the problem of old people would become more urgent; in these two age groups the bulk of domestic accidents occurred. He suggested that the opportunity was there for the medical officer of health, and that it might be advisable to carry out a careful survey of accidents which had occurred in the district before undertaking propaganda and education to counteract them.

Dr. Boucher mentioned the valuable work that was being done in some areas by the local education authorities through school teachers. He concluded by suggesting that the health visitor and sanitary inspector in routine visits could, by their influence and advice, eliminate accident-promoting hazards which existed in many homes and of which the occupiers were unaware.

LEEDS REGIONAL PSYCHIATRIC ASSOCIATION

The inaugural meeting of the Leeds Regional Psychiatric Association was held on Jan. 29 at the General Infirmary. The objects of the association are to promote and improve the mental health of the individual and the community by the study of clinical, social, educational, and administrative problems of the psychiatric practice in the region. In the course of a general discussion on the aims of the association Professor D. R. MACCALMAN, who was elected chairman, expressed the hope that the meetings would be of social as well as professional value and that it would be possible for the assistant psychiatrists in the mental hospitals to make their contribution to the work of the association. Ordinary membership is open to specialists in psychiatry and trainees who are accepted by the association's executive committee. Associate membership is open to psychologists, psychiatric social workers, and lay therapists practising in the Leeds region. The honorary secretary of the association is Dr. J. W. Affleck.

CHELSEA CLINICAL SOCIETY

The fifth meeting of the session was held on Feb. 8 at the South Kensington Hotel with the president, Mr. NILS ECKHOFF, in the chair. A discussion on the insidious onset of serious disease was opened by Dr. DESMOND MACMANUS and continued by Dr. HORACE EVANS. Both speakers replied to the subsequent discussion by Drs. POCOCK, SUNDELL, CHADWICK, ATKINSON, ECKENSTEIN, STUART WEBB, SANDELL, HUGH GARDNER, NIAL MACMANUS, SIMPSON HARVEY, and Mr. STEELER.

Certain sections of the Criminal Justice Act, 1948, involve the National Health Service. Section 24 confers upon courts of summary jurisdiction power to make orders for the reception and detention of offenders in institutions for persons of unsound mind. Where such an order is made it has the same effect in law as if it were a summary reception order made by a justice under Section 16 of the Lunacy Act, 1890. In most cases in which the question of action under this section arises the court will have remanded the person concerned for a medical examination and report on his mental condition under the provisions of Section 26. Before an order is made under this section the clerk of the court will normally ascertain, through the regional hospital board, the name of a hospital in which the patient can be received. However, where "catchment" areas have been allotted to mental hospitals, or as and when they are allotted, regional hospital boards should inform courts of summary jurisdiction in their area of the arrangements made in order to enable them to make the necessary arrangements for the patient's reception direct with the appropriate hospital. Subsection (3) enables payment of the usual allowances under the Witnesses Allowances Order to medical practitioners for attending and giving evidence for the purposes of the section. Section 26 enables a court of summary jurisdiction, where it is satisfied that the person charged with an offence, punishable on summary conviction with imprisonment, has committed the offence, to remand the offender on bail for periods not exceeding three weeks at a time for the purpose of medical examination and report on his physical or mental condition by a duly qualified medical practitioner. The court is empowered to make it a condition of his bail that he shall undergo examination at a specified institution or place or by a specified medical practitioner. The institutions and out-patient clinics in the National Health Service will be available to courts free of charge for this purpose. Unless the court for any special reason thinks it necessary that the medical practitioner who makes the examination should attend and give oral evidence, the report of the examination will be made in writing.

Correspondence

Plasma-cell Mastitis

SIR.—Dr. Max Cutler (Jan. 15, p. 94) has done a useful service by his excellent review of plasma-cell mastitis in drawing attention to an uncommon lesion of the female breast which is of sufficient importance to merit more widespread recognition. Dr. Cutler established this condition in the literature as a distinct entity with a characteristic clinical picture following a study of 10 cases in the year 1931,¹ and subsequent studies have served mainly to confirm the accuracy of his original observations.

In 1941, along with Dr. M. B. Dockerty, I reported a series of 24 instances of plasma-cell mastitis from a group of considerably more than 12,000 benign, malignant, and inflammatory lesions which had been treated at the Mayo Clinic.² At that time I thought that the condition must be an extremely rare one, but since then, with access to a much more limited supply of clinical material, I have encountered three additional cases, and I now wonder whether a careful look-out for these cases by clinicians would not be rewarded by the discovery of a large number of unrecognized instances of the disease.

