3. Where members of the staff of an approved hospital carry out some of their work at other hospitals not able to comply with Condition 2 (above), they may obtain supplies of radon through the approved hospital provided that the radiotherapist of the approved hospital is satisfied that the radon is to be used under such conditions as will provide for efficiency.

Under these conditions the following hospitals have been approved to date-Sept., 1943:

Aberdeen Royal Infirmary Birmingham United Hospital	Marie Curie Hospital Middlesex Hospital
Bournemouth, Royal Victoria and	
West Hants Hospital	Institute, Northwood
Bradford Royal Infirmary	Newcastle, Royal Victoria Infirmary
Bristol Royal Hospital	Newport, Royal Gwent Hospital
Burnley Victoria Hospital	Northampton General Hospital
Cambridge, Addenbrooke's Hos-	Norwich, Norfolk and Norwich Hospital
pital	Oxford, Radcliffe Infirmary
Cardiff Royal Infirmary	Plymouth, Prince of Wales's Hospital
Charing Cross Hospital	Rochester, St. Bartholomew's Hospital
Edinburgh Royal Infirmary	Royal Cancer Hospital (Free)
Glasgow Royal Cancer Hospital	Royal Free Hospital Royal Northern Hospital
Glasgow Royal Infirmary	St. Bartholomew's Hospital
Glasgow Western Infirmary	St. George's Hospital
Guy's Hospital	St. Mary's Hospital
Hull Royal Infirmary	St. Thomas's Hospital
King's College Hospital Lambeth and Hammersmith Hos-	
	Southampton, Royal South Hants Hos-
pitals, L.C.C. Leeds General Infirmary	pital
Leicester Royal Infirmary	Stoke-on-Trent, North Staffordshire Royal
Lincoln County Hospital and	Infirmary .
Scunthorpe Hospital	Swansea General Hospital
Liverpool Radium Institute	Tunbridge Wells, Kent and Sussex Hos-
Liverpool Royal Infirmary	pital
London Hospital	University College Hospital
Manchester Royal Infirmary and	
Holt Radium Institute	Wolverhampton Royal Hospital
Lam etc	-

-I am, etc.,

GEORGE F. STEBBING, Hon. Secretary, National Radium Commission.

Care of the Child's Eyesight

SIR,-The large sum which is to be devoted to research in ophthalmology at Oxford and to the prevention and treatment of eye diseases has caused much gratification and should bring great benefit to the public. In the meantime much could be done in the prevention of eye troubles at a very small expense. It has always seemed strange to me that, while children attending council schools have their eyes examined at regular intervals, there appears to be no routine examination of the eyes in public, preparatory, or private day schools, except in a very few instances. It would be simple for the visual acuity of these children to be checked twice a year; this could be done by one of the staff of the school with the aid of a Snellen eve chart, and no expert knowledge is required. Any child who did not come up to the normal standard could then be referred to an ophthalmic surgeon, and much valuable time would be saved. Under present conditions, if a child complains that he cannot see the blackboard, the master, instead of sending him straightway to an ophthalmic surgeon, usually tells him to go and sit in a desk in the front of the class, where the child is quite happy for another 12 months while the myopia steadily increases. Myopia usually comes on between the ages of 11 and 15 in those in whom there is a family tendency, and unless the child is examined twice yearly it is quite often unsuspected until the condition is fairly advanced.

I think the following three suggestions would do much for the eyesight of our future citizens: (1) That the visual acuity of all school children should be checked twice a year. (2) That they should work only in well-lighted class-rooms in desks suitable to their size so that they are always in the correct posture. (3) That no child should be allowed to read in bed except in the case of illness, when great care and attention should be given to the lighting .--- I am, etc.,

Camberley.

LESLIE HARTLEY.

Health and Tonsillectomy

SIR,-In your annotation entitled "Health and Tonsillectomy " (Sept. 11, p. 334) you sum up by saying: "This study supplies additional evidence to support the view that a large proportion of the tonsil and adenoid operations in children are unnecessary." The "view" may or may not be correct, but I cannot find any support for it in the "study." The compiler of the first series of statistics quoted by you

states that "the tonsillectomized group had no advantage over the group who were not operated on," and most of the others

give expression to the same idea. But why should one expect to find any advantage? Why should any person who has undergone any operation have an "advantage" over another who has not required it?

Consider a single case. Johnny has had his tonsils removed and Tommy has not. In assessing the value of the operation we do not ask whether Johnny enjoys better health than Tommy or has any advantage over him. We ask whether he enjoys better health after the operation than he did before. Almost invariably the parents say that he does. I think that that is the only criterion by which the operation should be judged. The multiplication of the case by 100 or 100,000 does not make any difference to the validity of the argument. The only series of statistics in your list that has any real bearing on the question is that of the 364 boys whose sickness incidence had been studied both before and after operation, and in that series it is admitted that the operation was justified.-I am, etc.,

London, S.E.25.

