rescission of the basic salary will be sufficient in itself to maintain essential freedom. While this proviso may perhaps provide escape from the State salaried service in name and title it is very far from doing so in effect and in fact, as these innocents would very quickly find if the Government became the sole owner and patron of their practices—which Heaven forbid. It is by no means appreciated how great is the value to the public of continuity of practice. A doctor who buys a general practice purchases, as it were, a stake in the locality. Almost invariably he settles down for a term of years, and not infrequently for the whole of his working life. In the way that only time can give he gains a real knowledge of his patients, their characters, their interests, their antecedents, indeed almost everything about them. To him they are individuals, not numbers. Frequently and in a very real sense he is a father of his people. In due course he may be succeeded by his son.

Now consider what might well happen under Government patronage, the doctor being appointed to his living. There is no incentive to like the place or to care for the people, there is no incentive to remain, and indeed much inducement to keep moving. Thus he becomes no more than a temporary resident, or, more aptly, the equivalent of the political "carpet-bagger."

Those who are wavering or weak in the faith, and those who are casting anxious eyes at their compensation, should try to look into the future of ten, twenty, or thirty years hence, when their sons and successors will be practising, and should always remember that they themselves are but custodians, that the science of medicine is a heritage common to the past, the present, and the future. It is worth hazard or sacrifice, especially of personal position and amenity, if thereby that heritage can be passed on in all the greatness of freedom.—I am, etc..

Wirksworth, Derby.

E. D. BROSTER.

Economy of Service

SIR,—If the available number of doctors is ever to deal with any contract covering the whole population great economy will have to be observed in the use of each doctor's time. It is not economic to use his time writing, dispensing, waiting for clinical laboratory services, x-ray services, and hospital beds. How reduce or eliminate these wastages? (1) Provide a short-hand typist for each doctor. (2) Provide a 24-hour 7-day dispensing service for the whole country. (3) Provide a "mobile" clinical laboratory service for the whole country. (4) Provide a "mobile" x-ray service for the whole country. (5) Provide a "mobile" consultant service for the whole country. (6) Provide *at once* sufficient hospital beds. (7) Establish a "one only incapacity certificate a week" service.

If (3), (4), and (5) are "mobilized" much work now absorbing hospital beds would be done at the patient's home, interesting cases would not be so entirely removed out of the care of their own doctor—to the advantage of both—so that this "mobilization" would have the effect *at once* of providing more hospital beds complete with staff. Such a development of the panel is a natural growth, and would work under the same sort of contract we have become accustomed to. The Spens Report covers the remuneration.

It would give the doctor the tools, leave him free, leave him subject to competition, and leave him responsible to his patient and his conscience.—I am, etc..

Market Rasen, Lincs.

DUDLEY F. TORRENS.

Benefits for Doctors' Wives

SIR,—I should like the opportunity of replying to the letter from Mrs. Gladys M. Woolf (March 13, p. 520). She is indeed more fortunate than most doctors' wives in that she has had a maid throughout the war. We have received many hundreds of letters from doctors' wives enclosing their subscriptions to the League of Doctors' Wives, and the gist of most of them is that the only time they are able to leave their homes to do any shopping is whilst their husbands are working in the surgery, because they have had no domestic help.

The doctors' wives are quite distraught at the thought of what is to happen on July 5 when the number of patients actually attending the doctors' houses will probably be trebled.

In addition to this there will be all the extra paper work which will have to be seen to by the doctor or his wife. There will be record-cards for every patient on which every item of service—even if it is only a repeat medicine or a certificate—will have to be entered. The doctors' wives feel that this burden is too great for either their husbands or themselves after the long exhausting years of the war. There is little opportunity for these women to leave their homes with their husbands on social visits in the car as Mrs. Woolf suggests, because the house cannot be left unattended. We insist that the Minister should have made some provision in his Act for the essential domestic and secretarial help which this scheme will necessitate.—I am, etc..

Camberley, Surrey.

IRENE HARTLEY,
President, League of Doctors' Wives.

SIR,—It is with some regret that I write to dispel a little of the sunny light of favouritism in which Mrs. Gladys M. Woolf (March 13, p. 520) imagines that she, as a doctor's wife, is basking.

(a) The practice of medicine being considered an essential occupation during the war period, maids of military age were allowed to remain in the employ of doctors because their services were considered necessary for the efficient carrying on of those practices and not out of compliment to the doctors' wives.

(b) Income-tax allowances are granted to all professional or business men whose professional or business activities involve them in unavoidable overhead expenses. Since this perfectly fair concession is made to any person entitled to claim it, precisely why it should now be regarded as designed for the particular benefit of the doctor's wife entirely escapes me.

(c) Doctors have been permitted to use their cars for recreational purposes, as they occupy the surely unique position of always being liable to recall, thus giving the frailest possible guarantee of their being able to enjoy any leisure time and certainly not with that feeling of absolute freedom with which other sections of the community are blessed.

What a pity it is that Mrs. Woolf is unable to secure for us in the heart of the Minister of Health the "soft spot" which she appears to think exists in those of the Ministers of Labour, Fuel and Power, and the Commissioner for Inland Revenue. All our troubles would then indeed be over.—I am, etc..

