These, Sir, are briefly the findings in this case, and I consider it rare and interesting for the following reasons. (1) The heart condition seems to have been a toxic myocarditis causing ectopic ventricular beats. (2) The toxæmia was mild, causing no temperature or tachycardia. (3) In my library I cannot find any cardiograms like the tracings found in this case. (4) The clinically alarming condition of her heart and the rapidity with which it cleared up.—I am, etc.,

Roscommon, Eire.

JOHN J. WALLS.

Obstetric Emergency Service

SIR,—Mr. Frank Stabler's excellent paper on the Newcastle-upon-Tyne obstetric emergency service (Nov. 29, p. 878) gives me an opportunity to make a point of which I became convinced as an obstetric H.S. and the value of which I have since had a chance to confirm in general practice. This is that the general practitioner's obstetric bag should include either saline or plasma and a giving set. If he is to be called by the midwife in emergency he should at least bring these simple requirements; in this way he may very well save some of those cases which the "flying squad" admittedly cannot reach in time. He can put up a drip before undertaking manual removal of the placenta—a precaution which I find gives considerably increased confidence. Should the flying squad be called they arrive to find the transfusion arrangements ready set up and can the more quickly continue with any obstetric manipulations that may be necessary.

I would suggest that the regional transfusion officers might organize the supply and turnover of saline and standard giving sets to practitioners. After all, since the war there must be very few practitioners under the age of 50 unfamiliar with simple transfusion apparatus. The supply of plasma might, however, be impracticable. Such apparatus will also come in useful in pit accidents, and its availability on the spot has saved the life of one of my fellow practitioner's patients in this area.—I am, etc.,

Morpeth, Northumberland.

R. P. ROBERTSON.

SIR,—If penicillin resistance is to raise its hydra head, manual removal of placenta may well regain pride of place as the most dangerous operation in midwifery. One pictures the modern scene. By the time Mr. F. Stabler has scrubbed up and donned a pair of dry sterile gloves (another pair, of the right size, lying ready in case he tears the first), sister has "wooded" the patient from navel to knees, a sterile towel is on the abdomen, another occludes the rectum, the vagina has been swabbed with flavine, and another expert has anaesthetized the patient. It is probable that in these circumstances running in and out of the uterus as advised may not end in disaster.

But what of the occasional obstetrician in the back of beyond who knows that Mr. Stabler cannot reach him and the blanched woman under two hours? Hastily scrubbing up, he pours pure "dettol" on his hands and "washes" till tacky, anxiously eyeing the while inexpert chloroform dripping at one end and red blood at the other. Introducing a hand he separates the placenta all round and delivers it—*horribile dictu*—by pulling on the cord, and then feels round for debris. Obviously the uterus cannot invert with the hand in the fundus; the membranes are not more likely to be torn than by fingers scratching about inside; and only one introduction is required. One would of course not dare to say this had one not heard it advocated by a most distinguished London gynaecologist.—I am, etc.,

London, E.4.

FREDERIC SANDERS.

"Unjustified" Use of d-Tubocurarine Chloride

SIR,—I hesitate, as an obstetrician, to enter into this correspondence between two such experts, but as I understand it the uses of curare in this respect are that (a) it greatly diminishes the tendency to spasm, making intubation, if necessary, easier; (b) it enables the entire anaesthetic to be conducted on an exceptionally light plane so that the infant, not being "anaesthetized," cries almost as soon as the head is born and the patient almost before leaving the theatre is becoming conscious; (c) it "potentiates" the action of the barbiturate, thereby lessening the required dose. These reasons Dr. T. Cecil Gray has already ably expounded. Dr. A. H. Galley (Nov. 22, p. 840) has

scarcely viewed the matter from the standpoint of the obstetrician when he states that "the only possible reason for administering curare preparations to caesarean sections must be for its effect in relaxing the tone of the abdominal musculature." In point of fact, while a fair degree of relaxation is obviously desirable in the initial stages of the operation, it is clearly not asked for with the same urgency as in general surgical procedures in the upper abdomen.

In so far as uterine tone is said to be enhanced by this type of anaesthesia, the problems in pure physics inherent in the contracting uterus simplex at the onset of labour are sufficiently complex as surely to make it unlikely that one may justifiably cite a simple relationship between "kemithal"—cyclopropane anaesthesia and the "eyeful of liquor" which incommoded the present P.R.C.O.G. The incident was disturbing but did not necessarily prove very much, and with optimum conditions such an incident could, I imagine, be repeated quite easily under local anaesthesia. The essential point which I would make is that as an obstetrician one bears a heavy responsibility, not for one life but for two. The mother is frequently ill prepared for a major surgical procedure in comparison with what her state of preparedness would have been for most procedures in general surgery, and the influence particularly of the older types of inhalation anaesthesia on the foetus is too well known to need emphasis. The technique that my colleague Dr. Gray described so well in the *Journal* of April 5 (p. 444), and with which I have now had a fair experience in collaboration with him and other expert anaesthetists, seems to me to offer the obstetrician a few more significant advantages than a little added relaxation of the abdominal musculature, which in any case can often be done without in the initial phase of the operation.—I am, etc.,

Liverpool.