ALEX ROSE.

Action of Pentose Nucleotides

SIR,-In the article on stimulation of leucopoiesis (Sept. 18, p. 365) there is the statement that pentose nucleotides "act mainly by redistribution and mobilization of preformed leucocytes." It would be valuable if the evidence for this statement could be published. My own experience does not support the contention. I find that, after starting treatment with pentose nucleotides, there is always a period during which no blood changes develop, however large the doses given. This period is about 4 days; and after its expiry there are immature granulocytes in the peripheral blood-a change that cannot be due to redistribution of cells already present in the circulation. In cases in which the treatment fails there are no such blood changes, and any explanation, other than that of new formation of cells in the marrow, must take these facts into account .--- I am, etc., London, W.1.

A. PINEY.

Arsenic for Vincent's Infection

SIR,-I beg to disagree with Squad. Ldr. E. C. O. Jewesbury's statement in his article (Sept. 18, p. 360) that the employment of intravenous arsenical compounds for Vincent's infection is useless and wasteful.

As medical officer in the V.D. clinic attached to this hospital I have not infrequently seen cases of Vincent's gingivitis or stomatitis develop during arsenical therapy, although I cannot recall a case of faucial ulceration occurring under these circumstances. In most cases bismuth has also been employed, and may by irritating the gums be a precipitating factor in the onset of a Vincent's infection.

In my work in the fever wards of this hospital I again encounter Vincent's infection—cases admitted for diagnosis of diphtheria, or for treatment because of the severity of the condition. As I see all cases outside before admission, trivial or mild cases are not admitted. In those cases of acute faucial angina due to Vincent's organisms I have no doubt as to the efficacy of the intravenous administration of arsenic, as either N.A.B. or mapharside. Pain, fever, and malaise rapidly subside in the great majority of cases, and the local throat condition clears rapidly. I can recall only once having to give more than one injection. The gingivitis which often accompanies the faucial condition does not respond so well, and usually requires local treatment.-I am, etc.,

Isolation Hospital, Southend-on-Sea,

A. B. Christie, Medical Superintendent.

The Common Cold

SIR,-The following facts may be of interest to either sufferers from or investigators of the common cold. During the course of twenty-five years' practice of psycho-analysis for the treatment of psychoneurotics I have observed that in them: (1) A cold invariably occurred in a particular emotional state. (2) The cold invariably occurred in a particular emotional state. (2) The occurrence of a cold could be prognosticated whenever this state developed. (3) The cold could be aborted if a different emotional state could be produced in the course of treatment, or or could be shortened if it had started. (4) Cold, wet, hunger, or could be shortened if it had started. (4) Cold, wet, hunger, exhaustion, and a source of infection do not result in the development of a cold in the absence of the appropriate

emotional state. (5) Cold "proneness" disappears completely as a result of successful treatment, and does not recur.

Though these observations have little immediate practical value, my experience demonstrates to me at least that the solution of the problem of the common cold lies in the sphere of preventive psychological medicine. The specific factor is psychological; the microbic one secondary.-I am, etc.,

> E. WRIGLEY BRAITHWAITE, Consulting Psychiatrist, Ministry of Health.

Sterility and Contraception

SIR,—In your issue of Sept. 11 (p. 350) Dr. Gibbon Fitzgibbon of Dublin questions the accuracy of the statement that contra-ception in nulliparous women is liable to cause sterility, and asks for further evidence of this. His request would seem most opportune, for there appears to be considerable loose thinking upon this subject. Very few authorities are teaching that contraceptive practice and sterility are related, but, should this tenet be true, it is clearly most necessary that the whole medical profession should recognize this fact and teach accordingly. For this reason a full discussion should be welcome.

Dr. Fitzgibbon finds that "the vast majority of causes of primary sterility are conditions which pre-existed marriage. Informed opinion would surely anticipate this conclusion. Mazer and Israel (Menstrual Disorders and Sterility, Heinemann) find that non-patency of the Fallopian tubes and faults in the seminal fluid are the two commonest single factors in the barren marriage. By no stretch of imagination could contraceptive practices bear upon these.

Doctrines which coincide with people's deepest superstitions, however unfounded, are always difficult to eradicate. From time immemorial the infertile woman has tacitly accepted her barrenness as a stigma and a punishment. It is a great responsibility, therefore, to play upon fears of this nature. The point is not merely academic. When the late Sir Francis Fremantle announced in Parliament that this alleged danger of contraception must be "preached from the house-tops" he must have brought grave anxiety to countless young married women, and may have caused many to renounce their Service jobs, or munition work, in favour of immediate pregnancy. If such teaching is true, only good can result. But at a time when the mysteries of sterility are beginning to be understood, surely the medical profession must shoulder the responsibility of agreeing upon such matters and giving concerted guidance upon them to the public.-I am, etc., JOAN MALLESON.

London.

