Colonel R. Knowles, I.M.S., and Dr. B. M. Das Gupta in the August issue of this journal, on 'Clinical Studies in Malaria by Cultural and Enumerative Methods. Second Series', I beg to refer to two points raised therein.

(i) *Plasmoquine pure 0.01 gm. (1/6th gr.)*.—Tablets of the above strength were released for sale from June 1932. They are available in tubes of 15 tablets (Rs. 1-6-0), bottles of 500 (Rs. 39-8-0), tins of 10,000, 50,000 and 100,000. The above mentioned prices are subject to the usual discount.

Our manufacturers are very much obliged to Colonel Knowles for his kind suggestion to put this very convenient strength on the market, and we realise that the application of the now-a-days acknowledged small plasmoquine doses has been greatly facilitated thereby.

(ii) *Price of atebtrin*.—We agree that the present list price of atebtrin (bottles of 15 tablets: Rs. 3-4-0) is a serious obstacle to its wider use. It is perhaps not yet sufficiently known that the importers have to pay a 25 per cent. import duty on this preparation. We have approached the Central Board of Revenue in Simla to allow atebtrin which, in spite of its recent introduction, is already of publicly acknowledged value in the treatment of malaria, to be passed free of duty. To such proposal, unfortunately, the authorities in Simla could not agree. We hope, however, that the above referred to paper, published from authoritative quarters, will induce the Central Board of Revenue to reconsider its decision, and thereby remove the handicap against the more liberal use of this drug which, it is expected, will play an important part in the campaign against what is economically the most important disease of British India.—Yours, etc.,

O. URCHS, M.D. (Prague),
Manager.

SCIENTIFIC DEPARTMENT,
HAVERO TRADING CO., LTD.,
CALCUTTA,
20th August, 1932.

To the Editor, THE INDIAN MEDICAL GAZETTE

SIR,—Will you kindly find space in the *Indian Medical Gazette* for us to report that we have recently tried without success to repeat our experience regarding the influence of Atebrin on the development of malarial plasmodia in the mosquito, reported in your April number of this year. Of 135 mosquitoes fed on a patient at varying times, some soon after the administration of Atebrin, 116 developed sporozoites. Green in the Federated Malay States, and we are permitted to say also Mr. B. C. Basu in Colonel Knowles' laboratory in the Calcutta School of Tropical Medicine, have obtained similar results. We are nevertheless investigating the matter further, in an attempt to elucidate under what conditions our previously reported observations may be repeated.—Yours, etc.,

C. STRICKLAND, M.A., M.D.,
Professor of Entomology,
and

D. N. ROY, M.B., D.T.M.,
Assistant Professor of Entomology.

SCHOOL OF TROPICAL MEDICINE,
CALCUTTA,
2nd September, 1932.