There are two points which should be emphasized in considering the aetiology of the condition. In the first place, it has been observed only in parous women. In some cases as long as 25 years have elapsed between the last period of lactation and the appearance of the lesion, but lactation has preceded every reported lesion. Secondly, when the patient has been available for questioning the usual finding has been that for some reason or another she had not been able to use that breast for nursing purposes. In seven out of the Mayo Clinic series of 24 cases the nipple was congenitally retracted. In another case in the same series, and in one studied later, the lesion had occurred in an accessory breast. I believe that the retention of milk in the breast for long periods forms the most satisfactory explanation of the cause of the lesion. It is easy to understand that the retained products of lactation, probably altered by the action of enzymes, might eventually find their way into the periductal tissues and there, by chemical irritation, set up the typical low-grade inflammatory response characterized by infiltration of plasma cells, epithelial autonomy, and the appearance of giant cells. It would also explain the phagocytosis of fat droplets which is such a marked feature of some of the sections and the discovery of fatty-acid crystals in others. However, the most convincing argument in favour of this hypothesis is the experimental production of a similar picture by Rodman and Ingleby,³ who injected pancreatized milk into the breasts of virgin rabbits and pancreatic extracts into the breasts of lactating rabbits.

Although on section of the affected breast the lesion appears to consist of multiple discrete foci, tridimensional inspection, were that possible, would reveal a continuous extension of the cellular exudate along the outer surfaces of the milk ducts, embracing them in much the same way as ivy overgrows the trunk and branches of a tree. One effect of this process is the tendency to compression and obliteration of the duct system which prompted the earlier German authors to style the condition "mastitis obliterans." This is indeed the most characteristic feature of the lesion, and the term is, to my mind, preferable to "plasma-cell mastitis," because it is applicable to the many specimens in which plasma cells, although present, do not predominate. However, if the conception of the aetiology of the condition as stated above could be regarded as proved, "stale-milk mastitis" would be an even more appropriate title.

Dr. Cutler's description of the characteristic clinical sequence of a minor inflammatory episode characterized by pain in the non-lactating breast followed later by the discovery of a lump bearing all the hall-marks of malignant disease is admirable, and there is no question that a typical history may give a clue to the diagnosis. But unfortunately this history is not always obtainable. Five of the 24 patients studied by Dr. Dockerty and myself gave no history of pain in the breast prior to the

finding of the lump. In these cases the condition could not have been suspected by clinical examination alone.

It has been suggested that "plasma-cell mastitis" can be diagnosed clinically. I think that the time has come when any surgeon who indulges in this type of guess-work should be brought to task for his errors. Biopsy is a simple and safe procedure and should be carried out in all cases of breast tumour. Any risk, discomfort, or inconvenience which may be occasioned to the patient by this trivial procedure cannot be weighed against the surgical crime, in the treatment of a lesion that may be malignant, of temporizing until the opportunity for its successful ablation has been irretrievably lost. In my experience the pathologist has had no difficulty in recognizing the inflammatory nature of the condition by the technique of quick-frozen section. The actual diagnosis has sometimes been in doubt, due to lack of acquaintance with the disease, but it has always been possible to rule out malignancy by this means. Some of the cases have been labelled "atypical tuberculosis," but the differentiation between the two conditions is not difficult when it is remembered that plasma-cell mastitis involves the ducts and periductal tissues, while tuberculosis usually has a perivascular and perilymphatic distribution. Furthermore, in tuberculosis typical tubercles are nearly always found, and they often contain caseous centres. In plasma-cell mastitis the tubercles are artifactual and caseation is not discernible.

The experiences of Rodman and Lübschitz⁴ serve as a warning that major surgery should be delayed until after the subsidence of the inflammatory stage. Dr. Cutler's observations on the radiosensitivity of the lesion during this period are interesting, but in view of the morbidity of irradiation and the tendency shown by the lesions to subside spontaneously the time-honoured ritual of painting the part daily with iodine is probably all that is needed in the acute stage after the diagnosis has been established by biopsy. Local removal of the residual lump or simple mastectomy should be carried out when the lesion is no longer painful or tender. There is no indication for radical surgery. In the case reported by Gronwald⁵ part of the plasma-cell exudate was left behind and no harm resulted.

I am not aware of any evidence to suggest a relationship between plasma-cell mastitis and carcinoma. Even if a case were to be reported in which the two conditions coexisted, the possibility of pure coincidence would have to be taken into consideration. Dr. Cutler's case of bilateral plasma-cell mastitis is the only one that has come to my notice. Two of the patients in the Mayo Clinic series gave a history of disease in the other breast, a cyst in one case and an abscess in the other. In the remainder the contralateral breast was free from disease. Dr. Cutler is to be congratulated on his discovery of this unique case.—I am, etc.,

Ottawa, Ontario.

COLIN D. L. CROMAR.