Hayes End, Middlesex.

MARGARET ELMES.

Relief of Pain in Midwifery

SIR,—Dr. C. A. Allan (Jan. 24, p. 175) states that it is surprising that so little attention is given to the problem of analgesia in labour. The true position is that the perfect analgesic for labour has yet to be discovered and that the objections to many of the available analgesic agents are so great that many doctors avoid their use not from callous indifference but from a distrust and appreciation of the dangers of such methods as prolonged narcosis with the barbiturates or the opium alkaloids, and from the experience that the use of Minnitt's apparatus and other methods of gas-air analgesia have been unsatisfactory.

In my experience the objections to the barbiturates have been principally in their effect upon the foetus. If an adequate relief of pain is obtained for the mother the foetus is frequently slow to respond at birth, and I am sure that every now and again a foetal death results from the use of the barbiturates alone.

The uses of morphine-hyoscine narcosis and similar methods may give rise in a considerable proportion of women to uncontrollable excitement which may cause extreme difficulty in delivery, and particularly in the management of a patient in her home.

Minnitt's apparatus, in an investigation in which I took part in 1934, gave satisfactory analgesia in 94% of cases, the criterion of satisfaction being the joint opinion of the obstetrician-in-charge and the patient. There is no doubt that when used by a patient who has been familiarized with its use, as advocated by Dr. Anne M. Toms (March 6, p. 475), it is a very valuable method indeed, but in various parts of the country I have found a regrettable ignorance of the proper use of the apparatus on the part not only of the patient but, as Dr. Allan points out, of the doctor or nurse. The substitution of pure nitrous oxide inhalation for the gas and air of the Minnitt apparatus, as advocated by Dr. H. Thistlethwaite (Feb. 14, p. 318) and Dr. R. John Gourlay (Feb. 28, p. 417), carries with it a danger of foetal anoxia, as in the case quoted by the latter writer. In many cases a very short period of anoxia may

be sufficient to determine a fatal outcome for a foetus, possibly already suffering from the strain of prolonged and difficult labour, and for this reason it seems to me that the safety factor of the air inlets in the Minnitt apparatus is of prime importance.

In the United States and to a less extent in this country the recent interest in continuous caudal and saddle-block spinal anaesthesia, and in other local anaesthetic methods, has been followed by enthusiastic reports from various authors, and one of the most recent of these (Hingson *et al.*, *J. Amer. med. Ass.*, 1948, 136, 221) claims to have demonstrated a considerably lower mortality rate where these methods have been used than in cases treated by systemic narcosis or general anaesthetics. They point out that the stillbirths and neonatal deaths were four times as great in cases where no anaesthetic was used as in those where local and regional anaesthetics were applied. This is probably an even more cogent argument for the use of analgesics than the dictates of common humanity, but it is impracticable to undertake these particular methods in any but large, well-equipped, and fully staffed hospital units owing to the prolonged and continuous supervision required.

The use of pethidine described by Miss Josephine Barnes (April 5, 1947, p. 437) gave relief in 87% of patients. It is a method simple to apply and safe for both mother and foetus, and in my experience leads in a considerable proportion of patients to strikingly easy labour. 100 mg. of pethidine should be given as soon as pains are well established, and repeated in three hours if necessary and if delivery does not appear imminent. This gives ample analgesia in the majority of cases, but in a few women it appears to be inadequate and in these the addition of morphine gr. 1/4 (16 mg.) by hypodermic injection will usually prove satisfactory.

One is forced to the conclusion that, as has been so often stressed before, the ideal analgesic method for labour has yet to be discovered, but in general practice the use of pethidine or morphine, with an inhalation anaesthetic for delivery such as "trilene," or even the much maligned chloroform in small dosage, is still probably the most satisfactory practicable method.—I am, etc.,

Inverness.

J. A. CHALMERS.

Leucocytosis following Treatment with Thiouracil

SIR,—The toxicity of thiouracil has been much discussed in the past few years in English and American literature. There were some cases with agranulocytosis, but leucopenia was described as the usual reaction. In the case reported below—treated with methylthiouracil—a significant leucocytosis was observed with marked increase of lymphocytes.

Female, aged 37. Diagnosis—Graves-Basedow disease, cardiomyopathy compens. Basal metabolism rate +32%. White blood cell count 8,000.

The treatment was started with minimal dose. The total dose of 4 gr. (0.25 g.) was reached only on the 13th day. On that day the white cells—previously constant at 8,000 per c.mm. even on the 10th day of the treatment—were 15,000 in number. 1.25 gr. (81 mg.) was added during the following two days. The white cell count was still high, 16,500. Then treatment was stopped. Two days later the white cell count was 9,000 and this remained unchanged the following 6 days.

The differential count at the leucocytic state: neutrophil metamyelocytes, 2%; band forms, 4%; polymorphs, 36% (5,600 in absolute count); eosinophils, 12% (1,850); lymphocytes, 40.5% (6,200); prolymphocytes, 4%; Gumprecht's shadows, 1%; monocytes, 0.5%. Two days after treatment was stopped: neutrophil metamyelocytes, 0%; band forms, 2%; polymorphs, 59%; eosinophils, 7%; lymphocytes, 30%; monocytes, 2%. Five days after this: neutrophil metamyelocytes, 1%; band forms, 4%; polymorphs, 57%; eosinophils, 4%; lymphocytes, 32%; monocytes, 2%.

