restricted supplies do not yet allow of dogmatism. In the present state of our knowledge it would appear to be wisdom for all gonococcal vulvovaginitis infections to be considered as individuals and for no empirical treatment to be given as a routine measure. Furthermore, emphasis must be laid on the necessity for keeping these children under close observation for at least six months after the initial infection. Only thus will "relapses" be avoided and the danger of spread to other children in the home or the school be eliminated.—I am, etc.,

London, W.1. G. M. SANDES.

School Medical Service

SIR,—Dr. Gamlin's letter (Jan. 15, p. 90) would appear to be based upon a misunderstanding of the Education Bill. Were the position to be as he envisages it, then I fully agree that the results would be disastrous. The present routine cleanliness inspections are, however, carried out under the powers given by Section 122 of the Children's Act, 1908. This section it is not apparently proposed to repeal. It would appear to follow that the powers given by Section 52 of the Education Bill are supplementary to those already possessed and not in substitution therefor, which is a much more satisfactory position, though I doubt, personally, whether the proposed new powers will prove in practice to be of much use, since only cases of gross infestation are likely to come to the notice of the teachers.—I am, etc.,

A. C. TURNER,
Senior Medical Officer,
City of Leicester Education Committee.

Nightwear for the Troops

SIR,—I was amazed recently at the information given me by the wife of an A.C.2 that no provision of nightwear is made with the uniform. Further, an application for coupons to make good the deficiency was refused on the grounds that it was unnecessary. If this is the official policy in such ranks of the Services I am concerned, not as was my informant that those who refuse to lower their standards must provide nightwear at their own expense and that of their family's coupons, but that those with low standards receive no encouragement to raise them; rather they have the official seal set on them. One of the revelations, brought to light by evacuation, of the low standards of personal hygiene prevalent in the population was the absence of nightwear. In *Our Towns*, which so admirably surveys the many deficiencies found, one of the suggested remedies lies in adequate education. For many years, of course, health visitors and teachers have worked along these lines, but have been handicapped in part by ignorance that certain habits existed; and they in common with others were shocked when the closer contacts of evacuation showed them up. If every child spent a period at a residential school he would learn certain principles of hygiene by putting them into practice which he would never learn from blackboard instruction; but even if this were possible it would not be until the next generation that the full effect could be felt, whereas there is, in the masses of young adults now under discipline in the Services, a good field for practical health education.

Perhaps in some directions the opportunity is being used and the question of nightwear may seem relatively unimportant, but is it not true that such a simple process as changing the clothes helps to keep down the parasite population and thereby mitigate the disease and discomfort caused by parasites? In modern warfare there will inevitably be large numbers of men stationed permanently well behind the front line, and it is surely not necessary for the same standard to be applied to them. What do the medical officers to the Services think, or are they not consulted in such matters? I believe these remarks do not apply to the women's Services, so why the sex differentiation?—I am, etc.,

Leicester. JANET M. DONE.

Prostigmin in Delayed Period

SIR,—Dr. E. Friedmann, in the *Journal* of Jan. 1, suggests that prostigmin should be tried "in all cases of delayed period except those of endocrine origin and those in which pregnancy has been established." He classes as "unsuitable patients" those with "obvious endocrine disturbances, a history of long-standing amenorrhoea, or obvious menopausal symptoms," and relates that he has treated nine such patients "unsuccessfully."

What does he mean by "obvious endocrine disturbances" or "obvious menopausal symptoms"? The fact of the endocrine disturbance or menopausal symptoms being obvious or not depends only upon the powers of observation of the observer; the word "obvious" has nothing whatsoever to do with the condition of the patient and cannot describe it. What is obvious to one person may not be so to hundreds of others, and because a particular doctor does not notice a disturbance it does not mean that a disturbance is not present.

I would like to draw the attention of your readers to the fact that no good can result from Dr. Friedmann's recommendation that prostigmin be administered in "the treatment of delayed period," though they will possibly succeed in lulling their patients into a false sense of security if they act upon it.

He says that the drug should not be "tried where pregnancy has been established," yet in 30 out of his series pregnancy was the cause of the "delay"; pregnancy was "later discovered on clinical or biological investigations or the patients were known to be pregnant." Why does he recommend to others a procedure different from the one he himself has adopted? "Pregnancy," Dr. Friedmann says, "is not disturbed . . . prostigmin is safe . . . there is no tendency of the drug to interfere with the course of pregnancy." How is Dr. Friedmann to know that pregnancy has not been disturbed in some of his "successful cases"? It would seem beyond his power to establish a diagnosis of pregnancy in "a case of delayed period" without resorting to a "wait and see" policy or to help from laboratory tests.

He records that 24 of his cases were "poorly selected." Did he select them, and if so, why? He injects sterile water into 10 women: he observes, "No bleeding occurred." These cases must have been properly selected! For what reason does the injection of sterile water here prevent the menstrual flow? There is no reason why even a "delayed period" should not appear after such an injection, but in his cases the period obligingly waits for the "proper prostigmin course" which followed.

