others will come in from India, Pakistan, and elsewhere to fill the vacant places. This is clearly happening in America as well as in Britain, as I have just shown.

We in the Working Party had to consider other solutions, which may be roughly set out as follows:

1. Have too many of these posts been established?
2. Are the doctors working in them doing work suitable to a training post or are they, in fact, doing a good deal of the work which should be done by consultants?
3. Are British doctors staying long enough in hospitals? (If each man stayed twice as long the problem would be solved.)
4. Is it in their interests to stay longer in hospital even if we used measures to try to persuade them to do so?
5. Is the present staffing structure appropriate to all hospitals or should not some of these posts be filled on a part-time or whole-time basis by medical and surgical assistants who are on a permanent, instead of a three-year, contract?

What I am concerned to do is to bring a little clear thinking on the scene. I personally believe that this country is short of doctors, but not for the reasons which are being advanced at the present time. I think it is short of doctors in the sense that we need more consultants and that general practitioners should not be called upon to see so many patients, but clearly the question as to whether medical schools should produce more doctors is one which must be answered by a consideration of the opportunities for permanent employment. The question of foreign doctors in junior hospital posts is in this respect almost, though not completely, irrelevant.—I am, etc.,

Department of Medicine, Manchester Royal Infirmary. ROBERT PLATT.

Overseas Graduates

SIR,—The many letters of complaint about treatment of overseas graduates in England oblige those who have benefited from training there to give the other side of the picture. The main impression I took away with me in the post-war years was of the extraordinary hospitality of England, where graduates from all over the world were welcomed without question. Eccentrics and misfits from every country could be sure of finding in London a tolerance which they would not receive in their home environments. I used to remark on the remarkable sense of fairness shown to people like me when we were chosen for good hospital jobs in preference to English doctors, who, we felt with an uneasy sense of justice, were being deprived of their birthright. Not only in medicine but in every other sphere this policy has led to the spread of English ideas and standards to every land. It would be a tragedy if England should ever lose her traditional role as the intellectual haven for all professions, or if we should ever forget our gratitude to her, our remote, careworn, yet ever renascent alma mater.—I am, etc.,

Auckland, New Zealand. H. P. DUNN.

Emigration of British Doctors

SIR,—The article by Dr. R. H. Davison on "Medical Emigration to North America" (March 17, p. 786) contains at least two important errors of fact, and if no one has corrected them in the meanwhile may I take this opportunity of doing so?

Dr. Davison mentions the possibility of a doctor entering the U.S. on a visitor's visa and becoming a permanent immigrant. This can only happen if he again leaves the U.S. and reapplies for immigration permission. Such doctors have already been counted in the article.

In the contrary sense, Dr. Davison assumes that all doctors who enter on an immigrant's visa are in fact permanent immigrants. This is certainly not the case. Many of the American hospital positions advertised in the *B.M.J.* require this type of visa, but there is nothing to prevent the doctor concerned from returning to the United Kingdom when he wishes.

In his final paragraph Dr. Davison refers to "14 years of socialism." I am not sure whether the error here is numerical, semantic, or possibly astigmatic, but some form of correction is certainly needed.—I am, etc.,

Abilene, Texas, U.S.A. T. ALUN PHILLIPS.

Practice Overseas

SIR,—I have read the recent letters regarding the frustrations of the N.H.S. with interest. I am one of the more fortunate National Service men who volunteered for service with the Ghana Army, and have spent two years serving in Ghana and the Congo. The experiences have been excellent and interesting. However, the frustrations of not having modern drugs and ancillary aids readily available are just as bad as any in the N.H.S. Our pathology is minimal, our *x*-rays are only of the simplest kind. Our drugs are always running out without immediate hope of replacement, and I regret to say that deaths have occurred because oxygen or tetracyclines are just not available.

It may be pleasant to handle one's interesting cases throughout, but it is alarming when there is nobody to consult but one's textbooks and two years' experience. Surely it is more satisfying to realize that one's patients are receiving the most modern drugs available from a highly trained and experienced specialist with all modern ancillary aids, than to muddle through on one's own, gaining experience but at the patient's expense?—I am, etc.,

Tamale, Ghana. P. R. RICHARDS.

Achlorhydria and Cancer

SIR,—Dr. A. Geoffrey Shera (March 3, p. 644) reminds me of a conversation I once had with the late Sir Arthur Hirst in 1932, when he forecast that all my patients with pernicious anaemia would die of carcinoma of the stomach. Although I disagreed with him, I used to let him know from time to time in subsequent years how many of my patients developed carcinoma.

Looking back over the last 34 years during which time I have seen rather more than 2,500 cases of pernicious anaemia, it is a pleasure to me to see that, contrary to this forecast, I have records of only 30 males and 31 females with pernicious anaemia who have developed carcinoma of the stomach after excluding all the new patients with pernicious anaemia that I have seen in the last five years; thus the follow-up period of the whole group was 5–34 years.

