visit (day, night, Sundays), and minor operations. The patient pays his doctor, who initials a receipt provided by the social security organization. The fee is later refunded minus 20%.

The advantages of this system are many and amply compensate the slightly more complicated administrative machine which is needed. (a) The patient has complete freedom to choose or change his doctor. (b) The doctor-patient relationship is preserved, as the State enters into a contract with the patient and not with the doctor. (c) The doctor is not called out for trivial complaints, as the patient must pay out of his own pocket one-fifth of the fee. (d) The more experienced doctor or the older physician may raise his fees (within accepted limits) to lessen the burden of his practice.

This system works well, and I have no doubt a similar system could be devised to meet our needs.—I am, etc.,

London, N.W.3

J. DELAFRESNAYE.

Implement the Plebiscite

SIR,—At a local general meeting of the profession convened on March 7 to consider the resolutions proposed by the B.M.A. Council at the next Special Representative Meeting I proposed the following resolution, supported by one of my seniors:

That after consideration of the plebiscite result the Representative Body recommends the profession not to take any action to implement the Health Acts of 1946 and 1947 until they have been amended to meet the demands of the profession.

While it was received sympathetically, it was rejected. The first resolution of the Council was passed by a large majority, a minority not voting.

I would like to know how the Council and the supporters of their first resolution defend it in the light of what we have learnt about the Health Acts. We know that they are a political measure, the main purpose of which is to centralize the control of certification in the hands of the Government, that they are the last link in a chain being forged, not by any one political party, which will have as its effect the delimitation of individual freedom. We know that the Government is determined to carry out its policy. We know that our previous effort to meet the Government has given us nothing, not even the sympathy of the public. We know that we have an overwhelming majority in the profession who disapprove of the Acts. I would suggest that a mandate placed in the hands of the B.M.A. Council is the logical consequence of such a position.

"Criticism" that such a resolution as mine is derived from aggressive tendencies may well be a description of psycho-analytical fact, and in that it is mere description—it is not to the point. The B.M.A. is a democratic institution, where it is for the members to make clear to the Council what is to be the policy of that Association. The first resolution of the Council is not a statement of policy but merely a hope and an opinion. At this meeting the Council were not given any line of policy to enact the results of the plebiscite.

Especially as there are at least a minority who share these views I venture to record them, and would like the Council and their supporters to take this matter up and explain the idea behind their first resolution. Failure to implement the plebiscite will result in the disintegration of our majority if the profession have voted with decision to maintain one of the last bastions of freedom.—I am, etc.,

Hull.

GEORGE H. BLAIR.

Benefits for Doctors' Wives

SIR,—I have read with interest and some sympathy of the formation of a League of Doctors' Wives. I feel, however, that having made public its activities in the national press the League may lay itself open to charges of misrepresentation of facts if it paints a picture of unrelieved gloom, and so I wish to draw attention to a few shafts of light in the form of State concessions that we have enjoyed up till now and which we may surely expect will continue after the appointed day.

(a) Throughout the war period my maid of military age was allowed to remain in our service with the reasonable proviso that she played her part in civil defence (in her case, joining a fire-watching party). (b) Income tax allowance is granted for that part of her services employed in connexion with the practice. (c) Doctors have been permitted to use their cars for recreation (subject to reasonable conditions) and their wives can enjoy with them this great advantage.—I am, etc.,

GLADYS M. WOOLF.

Symmetrical Gangrene in the African

SIR,—We have read with great interest Dr. M. Gelfand's excellent article on symmetrical gangrene in the African (June 14, 1947, p. 847). The possibility arises that the disease may have a similar aetiology to the epidemic thrombophlebitis described by us¹ in the East African Command during the War. The following are points of resemblance:

1. Dr. Gelfand's six patients were seen during the same period as our cases in Kenya and Somaliland.

2. The age and sex incidence was similar (he only saw the disease in males, usually between the ages of 20 and 35).

3. Oedema preceded the gangrene in all his cases. Many of our patients suffered from oedema without evident thrombophlebitis, although the pathology of these and of the cases of obvious phlebitis was undoubtedly identical.

4. Two of our patients developed gangrene of the lower limb, arterial thrombosis being found at operation. Both cases presented as thrombophlebitis with oedema, which was later complicated by arteritis.

5. Most of our cases were preceded by venepuncture. One of Dr. Gelfand's patients had received injections of quinine for cerebral malaria, but the route of administration is not stated. The Wassermann reaction was positive in two of his cases. It is possible that these patients may have received anti-syphilitic treatment at some previous date.

