thereafter remained depressed, withdrawn, and at times almost stuporose, so that he came to be regarded as demented, though his blood pressure was normal. He has now been normal in manner, speech, and mood for the past two months, enjoying for the first time the freedom of parole.

These cases emphasize the universally good prognosis in uncomplicated simple depressed states no matter how long some of them tend to continue, with the added dangers of being considered incurable and denial of further E.C.T. -I am. etc.,

Sheffield, 6.

F. T. THORPE.

Unheralded Pulmonary Embolism

SIR,—I was interested in the paper on unheralded pulmonary embolism by Drs. H. Cohen and J. J. Daly (*Journal*, November 23, p. 1209). It is recognized that the pulmonary embolism in the majority of cases starts with phlebitis in the legs. In the legs are two venous systems—the superficial one, easy to examine, and the deep one. The latter can be easily examined by oscillometry. This simple method applied daily would clearly show, by the deviation of the oscillometric needle, the existence before or after operation of deep venous thrombosis in the legs. Pachon's oscillometer, in my opinion, is the best. Incidentally, oscillometry is the only simple clinical method of defining the mean or effective blood pressure, which is more important than the systolic or diastolic ones.—I am, etc.,

London, N.W.11.

N. PINES.

Dislocation of Jaw

SIR,—Dr. M. S. Sanders's letter on the subject of dislocation of the jaw (*Journal*, November 23, p. 1240) reminds me of an amusing occurrence many years ago, when I was a house-surgeon.

Two girls presented themselves at the casualty department of the hospital with the following history. One of them had dislocated her jaw in the act of yawning. She had gone with her friend to a general practitioner who lived opposite the hospital and who had promptly reduced the dislocation for her. On leaving his surgery they had both had a fit of the giggles and the victim had laughed so heartily that the jaw was again dislocated. Feeling rather foolish, and not having the nerve to go back to the doctor, she came across the road to the hospital for her second reduction.—I am, etc.,

Gt. Yarmouth.

IVOR W. HOCKLEY.

Intermittent Claudication

SIR,-I read Dr. R. L. Richards's timely and informative. article (Journal, November 9, p. 1091), in which he discusses the prognosis of intermittent claudication, with great interest. He followed up 60 patients with uncomplicated intermittent claudication over a five-year period and found the mortality rate was 28.3%. After reading the article, I have analysed the case records of 92 patients attending my peripheral vascular disease clinic for a similar period and have found that the mortality rate was 16.2%. My material was similar, as can be judged by comparing his figures with mine, which are bracketed. Dr. Richards stated that "the duration of the claudication before the patients were seen varied from a few days to five years [two weeks to six years]. There were 55 men and 5 women [87 men and 5 women] in the series. Their ages ranged from 24 to 69 [29 to 79], with a mean of 52.9 years [63.3 years]." I have excluded all cases suffering from gangrene unless this developed shortly before death.

During the analysis of the case records, it soon became obvious that it was difficult to find out the precise cause of death. Many who died in hospital did not have a postmortem examination and 45 had not attended the clinic during the past six months. I wrote to the family doctor concerned asking for information about these patients, and

from the additional information I was able to assess the mortality rate. I must disagree with Dr. Richards's remark that "it is probable that fluctuations in the severity of the claudication represented the natural history of the disease rather than the effects of medical treatment."

When last seen in my clinic, out of the 92 patients, 51 were taking spasmocyclone ("cyclospasmol"); 19 were taking spasmocyclone plus nicotinyl alcohol tartrate ("ronicol") plus alpha-tocopherol (vitamin E), 11 were taking spasmocyclone plus nicotinyl alcohol tartrate, and the remaining 11 were on nicotinyl alcohol tartrate alone. The therapeutic value was assessed in the same manner as in my previous paper¹ and the results are listed below.

	Moderately Improved		Failed
Spasmocyclone	30	10	11
Spasmocyclone plus nicotinyl alcohol tar- trate plus alpha-tocopherol Nicotinyl alcohol tartrate Spasmocyclone plus nicotinyl alcohol tartrate	10 5 5	4 2 4	5 4 5

It must be emphasized that these figures represent the number of patients who were considered to be receiving the best drug or combination of drugs. Many had previously received other drugs with less benefit. In a controlled clinical trial I^1 have already described the value of spasmocyclone in the treatment of intermittent claudication, and these figures support the conclusions reached in this article that it is one of the most useful drugs we have for the treatment of severe peripheral vascular disease of the limbs. —I am, etc.,

Birmingham, 18.