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- ¹ Cheattle, G. L., and Cutler, M., *Tumours of the Breast*, 1931, pp. 298–304. London: Arnold and Co.
- ² *Proc. Mayo Clin.*, 1941, **16**, 775.
- ³ *Ann. Surg.*, 1939, **109**, 921.
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- ⁵ *Zbl. chir.*, 1931, **58**, 663.

Self-administered Trilene Analgesia

SIR,—May I from 8,000 miles away make some comment on the letters of Mr. F. Neon Reynolds (Sept. 25, 1948, p. 620, and Oct. 23, p. 761), and Professor R. R. Macintosh and Dr. C. Langton Hewer (Oct. 9, p. 691)? It seems to me that the latter two correspondents are constrained to base their criticism of the present "trilene" inhalers on the fact that they are not ideally "foolproof" as seen through the eyes of an advisory council for midwives. Nothing in this world is "foolproof": least of all the motor-car, or even the bicycle, provided for the midwife. I suggest that the very stairs up which she climbs to attend her cases have been responsible for more foetal and maternal morbidity than trilene (or any other) analgesia ever will be.

A year ago I presented¹ a preliminary paper on trilene analgesia as yielded from a small pocket inhaler, now known as the "trilene inhaler" (10 oz. or 284 ml.), covering over 2,000 cases, of which about one-third were obstetrical, including mid and high forceps, eclampsia, craniotomy, perineal repairs, etc. Results from this group bore a striking similarity to those obtained in over 50 other painful conditions—85% good, 9% fair, and 6% failures.

Since this time I have collated approximately 5,000 cases of the use of my inhaler, and there are probably 10 times this number unobtainable up and down this country, in England, and in other parts of the world. As is the way of our profession, I have no doubt whatsoever that I should have heard sharply and crisply had any untoward sequels arisen through its use. I have had no such report.

An even more important point is that in a very considerable proportion of the cases (all of which were of course self-administered) the patients were Africans, often of necessity left unattended for long periods of time with what has become known as the "white-man's pain pipe." Now, in matters of medicine the Bantu has a staggering disrespect for quantities, and it has been observed that the trilene ampoule of 6 ml. lasts usually a much lesser time than when used by the European, owing to the former's inhalational enthusiasm. Yet no report of effect on the child has been received, and, except for one observer who thought "the duration of the labour was slightly increased," none on the mother.

Drs. Helliwell and Hutton² state that trilene passes the placental barrier. So does chloroform, ether, cyclopropane, etc. These and nitrous oxide have a relatively ineffective phase of analgesia: trilene has a very marked one. The point of interest is, however, whether the quantity of trilene required to provide maternal analgesia will be such as to jeopardize the infant. As far as my results from this inhaler show, there is no practical effect.

Thousands of women are being permitted daily to suffer pain in childbirth when we have at our finger-tips the means greatly to relieve them. To my mind it is fantastic that what is considered satisfactory and safe is being withheld from many thousands of ordinary people because the intermediary—the midwife—is considered insufficiently intelligent to lift the curtain of pain for one in the drama she unfolds for two.—I am, etc.,

Durban, South Africa.

J. T. HAYWARD-BUTT.

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- ² *Anaesthesia*, 1948, **3**, 176.

Haemolytic Disease of the Newborn

SIR,—Sir Leonard Parsons (Feb. 5, p. 234) has commented on our paper published in your columns of Jan. 22 (p. 123). It seems that the main point of controversy is whether the occurrence of kernicterus is or is not closely related to the severity of the haemolytic process.

In a letter to the *Lancet* on April 19, 1947, Sir Leonard Parsons wrote, "... there is no evidence that the products of haemolysis ever produce such damage [i.e., to the liver and brain]. Indeed the evidence is all to the contrary; for instance, changes in the liver and brain have never been described in congenital anaemia of the newborn in which the degree of haemolysis is greater than in icterus gravis." We summarized this letter by saying that Sir Leonard Parsons believed that there was an inverse relationship between the degree of blood destruction and the development of kernicterus, but readily accept his contention that we should have said that he had never found "any parallelism" between the two phenomena.

The causation of kernicterus remains obscure, but our observations strongly suggest that the condition is more likely to develop if the infant is anaemic at birth than if it is not. We have tried to show that this relationship is obscured by the changes in haemoglobin concentration that occur after birth; and we are not aware of any observations on cord blood which refute the evidence that we have obtained.—We are, etc.,

London, W.12.

P. L. MOLLISON.

MARIE CUTBUSH.

Diagnosis of Tuberculous Meningitis

SIR,—I have been reading with interest the recent correspondence on the diagnosis of tuberculous meningitis and should like to suggest that present investigators might do well to include an estimation of the blood/C.S.F. sugar ratio in their biochemical tests. In my series of cases examined ten years ago I found this estimation to be of greater diagnostic significance in the early stages of the disease than that of the C.S.F. sugar alone. It should not be forgotten that the convulsions