bite, but, generally speaking, these cases rarely come to hospital or feature in medical statistics. The question of incidence of sea-snake-bites is briefly discussed in a paper recently submitted for publication. As vipers are much commoner than the elapids in Malaya and most cases of envenomation admitted to hospital show the features of viper poisoning, it seems reasonable to assume that the majority of these notified deaths were, in fact, due to viper bites. If this is correct, it is still uncertain whether the mortality was due to direct effects of the envenomation or to secondary complications of infection, etc. With antibiotics, the latter should not nowadays cause death unless the patient comes to hospital a considerable time after the bite. During the course of my researches in northern Malaya I have been told by a colleague of at least two unequivocal cases of death due to haemotoxic snake poisoning personally observed in hospital. In one instance the snake which bit the patient was brought to the hospital. Unfortunately, it was not identified.

It occurred to me that these fatalities in north-west Malaya were probably due to bites of Russell's viper, which has been recorded in Siam but not, so far, in Malaya. Mr. M. W. F. Tweedie, of the Raffles Museum, Singapore, had also come separately to the same conclusion. The matter is of more than theoretical interest, as, if Russell's viper bite occurs in northern Malaya, a tourniquet is indicated, whereas in bites from the species of viper at present recorded in Malaya it is contraindicated because it increases the local necrosis. Furthermore, larger amounts of antivenene would be required than are at present usually given. Investigation of these problems is being carried out.—I am, etc.,

Penang. H. A. REID.

REFERENCE

[1] Cantor, T., *Miscellaneous Papers Relating to Indo-China*, 1886, vol. 2, p. 237. London.

Malaria and the Sickling Trait

SIR,—I have read with much interest the two articles on sickle-cell trait with its possible relation to immunity against *P. falciparum* infection (*Journal*, May 14, pp. 1186 and 1189). One confirms the findings originally reported by Allison,[1] whereas the other was not convinced of the significance of Allison's findings.

May I suggest that the proper line of investigation now should be a study of the chemistry of the abnormal S-haemoglobin, its constituents being incorporated in the culture medium for *P. falciparum* in varying concentrations to observe any inhibition of growth of the parasites? It is possible that certain chemical constituents of the abnormal haemoglobin may antagonize some of the parasites' essential metabolites.—I am, etc.,

Calcutta. SHYAMAL KUMAR SEN.

REFERENCE

[1] Allison, A. C., *British Medical Journal*, 1954, 1, 290.

Modern Treatment of Leprosy

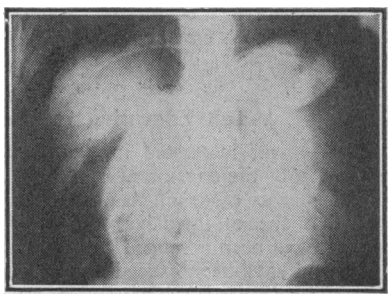
SIR,—Dr. H. W. Wade (*Journal*, August 20, p. 491) has written commenting on my talk before the Royal Society of Tropical Medicine and Hygiene last March (*Journal*, March 5, p. 597), as also did the late Dr. John Lowe (*Journal*, March 26, p. 787). I find myself in the curious position of agreeing broadly and in nearly every detail with my famous critics. This is not really so surprising, because the original talk was of the nature of a mental and spiritual exercise, in which the speaker knowingly stepped out of a comfortable accepted position and attacked that position in order to see what good would come of it. So, from being in the same camp with Lowe and Wade, I temporarily began to attack the position that all is satisfactory in the modern treatment of leprosy.

That some good has come of it is shown by the thoughtful replies of both Dr. Lowe and Dr. Wade, which do a lot to clarify the situation, and in particular the remark of Dr. Wade that my thesis is, after all, only that there is urgent need for improvement in therapy. Hence I think that an attitude of urgent seeking for a speedier and more efficient therapy than that of the sulphones is what should be the residuum of this discussion acceptable to all. This is a real residuum in my own case. In spite of long experience of leprosy amongst Africans, in whom the disease is perhaps more easily treatable and curable than anywhere else, I still long and hope for a therapy which would take under a year to achieve bacteriological negativity. This is for public health reasons of control as well as from the patient's point of view. I share the gratitude for all that the sulphones have done and think that it is no crime nor insult to them to wish for something even better.—I am, etc.,

Busia, Uganda. JAMES ROSS INNES.