The bone marrow at the time of the above deviation was unchanged. Lymphoid cells were not increased. Subfebrility, tachycardia, and basal metabolism rate remained unchanged. The response to treatment was nil.

—I am, etc.,

Szeged, Hungary.

E. KELEMEN.

Trichlorethylene in General Anaesthesia

SIR,—As Dr. Ronald Millar (March 13, p. 524) has rightly pointed out, the use of trichlorethylene in anaesthesia is still in its trial stage, and it behoves anaesthetists to report their experiences with the drug so that the full range of its useful and harmful properties may become known.

Dr. Millar reports several interesting observations regarding trichlorethylene which concur with my own experiences of the anaesthetic. I cannot agree with him, however, that a per-

centage of oxygen as low as 20 should be used with trichlorethylene. Owing to the diminished depth of respiration, I have found that CO₂ "build-up" and anoxia will occur unless a good flow of gases (at least 6 litres a minute) and 30% to 40% oxygen are given, especially in longer cases. I cannot help feeling that the increased muscular tone observed by Dr. Millar is at least partly due to hypoxia.

Dr. Millar's case of jerky abdominal movement under trichlorethylene is very interesting, as I had a similar case not long ago. The condition commenced during a period of strong surgical stimulation; a change over to ether did not completely abolish the abnormality, but within a matter of ten minutes the condition improved, and by the end of the operation respiration was normal.

I have had one case of "false anaesthesia" resembling that described under chloroform.¹ The patient, a healthy woman of 39 years, was to undergo Keller's operation. Six ml. of 5% thiopentone was given, followed by gas-oxygen-trilene with a well-fitting mask. A tourniquet was applied, and ten minutes later, when the surgeon was ready to start, respirations were regular, the limbs were relaxed, and the eyelash and eyelid reflexes were absent. The surgeon's knife showed that the patient was not indeed anaesthetized, but fortunately the deepened respirations ensuing rapidly brought on true anaesthesia.

Unlike Dr. G. Ostlere (Jan. 31, p. 195) I have had no complaints that trichlorethylene increases bleeding. On the contrary one or two surgeons have expressly asked for it because of the diminished capillary oozing. This accords with Dr. Langton Hewer's view.²

Finally I should like to say that I have found trichlorethylene very useful for ensuring a smooth transition from gas-oxygen to ether (preparing the larynx, as it were, for the stronger stimulus to come), and for most cases where anaesthesia deeper than stage 3, plane 1, is not required—provided always that adequate oxygen is given, that the warning signs of tachypnoea and cardiac arrhythmia are acted upon, and that the minimum only of the drug is used.—I am, etc.,

MARK SWERDLOW.

REFERENCES

- ¹ Minnitt, R. J., and Gillies, J., *Textbook of Anaesthetics*, 1944, p. 220, Edinburgh.
- ² *Recent Advances in Anaesthesia*, 1944, p. 103, London.

SIR,—I should like to express my appreciation of the criticism afforded my paper on trichlorethylene. There are three points in this recent correspondence upon which I beg leave to comment.

1. Safety. No fatality definitely incriminating trichlorethylene was described by any correspondent.

2. Oxygenation. We have found that in appropriate cases a mixture of 20% oxygen and 80% nitrous oxide is suitable for maintenance. Small amounts of trichlorethylene may be added to this mixture as necessary. It was finally considered that increasing the oxygen percentage when trichlorethylene was employed, which was the usual practice at Hill End Hospital between 1940 and 1944, did not decrease the tendency of the drug to produce tachypnoea. I must apologize for not making clear that adequate oxygenation of the patient is essential as with the employment of any anaesthetic agent, and that we administer up to 50% oxygen with trichlorethylene if the tidal air is markedly decreased by the action of curare. If the tidal air remains at or above normal volume an increase of the inhaled oxygen from 20 to 100% only slightly raises the oxygen content of the arterial blood.

3. Intubation. We perform nearly all our nasal intubations under trichlorethylene, a few breaths of which, following induction with thiopentone, have always appeared to establish sufficiently deep anaesthesia to prevent the appearance of vaso-vagal reflexes. Breath-holding and coughing may occur, although the patients rapidly settle down. The danger of the respiratory disturbances following intubation in light anaesthesia has been noted by Gillespie (*Endotracheal Anaesthesia*, 1948, p. 145. Wisconsin): "If the function of the patient's heart or lungs is seriously handicapped by disease, even a slight lack of oxygen, such as can be caused by holding the breath, may be sufficient to cause death." This may be the explanation of some deaths attributed to "reflex factors" and emphasizes the care that should be taken for the full oxygenation of such cases, but hardly condemns trichlorethylene out of hand as an unsuitable agent for intubation. However, I do not wish to become involved in a discussion on intubation in light anaesthesia.—I am, etc.,

Hill End, St. Albans.

GORDON OSTLERE.