H. VINCENT CORBETT.

Diabetes Insipidus and Hyperostosis Frontalis

SIR,—I have read with great interest Prof. G. Marañón's article about diabetes insipidus and uterine atony (Nov. 15, p. 769), but I am surprised that he does not discuss the possible significance of the slight frontal hyperostosis disclosed by the radiograph. Could that hyperostosis not be the "non-malignant non-progressive lesion of small size" for which he looks? It is known that patients with hyperostosis frontalis interna have frequently cerebral symptoms and signs and particularly those pointing to the hypothalamic-pituitary region.—I am, etc.,

Harrow Weald, Middlesex.

A. LETCHNER.

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Oxytocic Action of Ascorbic Acid

SIR,—Prof. Chassar Moir emphasized^{1,2} the proper use of pituitary extract and ergometrine during and after labour. Dale's³ discovery and Hofbauer's⁴ practical application of the remarkable physiological action of posterior-pituitary extract on the gravid uterus, and Dudley and Moir's⁵ isolation of ergometrine, are corner-stones in the advance of conservative midwifery.

The dangers of employing pituitary extract for induction and acceleration of labour have been stressed repeatedly. Chassar Moir's golden rules for the use of standardized pituitary preparations should be strictly observed by all who practise midwifery. With considerable interest I have therefore collected experience about the use of ascorbic acid as an oxytocic agent in labour, having had in mind the disadvantages of pituitary-extract preparations in the first and second stage of labour. My observations, which are based on several hundred deliveries, confirm the views of Kappeli,⁶ of the gynaecological university clinic in Berne, that ascorbic acid has a distinct influence on uterine contractility.

I found that the time of employment is chiefly the dilatation period. Contractions must be established. It has, therefore, no effect on an inactive uterus. For induction of labour I found it unsuccessful. Ascorbic acid is used in the first stage, cervix 2-3 fingers wide, when uterine contractions are less than one in three minutes and weak. It is administered preferably by mouth, 100 mg. of ascorbic acid for three doses at half-hourly intervals. If there is no effect the drug can be given in three 6-hourly courses within 24 hours. A 1-min. (0.06-ml.) dose of

"pitocin" can be given after the third dose of ascorbic acid if desirable, often with a very notable oxytocic effect. Higher doses of ascorbic acid are useless. Intravenous use may lead to tonic contractions. Intramuscular administration is of no advantage.

Ascorbic acid proved especially useful in patients with uterine inertia, in which posterior-pituitary extracts were contraindicated. There were no ill effects in mother or baby. In malpresentation, trial labour, antepartum haemorrhage, and foetal distress, where the use of other oxytocics needs greatest supervision and caution in dosage, ascorbic acid is safe and deserves a trial before any other oxytocic agent. Toxaemias of pregnancy are a great field for the use of ascorbic acid as an oxytocic.

It is worth noting that, with the above qualifications, ascorbic acid seems to me an active oxytocic drug which is preferable to posterior-pituitary extract, especially for patients with hypotonia in the dilatation period. The object of this communication is to call for further experimental and practical investigations of a relatively simple and safe chemical substance which appears to regulate and stimulate contractions on the already active gravid uterus.—I am, etc.,

London, W.1.

W. SPITZER.

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- ³ *Biochem. J.*, 1909, **4**, 427.
- ⁴ *Zbl. Gynäk.*, 1911, **35**, 137.
- ⁵ *British Medical Journal*, 1935, **1**, 520.
- ⁶ *Helv. med. Acta*, 1940, **7**, 169.

Dwarfism, Hormones, and Dieting

SIR,—Dwarfism associated with hypogonadism may be of endocrine origin and may respond to gonadotrophic hormone, testosterone, or anterior-pituitary growth hormone. Preparations of the latter at present available are, on the whole, disappointing, although in October I showed a patient of 15 years of age with infantilism at the Royal Society of Medicine (Endocrine Section) who had grown 3 in. (7.6 cm.) in a few weeks on large doses of growth hormone at a total cost of £60, or \$240, the available preparations being of American origin. The local reactions to these large doses—e.g., 5 ml. b.d.—were severe and painful.