Diagnostic Pneumoperitoneum

SIR,—I was very interested in Drs. S. C. Truelove and K. Lumsden's article on diagnostic pneumoperitoneum (*Journal*, September 3, p. 585), as I had, myself, employed this procedure in May this year in order to try and establish a firm diagnosis in a woman suspected to be suffering from cirrhosis of the liver. I was not at the time, however, aware of the advantages of the prone position in outlining the subdiaphragmatic organs with air when *x*-raying them. I entirely agree with them on the simplicity and usefulness of the procedure.



The patient, aged 47, was originally admitted to hospital under the care of the dermatologists on account of widespread bullous lesions of the skin. While in hospital she developed oedema of the legs, ascites, a granulocytopenia, and a low platelet count. A provisional diagnosis of cirrhosis of the liver was made. The liver function tests were all within normal limits. Paracentesis abdominis produced 86 oz. (2.5 l.) of straw-coloured fluid. Even after this, examination of the abdomen was difficult, and, although it was suspected on one or two occasions that both liver and spleen could be felt, there was no certainty of this. Since I had worked in a chest unit, I was familiar with the technique of inducing pneumoperitoneum, and I did this with a view to outlining the spleen and liver with air to see if any enlargement could be demonstrated by *x*-ray. This was done and a striking "hob-nail" appearance could be seen on the upper surface of the liver (see Fig.). The spleen was not well outlined, but could be seen to be definitely enlarged. A barium enema showed some evidence of ulcerative colitis. The patient ultimately died, and a necropsy confirmed both the ulcerative colitis and the severe "hob-nail" cirrhosis of the liver.

My thanks are due to Dr. W. S. Thomson for permission to publish details of this case.—I am, etc.,

Leicester. A. W. REID.

The Whitfield Tradition of Therapy

SIR,—Dr. G. B. Matthews (*Journal*, September 17, p. 737) asks for the original formula of Whitfield's ointment. That given by Dr. David I. Williams in his lecture (*Journal*, August 20, p. 453) corresponds with the one in the 1921 edition of Whitfield's handbook on skin diseases and the ung. ac. benzoic. et ac. salicyl. mite of the King's College Hospital pharmacopoeia of 1914. The latter also contains a "forte" ointment:

Benzoic acid	60 gr. (4 g.)
Salicylic acid	30 gr. (2 g.)
Hydrous wool fat	60 gr. (4 g.)
Soft paraffin	to 1 oz. (31 g.)

The formula of Drs. Wigley and Fox in "Favourite Prescriptions"[1] is therefore a compromise between the two.

The strong ointment was used by Dr. Whitfield for the treatment of multiple warts of the scalp, and very effective it can be. Not that warts all require such firm physical methods, as Dr. Williams explains in his delightful dissertation on them, where he speaks of Whitfield's mercury biniodide and ac. salicyl. in spirit lotion acting like a charm—perhaps as a charm. For Whitfield was a sound psychologist as well as a very great dermatologist, as I know from personal experience. When as a raw houseman I was fortunate enough to be his house-physician I asked him what I should do about a crop of warts on my head. Whitfield said: "Let me see, aren't you sitting for your final M.B. next month? They will all go when you have got through." Sure enough they did.—I am, etc.,

Exeter. R. FORTESCUE-FOULKES.

REFERENCE

1 Wigley, J. E. M., and Fox, F. B., *Practitioner*, 1950, **165**, 33.

SIR,—In reply to Dr. G. B. Matthews's query in your issue of September 17 (p. 737), I have a reprint of an article by Arthur Whitfield himself in the *Lancet* of about 1923, in which he recommends for the treatment of tinea pedis an ointment containing 5% benzoic acid and 3% salicylic acid; so this supports the formula quoted by Dr. David I. Williams in his lecture printed in the *Journal* of August 20 (p. 453) and his letter on October 1 (p. 850).—I am, etc.,

London, S.W.11. M. J. F. COURTENAY.

Adult Education for Consultants

SIR,—I was interested in your article on the continuing education of the consultant by Dr. D. Hubble in your educational number (*Journal*, August 27, p. 505). I would further add that special intensive courses for consultant dermatologists have been arranged by this Institute for the past two years and have been exceedingly successful.—I am, etc.,

J. E. M. WIGLEY,
London, W.C.2. Dean, Institute of Dermatology.

Vaginal Ulceration due to Potassium Permanganate

SIR,—I would like to support the plea made by Dr. E. A. J. Alment (*Journal*, August 27, p. 563) that something should be done to prevent the use of potassium permanganate tablets by women who wish to procure an abortion. I have recently treated a patient in whom the ulceration had involved the right uterine artery. Eight bottles of blood were given to this patient, who, incidentally, was not pregnant.

