

rose in spite of giving plasma in a continuous stream by the open method," a typical example of the terminal stage of shock. In some cases the plasma was given too late, while in others the plasma was given either too slowly or in insufficient amount to have any real effect or was stopped too soon so that the initial improvement was not maintained. In two cases it was suggested that the plasma transfusion was followed by ill-effects. These have been investigated. The first was a patient with hypertension in whom plasma transfusion was commenced after the B.P. had fallen from 160/80 to 90/76 during an operation for excision of elephantoid scrotum. The plasma transfusion was continued at the rate of 70 drops a minute, 1,000 ml. being given in four hours. The B.P. continued to fall and the patient died. It was obviously a case of inadequate speed and inadequate volume. The other was a patient on whom a hemicolectomy had been done for ileo-caecal tuberculosis. When the plasma transfusion was started the patient's condition was "bad." The B.P. was 104/60 and pulse rate 102; 500 ml. of plasma was given in one hour, when the patient's condition became "worse," with B.P. 90/58 and pulse rate 136. An hour and a half later an intravenous infusion of normal saline was started and the patient improved, the B.P. rising to 118/68. I venture to suggest, from my experience of two other similar cases in which a saline infusion restored the B.P., which had fallen apparently due to transfusion of plasma, that these are cases of dehydration which fare badly when plasma is given without concomitant administration of saline solution. Since March, 1944, some hundreds more transfusions of stored fluid plasma have been given with very favourable, and in some instances spectacular, results. I am unable to analyse these results as I have no access to the records, which are in far-off Madras.

I have been constrained to make the above observations at some length because processed human citrated plasma and serum stored in the fluid state are in general use all over India except in one or two centres where facilities for drying plasma/serum exist, and any impression that the use of such products is fraught with danger would have disastrous consequences in India and would retard the progress of transfusion in this country. Besides, facilities for storing plasma in the frozen state are equally lacking in India. Experience has shown that properly processed plasma can safely be used after storage at low temperature even in the Tropics.

Are the People More Healthy ?

Surg. Lieut.-Cmdr. G. H. C. ST. G. GRIFFITHS, R.N.V.R., writes: Your article on this intriguing subject (March 2, p. 318) touched conclusively on "health," discerned from rather a limited aspect—e.g., coryza, influenza, rheumatism, tuberculosis, and the mortality rate. It did not take into consideration that colds, 'flu, and even rheumatism, ought to be more epidemic one year or season, or the climate was more humid or exacting. Even on peacetime food abundance it must be admitted that epidemics of these diseases are more prevalent in one year than another, or the season is wetter and the rainfall greater, so that food, or the lack of it, may not have contributed to the figures stated in the article in question. Those responsible for the dieting of the nation naturally had to use propaganda of a cheering type, to encourage the public to undertake their long and arduous sacrifices and to endure their lot in going without many valuable foods, such as cheese, cream, butter, eggs, fine bread, meat, and a host of other peacetime foods. Substitutions, such as synthetic jams, powdered egg, peanut butter, varieties of margarine or "honey," were all served to the public in turn to eke out the monotonous and irksome diet that had to be faced, and unfortunately still has to be, owing to the alleged world shortage. However, all these sacrifices led to a "something" that we, as a nation, had not known previously: a general lassitude, languor, lack of energy and driving power; a lack of quick recuperative power to 100%, if ever attained, after some trifling illness. There seemed to be many individuals, men and women, suffering from varying slight grades of anaemia. Fractures, too, through deficient calcium, were more numerous. Accidents causing fractures on the football field were in excess of normal. These fractures often showed grave osteoporosis and decalcification of the bones, the bones appearing under x rays to be little more than fibrous tissues. Skin diseases such as acne pustulosa, furuncles, bullous pemphigus, and carbuncles seemed much more common, due to lack of fresh meat, fruit, and similar foods. Teeth also were not spared, owing to our lack of milk, cream, and butter. The reference to the mortality rate hardly holds good. Millions of people can be more or less starved to a certain extent without reaching the condition of those in Belsen Camp. No grievous epidemic, either, overtook this country, as in 1918, to decimate its inhabitants.