R. O. GILLHESPY.

REFERENCE ¹ Gillhespy, R. O., Angiology, 1956, 7, 27.

Maternal Anaesthetic Deaths

SIR,—Dr. D. Stirling Eddie (*Journal*, November 30, p. 1306) is sadly in error in regard to his facts. It is clear that he has not read the report¹ to which I referred (*Journal*, November 9, p. 1115). If he will do so he will see that it is stated that, of the 49 deaths, only 2 occurred in the patient's own home. In 5 the patient was in a nursing-home or maternity home, and the remaining 42 were in hospital. If we must have percentages, that would make it, approximately, hospital fatalities 84%, maternity or nursing-home 10%, and home fatalities 4% (not 14% as Dr. Eddie assumed).

Dr. Parker² in his authoritative article on maternal deaths from aspiration asphyxia showed that, in the period 1943 to 1952, all the Birmingham deaths from this cause occurred in hospital. In 3,048 forceps deliveries in the patient's home there were no deaths, whereas in 2,200 deliveries in the Birmingham Maternity Hospital there were 4 deaths from asphyxia. Can anyone pretend that these figures are fortuitous and without considerable significance? Their real importance, however, lies in the indications which they provide, and the conclusions which can be drawn, as to the causes of these tragic fatalities occurring in young women who are usually perfectly fit, and at a time when one of the happiest moments of their lives seems just within their grasp. Surely anything we can do towards eliminating or even reducing the incidence of these catastrophes is very well worth while.

I believe that the greater safety in forceps delivery at home depends on three factors which, in order of importance, are: (1) there are still a great number of general practitioners who use the lateral position with its infinitely greater safety; (2) simpler, open methods of anaesthesia are mostly used in the home; (3) even with the patient in the lithotomy position she cannot be fixed in the potential death trap ensured by the rigid lithotomy supports used in hospitals and in some maternity homes, and she can therefore be rolled over fairly quickly should vomiting occur.

Until those who teach obstetrics in this country realize that in forceps delivery under general anaesthesia the position of the patient can be of vital importance in determining the survival or the death of the patient when vomiting occurs, we cannot, unfortunately, expect any material improvement in the situation as regards aspiration asphyxia. There is, however, one alteration in the procedure in vogue at present which, if widely adopted, would certainly reduce the fatalities from aspiration of vomit. We know, from various sources, that in about half the fatal cases the vomiting and the inhalation of vomit occur during the induction of anaesthesia. If, therefore, those obstetricians who do not feel competent to put on forceps in the lateral position would at least allow the anaesthetist to induce the patient in that position, the vomit would in many cases be safely deposited on the operating table, perhaps even before the measured tread of the lithotomist is heard.-I am, etc.,

London, N.W.7.		Α.	H.	MORLEY.
	REFERENCES			

Report on Confidential Inquiries into Maternal Deaths in England and Wales, 1952-1954, Ministry of Health Reports on Public Health and Medical Subjects, No. 97, 1957. H.M.S.O., London.
² Parker, R. B., Brit. med. J., 1956, 2, 16.

Knock-knee in Children

SIR,-The article by Dr. A. J. M. Morley (Journal, October 26, p. 976) and subsequent correspondence exhibit somewhat superficial thought; but fortunately the condition as now seen without a rachitic background is indeed benign, and usually outgrown.

The observation that knock-knee is common in fat children is a blinding glimpse of the obvious fact that if the femoral condules are separated by thick wads of fat so also will separation of the malleoli be increased. Much confusion has arisen from using inter-malleolar separation as the only criterion of knock-knee. The majority of children exhibiting this knock-knee have in fact the same tibiofemoral angle of 10° (or 170°) measuring from the top of the tibial tubercle as apex along the tibial crest and the line of the femoral shaft. From this apex inter-malleolar separation is determined not only by the length of the tibia but by the angle and length of the femoral neck and by the separation of the femoral heads.

Basically it is relative widening of the distance between the trochanters-a normal phenomenon of growth due to alteration in the angle of the femoral neck (increasing varus, decreasing anteversion)-and increasing length which brings the malleoli together in the growing girl, whereas in the boy the angle at the knee grows less. Unless, therefore, there is marked increase in the tibio-femoral angle beyond 10° it seems senseless to try to obscure hip abnormality by straining the knee with splints. It is surely wiser to let the child grow nearly to completion and then, if very necessary, straighten the tibio-femoral angle by so simple and atraumatic a procedure as temporarily stapling the inner side of the lower femoral epiphysis. Surely, too, it is wise to protect the inner side of foot and knee from extra mechanical strain during the growing years by prescribing a Jones heel.-I am, etc.,

Derby.