Artificial Insemination

SIR,-I was interested in Dr. Mary Barton's letter (Sept. 4, p. 312), and while I do not wish to deprecate the value of scientific work on this subject, I feel that the procedure which she suggests where the husband has been proved the sterile partner-namely, the insemination of the wife with donated semen—is likely to worsen rather than improve the marital relationship, and is also handicapping unfairly the child born in this way. I shall deal with the psychological effects in each partner and on the child in turn, as I see them.

First, the mother. She is given the satisfaction of bearing her own child. Is Dr. Barton sure that this joy is sufficiently lasting and sufficiently embracing to give complete satisfaction to the mother, knowing that her husband was not the father? Was the donor carefully selected as resembling the sterile husband in appearance, or in character, temperament, and all these traits which attract a woman to a particular man? Have we any guarantee that the secret of the child's birth will be for ever concealed within the breast of husband and wife? Will the woman's love not tend to fix itself on the child and withdraw more and more from her husband, in spite Does the fact that she agrees to such a proof his generosity? cedure not suggest that a child-fixation of her love and affection is almost inevitable?

Secondly, the husband, whom Dr. Barton seems to have left out of her calculations. She speaks of the "generosity" of the husband in giving his consent. I should rather use the expression "generous impulse," and I should fear that such an impulse in times of anxiety and trial would be perhaps bitterly regretted. I can see the sterile husband drifting away from his wife rather than being drawn closer to her by such a solution of their problem.

Thirdly, the child. Such a child would, in my opinion, be extremely prone to develop an Oedipus or mother-fixation complex.

To sum up. I am convinced that such a procedure would lead to a constant struggle, obvious or repressed, between the child and the husband for the woman's love and affection. The effect of such emotional conflict seems to me fraught with danger both to the marital relationship of husband and wife and to that atmosphere of security and happiness in the home which is so essential to the development of a child's personality.

On the other hand, I feel that the couple who adopt a child by mutual consent, after the necessary investigation to make sure that the husband is permanently sterile, have a much better chance of achieving mutual happiness, and that the woman's maternal instinct can be satisfied, sublimated perhaps if you like, by the nurture and care of such a child, in a fashion more lasting than the thrill of the physical act of motherhood.-I am, etc.,

Falkirk, Stirlingshire.

ALEX. LEITCH.

SIR,-May I add to Dr. Barton's plea that careful consideration be given to and greater use be made of artificial insemination. Among its indications are: (1) impotence-more especially for the persistent case of premature ejaculation without penetration; (2) low counts containing some actively motile normally shaped sperms; (3) when the operation of epididymo-vasostomy is not desired or has proved unsuccessful in cases of double epididymal block. Here needle puncture can often obtain 0.2 or 0.3 c.cm. of fluid containing active spermatozoa. By replacing the puncture needle with a blunt Labat this amount can be inseminated without loss, giving the only possible chance of a family. In all these instances the husband's semen is utilized, and there can surely be no objection.

Selected donor semen, frequently that of the recipient's brother-in-law, at the request of and with the agreement of husband and wife, is more widely used in the U.S.A., where it has found much favour. In most cases it has prevented and not caused the drifting apart of two people, and has provided a child far more an integral member of the family than any adopted child would have been, and also satisfied a woman's yearning to have a child of her own.-I am, etc.,

London, W.C.1.

REYNOLD H. BOYD.

SIR,—To-day great interest is being taken in artificial insemination for married women. As yet I have not seen a discussion on its possibilities for unmarried women. Many of the latter do desire children and would be happier, and far less likely to develop into embittered spinsters, by realizing this ambition. The Church would surely be unable to frown on such a practice, as immorality is not involved. I think that the Government should give consideration to this question. Such offspring under present conditions would, I suppose, be regarded as illegitimate.-I am, etc.,

ANNE ETHEL McCandless, M.B., Ch.B. London, W.9.

Penicillin

SIR,—Your interesting leading article on penicillin (Aug. 28, p. 269) contains the sentence: "The search for something else as good as penicillin but perhaps more easily produced has therefore failed, as have efforts to synthesize it." This statement is less than just to many first-class organic chemists at present engaged on attacking a problem essentially antecedent to that of synthesis

Even though to the admiring medical practitioner the organic chemist may seem a wizard, he is not capable of attempting the synthesis of a compound until he knows its constitution. He cannot know the constitution of any compound until he has separated it in substantially pure form. Crystalline salts of penicillin, it is reported, have only just been obtained for the first time, and even these may well be less than $100\,\%$ "pure." Hence characterization of pure penicillin has so far been out of the question. How much more so any attempt at synthesis! To say, therefore, that efforts to synthesize it have failed is not fair comment. To state, on the other hand, that its isolation in pure form has so far not yet been achieved is correct, and is undoubtedly due to the extraordinary chemical properties of this extraordinary product of an extraordinary organism.-I am, etc.,

Greenford, Middlesex.