Since attention was first drawn to this condition by my colleague Mr. J. C. Miller,[1] when he reported 20 cases seen over a period of two years, there has been a steady increase in the number of cases seen at this hospital. I have recently seen five cases in four days, and at the time of writing there are three patients with potassium permanganate burns of the vagina occupying beds in this hospital. Some of these patients pay exorbitant prices for the tablets, while others buy them for a few pence from the chemists.

No amount of publicity is likely to reduce the public's belief in the efficiency of these tablets, which arises from the fact that a great number of the women who use them, although not pregnant, believe that the ensuing haemorrhage is an induced abortion which is followed after an interval by normal menstruation.

If the pharmaceutical chemists would agree not to sell potassium permanganate in tablet form but only as crystals or in solution, the number of cases requiring treatment in hospital would be greatly reduced, as the multiple small superficial ulcers caused by crystals have not, in my experience, caused sufficient haemorrhage to require transfusion or suture. It is to be hoped that some action will be taken by the Pharmaceutical Society in this matter before drastic steps are necessary to restrict the sale of these tablets.—I am, etc.,

Thornton Heath. T. G. E. WHITE.

REFERENCE

1 Miller, J. C., *British Medical Journal*, 1951, **1**, 526.

Duodenal Ulcer Treated by Vagotomy and Gastro-enterostomy

SIR,—In answer to Mr. M. J. Bennett-Jones's suggestion (*Journal*, September 24, p. 793) that the type of gastro-enterostomy might account for the poor results reported by us in a follow-up of patients with duodenal ulcer treated by vagotomy and gastro-enterostomy (*Journal*, September 3, p. 588), I would like to state that we performed a retrocolic posterior gastro-enterostomy with the stoma as close as possible to the pylorus and lying in the long axis of the stomach, which at that level is transverse in the patient.—I am, etc.,

London, W.2. C. G. ROB.

Treatment of Varicose Ulcers

SIR,—The number of treatments propounded for varicose ulcers are legion and most of them far from satisfactory. More than 40 years ago I had the honour to be chosen by Mr. Rutherford Morison as one of his dressers. His treatment was by the proper use of a Martin's bandage. I can see him now holding the bandage up in one hand and telling us he had received more credit by the proper use of it in various capacities than from anything else.

He used it frequently in Bier's treatment. He thoroughly washed the affected part in ordinary soft soap and water and carefully dried it. He then raised the limb and with gentle massage emptied the engorged veins, and then applied the bandage from the instep to just under the knee—the bandage not to be too loose, nor again too tight. He then instructed the patient that he must never remove the bandage till he was in bed, and in the morning to put it on before getting out of bed. The bandage had to be washed in soap and water and to be hung on the end of the bed for use in the morning. The affected leg also had to be washed in soap and water. He also advised five to ten minutes' "cycling" exercise each night in bed. He used the same treatment for varicose veins.

It is surprising what good results can be obtained with this treatment provided the technique is correct. The patient soon learns to apply the bandage at the right tension, which gives a feeling of support to the leg and great comfort to the patient.

Mr. Morison was for many years in general practice at West Hartlepool, Durham. He then decided to give his whole time to surgery and took the English Fellowship and became professor of surgery at the Durham College of Medicine and one of the most noted surgeons of the day. He, years before most others, advocated removal of the appendix at the first possible moment. In the first world war he introduced B.I.P.—I am, etc.,

Gainford, Co. Durham. WILLIAM J. HICKEY.

Milk-Alkali Syndrome

SIR,—Your annotation on the milk-alkali syndrome (*Journal*, September 10, p. 665) prompts me to comment on the following case.

The patient, a man of 39, was diagnosed as having a duodenal ulcer while in the Army, and this was confirmed at operation in 1946. He continued to have periodic but short exacerbations of dyspepsia, with long remissions, until one year prior to admission to hospital in January, 1955, when pain became more severe and exacerbations more frequent. Despite liberal use of alkalis and diet, his pain persisted and he was admitted for a period of strict medical treatment.

On routine examination a blood pressure of 190/130 mm.Hg was recorded; the urine contained a trace of protein but no other abnormalities, and the blood urea was 81 mg.%. On bed-rest the blood pressure fell to 130/100 mm. Hg after seven days, but the blood urea rose to 110 mg.%. A urea clearance test revealed 30% of normal renal function and on intravenous pyelography there was no evidence of renal excretion up to one hour after injection. A bilateral retrograde pyelogram showed a normal appearance