The symmetrical character of Dr. Gelfand's cases is not incompatible with our theory, for 29% of our cases of thrombophlebitis involved both lower limbs. Had arteritis been a more frequent complication it is likely that gangrene would have been bilateral in a similar ratio. Is it not possible that mild thrombophlebitis was more widespread in Southern Rhodesia than appeared from hospital admission? An African in civilian life would probably fail to report for treatment of a mild, perhaps transient, attack of oedema of the leg. It would be surprising if a disease which was attacking so many East African troops in Kenya and Somaliland did not affect a proportion of Africans in civilian life. Fisher and Lendrum² describe tropical primary phlebitis in the neighbouring territory of Northern Rhodesia.—We are, etc.,

A. D. CHARTERS.

P. E. C. MANSON-BAHR.

London, W.1.

REFERENCES

- ¹ *Lancet*, 1946, **2**, 333.
- ² *Ibid.*, 1946, **2**, 438.

Exo-erythrocytic Forms of Malaria Parasite

SIR,—In the paper on the "Pre-erythrocytic Stage of Mammalian Malaria" by Drs. H. E. Shortt, P. C. C. Garnham, and B. Malamos (Jan. 31, p. 192) it is stated that the curtain on the gap in the cycle of events was lifted in the case of avian malaria by James and Tate in 1937, when they described the exo-erythrocytic cycle in *Plasmodium gallinaceum*. Such description had been preceded by the discovery of Raffaele of the unpigmented stages in canaries of *Plasmodium relictum*.

In the first paper of S. P. James and P. Tate (*Parasitology*, 1938, **30**, 128) it is stated that "Raffaele was the first to recognize that in *P. elongatum* there is a definite schizogonic cycle of development in cells of the reticulo-endothelial system in addition to the cycle in erythrocytes. Raffaele also demonstrated (*Riv. Malariol.*, 1936, **15**, 318) that schizogony takes place in leucocytes or endothelial cells after heavy inoculation of canaries with sporozoites of *P. relictum*. . . . Unpublished work of one of us has confirmed Raffaele's results, that endothelial schizogony of *P. relictum* occurs in canaries which have been inoculated with sporozoites." Raffaele has also shown that the exo-erythrocytic forms appear only towards the 6th and 7th day after the inoculation of sporozoites. So the priority of Raffaele's discovery in avian malaria cannot be questioned, and no less incorrect is the statement in the annotation at p. 204 of the same issue of the *Journal* in which none of the names of the researchers in this field have been omitted with the exception of Raffaele's name.

The statement in the annotation that "evidence of a convincing nature is at last brought forward that the cycle of development of the malarial parasites in mammals is exactly analogous to that occurring in birds" comes many years late, as Raffaele had already described (1937-40) bodies belonging to the exo-erythrocytic cycle in man. The authors of the paper dismiss too easily the importance

of Raffaele's findings by saying that they have not been confirmed or received any support. But it is just that negative assumption that needs support, a support that would exact a long painstaking work as was Raffaele's work.

I am sure that your readers may be surprised in learning from Davey that to succeed in finding these forms, with the same difficulties that one meets in finding them in a six-days-old chick, it would be necessary to inoculate in the human the contents of 50,000 infected salivary glands. All malariologists who took the trouble of looking at Raffaele's smears have not hesitated in considering them as belonging to the exo-erythrocytic stage. I think that the authors' findings in the monkey is a confirmation of Raffaele's work on man. By the way, owing to the authority of Raffaele in that field his observations should have been accepted.

Before finishing this letter I feel the need of reminding your readers of the high intellectual merit of James in the discovery of the exo-erythrocytic stage. Considering all the proofs against Schaudinn's theory he postulated the necessity of a new stage between the sporozoite and the infection of the red blood cells. This working hypothesis was published in its completeness by Ruge (*Dtsch. med. Wschr.*, 1936, 62, 1869) and has been proved true by successive work. I am glad to give homage to the memory of James as the malariologist to whom the experimental malaria owes the most interesting clinical results.—I am, etc.,

Istituto di Malariologia Ettore Marchiafava,
Rome.

G. BASTIANELLI.

Swine Erysipelas Infection in Man

SIR,—I am interested in the concluding statement made by the president of the Section of Comparative Medicine of the Royal Society of Medicine (Feb. 28, p. 404) in which he asked whether the susceptibility of man to swine erysipelas might not be much higher than was commonly thought. Personally, I have found it comparatively common—its incidence twice as frequent as erysipelas in my practice. I meet at least two cases of the cutaneous type and sometimes as many as five of these cases in a year. I must have seen about fifty cases or more during the past eighteen years.

It is variously known as erysipeloid, crab cellulitis, or reticular lymphangitis. There is almost always a history of a scratch or minor cut from a meat bone or a skinning or butcher's knife. The infection has occurred in my cases among butchers, gamekeepers, cooks, farmers, who have been skinning dead sheep found on the hill, and not infrequently in housewives. A few have occurred from fish-bone scratches.

The condition has a seasonal incidence from August to February. It usually occurs on the finger, commencing as a purple patch, which extends over the finger, clearing in the centre and working towards the tip and the palm. There it commonly proceeds to travel down a neighbouring finger to its tip. It has a slowly spreading, sharply defined, purple, raised narrow margin. It is itchy and hot, but never really painful. On one occasion only have I seen a mild lymphangitis to the middle of the forearm. It resolved spontaneously with splinting of the parts. Suppuration never occurs. The erysipeloid undergoes spontaneous cure in about three weeks in most cases.