Schizophrenia and War Service

Mr. J. H. Wood, Secretary, Pensions Department, the British Legion (Scotland) writes: With reference to the question and answer (March 16, p. 419) regarding the Ministry of Pensions and the above disease, first of all, may I point out that the Pensions Appeal Tribunals are independent and not run by the Ministry, and they consist of a lawyer, a doctor, and an ex-Service man. Although in the

case quoted there was no pre-Service history of the disease and the family history was good, I am afraid that the Ministry of Pensions would only admit that the schizophrenia was aggravated or, in other words, made worse by his service in the Navy, but would not admit that it was attributable thereto, their view being that no case of schizophrenia can be due to war service as in every case there is a constitutional predisposition. At the risk of incurring the wrath of many psychiatrists, but not all, I may say that the British Legion disagrees entirely with this point of view, and holds that in cases such as the above the disability can be fairly said to be attributable to war service. Here it is worth noting that in the old Royal Warrant the words "directly attributable" were used, and we would admit in that case that where a predisposition exists it could not be "directly attributable." However, in the present Royal Warrant the word "attributable" appears by itself, and therefore, if a man has a good personal and family history and breaks down under Service stress, the obvious conclusion to be drawn is that the psychosis is attributable to war service. It is also worth noting that Brig. G. W. B. James, in the *Journal* of Nov. 3, 1945 (p. 620), says that in some cases schizophrenia can be fairly said to be the direct result of war service. If only we could alter this attitude of mind in the Ministry and on the Pensions Appeal Tribunals, who, I am sorry to say, uphold the Ministry in their misinterpretation of the word "attributable," the Legion would be a lot happier.

Intravenous Protein Hydrolysates

Dr. A. NEUBERGER, Secretary of the Protein Requirements Committee of the Medical Research Council, writes: Dr. H. E. Magee states that "British preparations for intravenous use are made by hydrolysing casein with sulphuric acid." This is not the case. All preparations which have been tested in this country under the auspices of the Protein Requirements Committee of the Medical Research Council have been prepared by enzymic hydrolysis. One particular preparation made with acid and which had been supplemented with tryptophan has been used in a small number of cases abroad. Dr. Magee also states that "a few repatriated prisoners of war were treated with protein hydrolysates in England in 1945 with some but not spectacular success. Thrombosis of injected veins occurred in every case." It must be pointed out that in the clinical tests carried out under the auspices of our committee thrombosis, though undesirably frequent, was not a regular feature, as implied by Dr. Magee. Thrombosis has also been occasionally observed when American preparations were used. It is clear that further work both on the production of protein hydrolysates and on the clinical administration and indications is required before this method of intravenous alimentation can be recommended for general clinical use.

Height of Water-closet Seats

Fl. Lieut. R. S. HENDERSON, R.A.F.V.R., writes: Surely there is little doubt that the ideal posture for defaecation is a crouching one, with spine, hip-joints, and knee-joints fully flexed, the feet apart, and the anal orifice as near the ground as possible. Most animals may be observed to find this natural and effective. Campers, passing their motions into prepared holes in the ground, know it to be ideal. Now lavatory seats, as at present designed, are never less than 18 in. to 2 ft. (45 to 60 cm.) off the ground. At a time in history when we are expecting almost at any hour the appearance all over the country of new houses, it seems that builders generally might be encouraged to lower the height of their lavatory seats from the ground to a maximum of 12 in. (30 cm.). Quite apart from the saving of material involved, the nation as a whole might thus find itself pleasingly less constipated—with incalculable benefit, no doubt, to the rest of the world.

Blood Transfusion Apparatus

Mrs. A. D. HEDGES, secretary of the Durban Blood Transfusion Service, writes from Addington Hospital, Durban, South Africa: The Durban Blood Transfusion Service has started a small museum, and we would like readers of the *British Medical Journal* who have any discarded pieces of blood transfusion apparatus, for which they have no further use, to consider sending them to us.

Corrections

In the report of the Royal Society of Medicine discussion on vascular injuries of warfare (April 6, p. 540) "Mr. Mayer" should read "Mr. B. C. Maybury." We apologize for the error.

Dr. STEPHEN D. STURTON wishes to correct a misprint in his letter on "Deck Ankles" and "Travellers' Oedema" published in the *Journal* of April 13. The third sentence of the second paragraph should read: "By the morning of July 12 out of 314 prisoners 249 of us were suffering from this condition."

Mr. F. G. ST. CLAIR STRANGE, F.R.C.S. (Ministry of Pensions Hospital, Dunston Hill, Gateshead, Co. Durham) is seeking back numbers of the *British Journal of Surgery*. The copies he wants are (up to twelve in number) of the July, 1945, issue, Vol. XXXIII, No. 129.