In October, 1946, at one of my hospital out-patient clinics I saw a boy of 15, height 4 ft. 6½ in. (138.4 cm.) with hypogonadism, whom I proceeded to treat with thyroid and pituitary growth hormone (by injection) until April, 1947, at the end of which period of six months he had grown 5⅞ in. (1.6 cm.). I then lost sight of him for five months, and when he reappeared in September of this year he had grown a further 2½ in. (6.3 cm.) in a period of five months. I assumed at first that he had carried on with the treatment, but I was informed by his mother that he had had no treatment whatsoever but had gone to some relatives on a farm in Ireland and had enjoyed open air and some very good food. In the few months he has been home he has ceased to grow. It is difficult to believe that the growth was unrelated to the period of five months in Ireland.

I am reminded of the work of my old professor, the late Sir Frederick Gowland Hopkins, on the importance of animal proteins and some of the amino-acids essential for growth—e.g., tryptophan and lysine. I am also reminded of the experiments of Corry Mann many years ago (1926), who showed that if the population of a large poor-school were divided into two sections and one half received an extra pint (568 ml.) of milk daily the children in that section grew 1 in. (2.54 cm.) per annum more than those of the control section.—I am, etc.,

London, W.1.

S. L. SIMPSON.

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Remuneration of Specialists

SIR,—A factor which should be considered in regard to the remuneration of a specialist is length of the necessary apprenticeship, though responsibility and annual turnover of patients may also be relevant. It is not reasonable for the man who has worked for a year or two at a special subject and obtained a diploma to expect the same returns as the man who has worked for a higher qualification and is prepared to spend possibly ten years earning little and acquiring the experience to establish himself.—I am, etc.,

Lymington, Hants.

GEOFFREY HALLETT.

Space for X-ray Departments

SIR,—The carefully thought-out plan for a hospital unit which accompanies the article by Mr. H. J. McCurrich on "A Suggested Hospital Unit" (Nov. 22, p. 832) has reminded me once more of the oblivion into which the Recommendations of the British X-Ray and Radium Protection Committee have fallen. This otherwise admirable scheme allows approximately 14 ft. by 11 ft. (4.3 m. by 3.4 m.) for the x-ray room and 5 ft. by 5 ft. (1.5 m. by 1.5 m.) for the dark room and a similar size of store room. The Recommendations referred to above stipulate a minimum floor area of 250 square ft. (23.4 sq. m.) for x-ray rooms and 100 square ft. (9.2 sq. m.) for dark rooms. It is astonishing that only 154 and 25 square ft. (14.2 and 6.7 sq. m.) respectively should have been allowed.

The author expressly states that the plan does not claim to be perfect in detail and mentions the desirability of having the plaster room and x-ray room adjoining. But what interests me is that a plan should be prepared which so flagrantly violates recommendations that are supposed to be accepted by the responsible medical bodies of this country.

Recently another firm of hospital architects raised no objection to a proposal to put an x-ray department in a basement until I drew their attention to the existence of the Recommendations. It was then found that the proposal originated with the architects of the Ministry of Health. On pointing out that one of the Recommendations was that x-ray departments including dark rooms should not be situated below ground level, the proposal was dropped, but my attention was drawn to the fact that many other hospitals have x-ray departments in basements.

Among numerous others the Westminster Hospital, one of the most recently planned and built of large teaching hospitals, has its x-ray department below ground level, I am informed. If this is so, it merely emphasizes the extent to which the Recommendations have been forgotten. They are expressly stated to be minimum requirements and not optimum objectives, and I feel that they should be resurrected and enforced in the way that building by-laws are.—I am, etc.,

Richmond, Surrey.

DOUGLAS GORDON.

Blepharospasm

SIR,—Among the various tics which we are called upon to treat probably none is more frequent or intractable than the twitching eyelid. Some time ago I was consulted by a patient who was greatly distressed by this condition, which had persisted for nearly a month. He had only decided to get medical advice when on the previous day the ear on the affected side began to ache. When I examined the ear it was full of hard wax, the removal of which was followed by an almost immediate and dramatic cessation of the tic, which has not recurred. Since then I have treated another patient for the same trouble in similar fashion, with almost immediate relief of the condition. In this case, however, there was no accompanying earache, deafness, or tinnitus to guide one.

I am writing this because in such literature as I have by me on the subject the causes of tics are variously listed as errors of refraction, conjunctivitis, carious or unerupted teeth, phimosi, worms, adenoids, and constipation. I find no mention of cerumen auris as an exciting cause, a condition which one may easily fail to consider.—I am, etc.,

West Malvern, Worcs.

W. G. SHAKESPEARE.

Health Centres

SIR,—I read with great interest Dr. S. F. Logan Dahne's letter (Nov. 8, p. 744) on the subject of health centres. It seems to me that such a development does give promise of an improvement in the medical services of this country, and it fits in admirably with an idea I have had in mind for some time as to the organization of the hospital service.

For this purpose I should like to see the country divided into areas, each with its base hospital staffed by whole-time consultants and specialists. These would preferably not be on a whole-time salaried basis. The base hospital would be surrounded by satellite (local) hospitals, staffed by such of the local G.P.s as had the desire, ability, and experience to take