Until two years ago I treated these cases with 10% ichthyl ointment applied every two days on lint, knowing that it would at least do no harm. I have never seen a case relapse with this treatment although relapses said to be common. I do not claim that the ichthyl had any particular effect on the infection, but some method of treatment had to be given to satisfy the patient. Lately I treated two cases with 200,000 units of penicillin night and morning, but abandoned it in both cases after five days as no improvement occurred. This autumn I was fortunate in having an elderly housewife with the condition, whose daughter, a nurse, administered 50,000 units of penicillin three-hourly for seven days. This case was less than a week old and too early to undergo spontaneous cure. After four days of penicillin treatment the lesion had completely disappeared, and no recurrence took place. It is obvious that ordinary massive dosage night and morning is insufficient, but 400,000 units daily by three-hourly injections effects cure in some cases. Higher dosage might of course be necessary in others.

I feel sure that swine erysipelas occurs much more frequently in man in rural areas than is commonly supposed.—I am, etc.,

Bridgend, Isle of Islay, Argyll.

CAMPBELL M. MCINTYRE.

Rarer Manifestations of Herpes Zoster

SIR,—The very interesting article on this subject by Dr. T. Parkinson (Jan. 3, p. 8) is bound to recall other unusual cases of herpes zoster. I remember to have seen a sequence of cases a few years ago which struck me already at the time as extraordinary but gained even more significance after reading his article.

The first case was that of an elderly man, patient A, who was admitted to hospital with herpes zoster of typical thoracic distribution. A few days later patient B was admitted for an amputation of his toes. While recovering from it he used to visit patient A in his room. About three weeks after his admission he developed a left facial palsy which took about one year before it had disappeared entirely. Patient A was admitted again several months later for post-herpetic pain and mental depression. At that time patient C, who was being treated for a diaphragmatic hernia with ulceration, visited him on several occasions. After about a fortnight he developed a herpes zoster of typical abdominal distribution. Somewhat about the same time patient D was recovering from a haemorrhoidectomy. He too visited patient A now and then. Soon after his discharge he consulted me for a paralysis of the long thoracic nerve which had affected the serratus anterior muscle and the posterior portion of the deltoid.

These four cases are interesting inasmuch as two of them apparently were examples of "zoster sine herpete." They further seem to point to a carrier state in herpes zoster which possibly was present in patient A.

The relationship between herpes zoster and varicella was exemplified lately to me when I saw a man suffering from herpes zoster and his wife getting an attack of varicella about three weeks later.

Finally it is worth recording the case of a 6-year-old boy who had been under radium treatment for sarcoma after abdominal exploration and came to see me for a herpes zoster with a distribution corresponding with L5.—I am, etc.,

Gatton, Australia.

E. GUTHANER.

Treatment of Subacute Bacterial Endocarditis

SIR,—I agree with much that Dr. Florence M. E. Davies (Feb. 14, p. 317) and Mr. B. Waters (Feb. 28, p. 416) have written on this subject. Nevertheless I do feel that the importance of infected teeth, apical granuloma, and possibly tonsils as potential sources of bacterial leakage leading to relapse has not been emphasized.

Therefore may I add that I have shown elsewhere (*Lancet*, 1947, 2, 807) that penicillin-sensitive organisms can thrive in a dead tooth pulp in a subject receiving massive doses of penicillin.—I am, etc.,

Liverpool.

JOHN HALLAM.

Breast-feeding in Erythroblastosis Foetalis

SIR,—The practice of weaning infants with haemolytic disease because the mother's milk contains antibodies has been based on circumstantial evidence and speculation on the possible harm that might result to the baby rather than on scientific proof. The question of breast-feeding erythroblastic babies is of such importance that an authoritative opinion based upon actual investigation should be welcome. Dr. I. A. B. Cathie's observations (Oct. 25, 1947, p. 650) that there is no experimental evidence to prove that Rh antibodies are demonstrably absorbed into the blood stream by way of the alimentary canal and the conclusion that weaning of such infants is not justified are therefore of great interest. It is also interesting to note that at the Hospital for Sick Children, Great Ormond Street, London, it has been the practice to breast-feed such children whenever this can be done, irrespective of the antibody content of the breast milk, and that their clinical progress has not suggested any relationship between the antibodies in the milk and the duration of the haemolytic process.

I wish to make the following comments on these observations. The finding that Rh antibodies are not readily destroyed by the gastric secretion of infants is significant, as it shows that they remain potent and may yet be absorbed from the alimentary canal. There is a fundamental difference between absorption through the placenta and from the alimentary canal. In the former, on entry into the foetal circulation the antibodies come into direct contact with the