R. LUNT.

Combined Prophylactics

SIR.-We would like to thank Dr. J. S. Robertson for his letter (Journal, December 7, p. 1366) on the subject of our joint article (Journal, November 23, p. 1213). While we appreciate all he says, we would like to explain a few points. In respect of the use of statistics, results such as those referred to may be viewed from two aspects; first, to note trends, as shown by our finding that the doubling of the dose of tetanus toxoid from 3-6 Lf to the fixed amount of diphtheria toxoid increased the Schick conversion rate by about .5%, and a further doubling of the amount of tetanus toxoid to 12 Lf produced an additional improvement of approximately 10%; secondly, even if we

assume that the whole body of the data is homogeneous. then the value of χ^2 for Group 4, Table II (30 Lf diphtheria toxoid plus 12 Lf tetanus toxoid), becomes 5.6, which, for one degree of freedom, gives a value for P of 0.02, one even less than that given in the paper.

It may not be generally known that, while realizing that P.T.A.P. and A.P.T. are greatly superior to F.T., one of us (G. B.) was the first to try out modern purified F.T. when many were in despair about the bogy of post-inoculation paralysis. It appeared to be a retrograde step in the immunological sense. Later work, however, showed the marked toxoid adjuvant effect of admixture with pertussis vaccine, and we are sure Dr. Robertson will agree with us that any modification of the composition of a mixture should be subjected to clinical trials. It has been the purpose of our work on combined antigens, over the last five years, to demonstrate their field efficiency on a quantitative basis ; we both wholly subscribe to their use, but insist on measurement at all stages, with particular stress on the merits of a good primary response.

Dr. Robertson's final remark on the need to adopt a course of action which will give the greatest overall efficiency is one that has never been absent from our minds; indeed, the prime difficulty here has been the lack of knowledge on what shall be regarded as an adequate antibody response. The whole problem is extremely complex, in which psychology and administration play a no less important part than the antigenic efficiency of the materials used.-We are, etc.,

London, W.2.

GUY BOUSFIELD. L. B. HOLT.

SIR,—Dr. Guy Bousfield, in his article with Dr. L. B. Holt (Journal, November 23, p. 1213), recommends that inoculation should be performed in the arm of very young infants, both arms to be used for this purpose on each occasion. I have read elsewhere that inoculation in the buttock is to be preferred, since post-inoculation poliomyelitis affects the spinal cord at the level of the muscles injected. Until such time as immunization can be offered to all babies before other immunizations might it not be safer to use both buttocks in preference to both arms ?-I am, etc.,

Enfield, Middx.

C. M. SMALL.

Cyanosis in Infancy

SIR,-In your interesting annotation on cyanosis in infancy (Journal, November 2, p. 1045) you have aptly alluded to the difficulty of explaining some of the attacks of intermittent cyanosis in the newborn period. The following two cases suggest viral encephalitis as a probable aetiological factor.

In an infant 30 days old attacks of intermittent cyanosis with disturbed respiratory rhythm were associated with rise of temperature up to 103° F. (39.4° C.) for two days. On the third day the attacks subsided with the appearance of limpness of the left lower extremity, clearly suggesting the diagnosis of polio-encephalitis. In another case, aged 3 weeks, no aetiological factor could be detected by a thorough investigation for congenital heart disease, diaphragmatic hernia, pulmonary collapse, or atelectasis. There was no history of prematurity, but the child was delivered by caesarean section at full term in a primipara. It was normal for three weeks. Then, with a mild upper respiratory tract infection and rise of temperature to 102° F. (38.9° C.) the child developed attacks of intermittent cyanosis with disturbed respiratory rhythm. The attacks gradually became more frequent and prolonged till, when I saw it, the child was intensely cyanosed most of the day. During the attack the child appeared unconscious, with eves rolled up, fists clenched, legs stiff and stretched but without obvious clonic convulsion. The child was making a peculiar groaning noise with almost each respiration. All the deep and superficial reflexes were lost except a weak conjunctival and deglutition reflex. Lumbar puncture was not allowed,