The sites of the carcinoma in these cases were approximately: body of stomach 62%, pylorus and distal half of the stomach 30%, fundus 4%, and diffuse (leatherbottle) 4%. These figures actually are about two to three times the expected frequency. I have on occasion in the past reported briefly some of these results.[1 2]

Like Hirst and Dr. Shera it has always been my practice to recommend my patients to take hydrochloric acid and pepsin in a tumblerful of water with their main meals, and many of them have continued to take this throughout their lives. I believe that this adjuvant treatment has great therapeutic advantages, and I regret that nowadays so many feel that cyanocobalamin alone is the complete answer in the control of pernicious anaemia, often ignoring the persisting flatulent dyspepsia and other minor symptoms. I am not convinced that such is the case, particularly since very often it may be necessary to give well-diluted hydrochloric acid and pepsin regularly with the main meals to maintain complete freedom from such symptoms; it appears also that those of my patients who have continued to take desiccated hog's stomach—some for more than 30 years—are in much better clinical and general condition in their old age than those on other forms of anti-pernicious-anaemia treatment.—I am, etc.,

Department of Haematology, The Royal Infirmary, Manchester 13. JOHN F. WILKINSON.

REFERENCES

[1] Wilkinson, J. F., *Brit. med. J.*, 1945, **2**, 664.
[2] —— *Lancet*, 1949, **1**, 249, 291, 336.

Retinal Damage from Drugs

SIR,—Your leading article (March 31, p. 929), with its arresting title, and the report by Mr. J. N. Ormrod (p. 918) in the same issue concerning two cases of retinal damage due to chloroquine, prompt me to record the following case.

A married woman, aged 51 years, was recently referred to me by a colleague as a possible example of optic chiasma compression. She was complaining of failing eyesight for the past six months. She owned a dress shop and had lately found difficulty in distinguishing between dark shades of material, especially browns, greys, and blacks. A half-crown and a penny looked alike. When driving a car she had experienced some near-misses which had alarmed her. She was able to read small print but she had to "search" for the print. She had no other complaint. She was active, did not suffer from headaches, but in the past she had had two operations for partial thyroidectomy and was inclined to obesity. The menopause had taken place two years previously, and about that time she had had some superficial *x*-ray therapy for a facial skin complaint.

I could find no neurological abnormality. Corrected visual acuity was 6/6 right and 6/5 left. Her optic disks were normal and her peripheral visual fields were full on confrontation. The cornea and retina on each side were normal.

At the end of the consultation, when I was making arrangements for further investigation, the subject of "tablets" came up. I do not recall just how this happened, but I think it was first mentioned by her when on opening her handbag she noticed one or more pill-boxes inside. It transpired that she was taking thyroxine and "nivaquine" (chloroquine), the first for many years and the second during the past year or so following the facial skin complaint. I was not then (February 9, 1962) sure whether retinal degeneration had been reported following chloroquine, but subsequent inquiry confirmed it, although an ophthalmological colleague was unable to detect any macular changes. When her fields were plotted on a Bjerrum screen it was apparent that she had bilateral central ring scotomata. Radiographs of skull, lumbar puncture, and carotid arteriography revealed no abnormality. When last seen a few days ago these scotomata were unchanged and there was no improvement in her vision since I stopped her nivaquine seven weeks ago. There are no definite changes in the maculae as yet.

The case is important in that central scotomata may appear before any macular degeneration can be detected—I am, etc.,

Cardiff. J. D. SPILLANE.

Drug for Vaccinia

SIR,—In view of the recent correspondence regarding the complications of vaccination and also the new antiviral drug compound 33T57, I would like to record the following case:

A male child, 4½ years old, weighing 38 lb. (17.2 kg.), who has had a most intractable eczema all his life, was accidentally vaccinated as the result of sleeping with his brother who had been vaccinated. When he was admitted to hospital on February 14 he showed what appeared to be an extensive surface infection of most of the eczematized areas with a generalized adenitis. Within 24 hours it became apparent that the infection was due to vaccinia and he developed very numerous primary lesions scattered over the body and limbs. His temperature was 104° F. (40° C.) and he became profoundly toxic. He was given gamma globulin on February 16, 19, and 22, but still remained very toxic and continued to develop new lesions. This state continued and on February 28 he was given *N*-methylisatin β-thiosemicarbazone (compound 33T57, kindly supplied by Dr. Bauer, of the Wellcome Laboratories of Tropical Medicine) in a dosage of 2 g. daily for seven days. His temperature fell to normal within two days and there was a very rapid improvement in his general condition during the following week; no further lesions developed and the crusts dried and separated so that, apart from scarring and residual staining, his skin was clear on March 8.

One must always be very careful about drawing conclusions regarding treatment from a single case. In this instance, however, in view of the steady spread of lesions during the first two weeks, it is difficult to believe that gamma globulin materially influenced the natural course of the disease. This comment equally applies to compound 33T57, since the drug was not given until the 14th day after the first lesion had been recognized, a time when the patient's own antibody formation would be developing and natural resolution would be taking place. The speed of the resolution was, however, unexpected and it appeared faster than the average, although this is purely a clinical impression. In contradistinction to the case treated by Professor C. W. A. Dick and his colleagues (February 24, p. 557) the child did not show any toxic reaction to the drug.

Further clinical experience with compound 33T57 is obviously needed before its use can be assessed, but it is reassuring that drugs which show antiviral activity are becoming available.—I am, etc.,

Royal Infirmary, Huddersfield, Yorks. A. J. E. BARLOW.

New Look for Physiotherapy

SIR,—We have read with interest your annotation, "New Look for Physiotherapy" (April 7, p. 998), referring to the memorandum outlining recent changes in the application of physiotherapy and advocating the avoidance of unnecessary treatment.[1]

We welcome your comments on the value of accurately prescribed physiotherapy, for there is nothing more disheartening for the physiotherapist than carrying out treatments ordered which have little value to the patient other than that of a placebo, or prolonging treatment after maximal functional improvement has been obtained. It is difficult to see how physiotherapists can do other than try to accommodate all patients who