His experiments prove nothing and help nobody, and one wonders what ultimate good Dr. Freidmann hopes to have done by them. Should it not be the doctor's foremost endeavour first to decide whether the "delay" has occurred in the course of a harmless physiological process, or as a symptom of maladjustment leading to displacement and undue pressure on vital organs? Dr. Friedmann does not give any evidence that he even thought of assessing the influence of faulty functioning in his "diagnosis," which, therefore, was not a full and reliable diagnosis.

Is it not reasonable to consider and establish first the cause or causes, to ask first why a woman has a delayed period? Is it not misguided to produce the period at all costs, to "try prostigmin" and to proceed with "further clinical work to reveal the interesting effects of prostigmin in cases of dysmenorrhoea"? Dr. Friedmann will not find the means whereby to alter faulty functioning among the multitudinous variety of drugs on the market to-day, and though he may produce the period he does not put right the cause of the delay in such cases. And before proceeding with further useless experiments and recommending others to do likewise he would do well to become conversant with the work of F. Mathias Alexander, whose approach to all problems is first to establish beyond doubt the cause or causes, and who has provided a technique by means of which problems of faulty functioning can be solved.—I am, etc.,

London, W.1. DOROTHY S. RADCLIFFE DREW.

Heroin in Labour

SIR,—Dr. James Ross (Jan. 8, p. 59) expresses a view with regard to the safety of heroin in labour which is in conflict with pharmacological findings and recorded clinical experience in respect of this drug. That a drug stated to be five times more depressant to the respiratory centre than morphine (Dilling, *Materia Medica*, 16th ed.) should have this remarkable degree of safety in labour calls for some comment.

Favourable reference is made to heroin as an analgesic drug in labour in Williams's *Obstetrics* (7th ed.), where a dosage of 1/12 gr. is stated to have "no deleterious effect upon the child

providing the drug has not been given during the three hours preceding delivery." Clark in *Applied Pharmacology* (6th ed.) states that heroin "is in no way safer than morphine," and refers to heroin as being about 10 times as toxic as morphine. Heroin was introduced by Dreser in 1898. If Dr. Ross is correct in his estimate of its value in labour it is indeed remarkable that recognition of the value of heroin in this respect has been so long delayed.—I am, etc.,

Turriff, Aberdeenshire. A. T. FORBES.

Diet and Peptic Ulcer

SIR,—I am afraid that Dr. Maurice Webster has misunderstood Sir Arthur Hurst's meaning. One may disagree with Sir Arthur's speculative theories, as I do, but his factual observations cannot be assailed. I sympathize with Dr. Webster, but however hot his hyperchlorhydria may feel, a cold impersonal approach must remain the basis of all scientific investigation.

It is a practically daily observation, which is not sufficiently appreciated, that although hypochlorhydric patients are temporarily relieved by alkalis, their cure depends entirely on the administration of sufficient hydrochloric acid. "Heartburn" is a most deceptive symptom, and easily misleads the unaware practitioner, because his whole attention is focused on HCl as the cause of peptic ulcer. All authorities agree that HCl by itself cannot produce the ulcer. My own view is that hyperchlorhydria is the first manifestation of the pre-ulcerative stage. All foods give a quantitative physiological secretory response. It will surprise many of your readers that gastric stimulation of water gives a positive response (Rehfuss *et al.*). The important point, however, is to discover what happens when the stomach is empty, for it is at that moment that the sufferer becomes aware of his symptoms. Whenever the stomach contracts it produces acid, but why should the stomach contract so violently when it is empty even a long time before any signs of chronic ulcer become apparent? The most likely explanation is that it reacts to some form of irritation, probably local. My explanation is that this occurs when the normal mechanics of the intestinal tract are upset—i.e., when iso-peristalsis is interfered with—by one cause or another. All the trouble begins from that moment. The implications of this thesis, however, are too complex to be dealt with in the short space of a letter.—I am, etc.,

London, W.1. J. JACQUES SPIRA.

Riboflavin in Hereditary Syphilis

SIR,—Recent articles in the *Journal* have shown the importance of the vitamin riboflavin as a therapeutic agent in inflammations of the eye and skin found in acne rosacea and also in cases resembling pellagra. In the keratitis associated with acne rosacea blood vessels and infiltrates are found in the superficial part of the cornea and, in aggravated cases, ulceration. The beneficial effect of riboflavin in rosacea inflammations of the eye has been known for several years; but it is not so widely known that this vitamin has also a curative effect in interstitial keratitis due to hereditary syphilis. Interstitial keratitis is characterized by the ingrowth of adventitious vessels into the substantia propria of the cornea as well as infiltration of cells. The following two cases show that riboflavin may be a therapeutic agent by itself.

Case 1.—A youth aged 18 attended the out-patient department of the Chelmsford Hospital with a keratitis accompanied by circumcorneal injection. Slit-lamp examination showed the lesion to be situated in the substantia propria of the cornea. No mention is made in the notes of corneal vessels. Wassermann and Kahn tests proved negative. Treatment by atropine and ascorbic acid failed to cause any improvement; sulphonamide tablets did not help. Carious teeth were extracted without avail. On Oct. 2 riboflavin (1 mg. t.d.s.) was substituted for the ascorbic acid. Compared with the former treatment it acted like a charm. On Oct. 16 the circumcorneal injection had disappeared as well as the corneal opacity. Shortly afterwards he joined the Army, having passed his medical tests.

Case 2.—A girl aged 13, sister of the patient in Case 1, attended the clinic on Jan. 20, 1943, both eyes having been affected by interstitial keratitis of several weeks' duration. The case was typical. There was photophobia and lacrimation. Both eyes showed the typical salmon patch due to corneal vascularization. Corneal opacity and iridocyclitis were present. Teeth were typically Hutchinsonian. Wassermann and Kahn tests were positive. The cause of the lesion in the brother's eye was now apparent. As he was several years older, the toxin had become more attenuated, the W.R. negative, and he showed a much milder corneal lesion. As riboflavin had caused such a marked effect in his case the same treatment was given to the sister. Notes record that on Feb. 20 the eyes were free from corneal injection. Later a complete course of novarsenobillon was given combined with riboflavin. Slit-lamp observation on Nov. 5, 1943, showed the cornea free from infiltrates and the corneal vessels represented by a few hair-like lines.

I ought to mention that in a case of acquired syphilis with deep vascularized keratitis and severe iridocyclitis in one eye treated by arsenical injections, riboflavin as an adjuvant did not appear to help. In the case of a young man with a vascularized keratitis of unknown origin, where the W.R. was negative and where syphilis could be excluded, riboflavin did not afford the expected improvement.

Will riboflavin prove a remedy in other manifestations of hereditary syphilis? In acne rosacea the ophthalmologist watches with interest the improvement which the administration of the vitamin effects in the skin of the face. In like manner the syphilologist may find a use for riboflavin in his department.—I am, etc.,

Chelmsford. S. G. CORNER.

Spontaneous Hypoglycaemia

SIR,—In your issue of Dec. 11 Dr. R. D. Lawrence expresses the view that spontaneous hypoglycaemia as an explanation for many minor indispositions has been overdone recently. Dr. Luntz, while supporting Dr. Lawrence, states that both hyper- and hypo-glycaemia are but "symptoms," but he rightly emphasizes that the nervous type of hypoglycaemia is a different phenomenon from that of hyperinsulinism, which term should be reserved for islet tumours of the pancreas. However, this statement, which suggests that the level of sugar in the blood is a "symptom," is one to which exception must be taken. Hypo- or hyper-glycaemia of itself can surely never be a symptom. The symptoms in neurotic patients to which Dr. Luntz refers are inevitably the reactions of the patients' nervous system to hypoglycaemia—if levels above 70 mg. per 100 c.cm. B.S. should be called by this name.

There is now evidence that individuals with cerebral dysrhythmia (about 10% general population and 26% of psychoneurotics) are particularly susceptible to lowering of the blood sugar, even to normal fasting levels. We have reported such a case, in which the electro-encephalogram (E.E.G.) was unstable below 100 mg. per 100 c.cm. yet stable above this level (*Lancet*, April 24, 1943). In these cases the symptomatology should not be regarded as purely hypoglycaemic, but as due to the increase of cerebral dysrhythmia which occurs. Our findings show that the normal E.E.G. does not exhibit instability at levels of blood sugar above 40 mg. per 100 c.cm., while dysrhythmics become unstable at higher levels. It has long been known that the onset of hypoglycaemic symptoms, as well as the onset of coma (Fraser, R., Maclay, W. S., Mann, S. A., *Quart. J. Med.*, 1938, **25**, 115), are not related to any one level of blood sugar, and vary from individual to individual. No doubt constitutional abnormalities of electrocortical stability are among the factors determining these differences.—We are, etc.,

DENIS HILL.
WILLIAM SARGANT.
MOLLIE HEPPENSTALL.

Chemistry of Vitamin Therapy

SIR,—The articles on vitamins in the *Journal* of Jan. 15 show, if I may say so with the deepest respect, a lack of appreciation of the chemistry and functions of these bodies. The addition of 25 mg. ascorbic acid to the diet of any person who already has enough can make no difference. If Prof. Davidson had first estimated the urinary excretion of vitamin C, and then confined his treatment to those whose excretions were below the minimum physiological standards of Harris, the recorded results would have been different. Similarly with the case of the compound vitamin capsule: what good can a jumble of vitamins do if the recipients are already taking a sufficient diet?

The weakness of both these experimental groups is that the individuals were all apparently well. My colleague and I offered for your acceptance some months ago a series of 600 analyses where the vitamin C excretion had been estimated