case of failure no harm has been done. Where the baby lives far from a hospital the method can be life-saving, as I think the histories of my two cases prove.

Case 1.—October, 1943. The patient, a white girl of 17 months, was a strong healthy baby. She wakened at 6 a.m. screaming with pain, vomited a little clear fluid, refused food, and during the rest of the morning slept between attacks of crying with pain. Early in the afternoon a little blood-stained mucus was found on her diaper. When I saw her soon afterwards she was pale and collapsed, with a weak, rapid pulse but no fever. Her mother told me that when rubbing the baby's abdomen in an attempt to ease the colic it had seemed to her that the left flank felt empty. This was not noticeable when I examined her, and I felt nothing abnormal, but on rectal examination I found the apex of the intussusception just inside the anus, and it was visible as the baby strained when I withdrew my finger.

Prolonged autumn rains had made the ground too soft for an aeroplane to land, so that the alternatives were either a 36-hour journey to hospital carried on a saddle-horse over rough bush trails, or operation by me, single-handed, with the aid of an amateur anaesthetist. Neither appeared to offer much chance of life to a shocked baby. It seemed justifiable to attempt reduction by inflation with air.

At 4 p.m., about ten hours after the onset, under an anaesthetic administered by a neighbour, I introduced a small rubber catheter alongside the intussusception, attached it to the bellows of a Junker's inhaler, and pumped very gently while compressing the buttocks to prevent the return of the air. The resistance could be easily felt by the hand. After keeping the pressure steady for a minute or so there was a clearly audible "plop," heard by the anaesthetist as well as myself, and there was no further resistance to inflation. A few minutes afterwards, before the child was fully awake, she had a large normal bowel movement, preceded by a little blood-stained mucus. The baby's recovery from shock was most dramatic; within half an hour she appeared perfectly normal. She has never had any illness since then.

Case 2.—April, 1946. The patient, an Indian boy aged 15 months, was a particularly husky baby. At 10 a.m. he suddenly vomited and complained of pain in his abdomen, and cried at intervals all morning. At 2 p.m. his mother found about a teaspoonful of bright red blood on his diaper, but no faeces. When I saw him at 3 p.m. he was very pale and lay limply on the bed with eyes half-closed. Every few minutes he roused and cried in obvious pain. His temperature was normal, pulse 130 and very weak. His abdomen was very tender to palpation, but I thought I could feel a tumour on the right side. He vomited a little clear yellowish fluid while I was examining him. The rectum was empty, and there was only a little blood and no trace of faeces on the examining finger.

On this occasion a snow-storm made it impossible to get him out to hospital by air, and, remembering the previous case, I decided to try inflation again if examination under an anaesthetic confirmed the presence of the tumour.

Six hours after the onset of symptoms, under an anaesthetic the classical sausage-shaped tumour could be clearly felt, extending from the right iliac fossa to the border of the liver. By the same method as before the bowel was very gently inflated. The line of the colon could be clearly seen to bulge. After a few minutes the swelling gradually disappeared, though the buttocks were firmly held to prevent the return of the air. A further slight pressure on the bellows produced no feeling of resistance to the hand. An hour later the baby was still sleeping peacefully, his colour good and pulse much stronger. By 9 p.m. he was sitting up playing, had had no further pain or vomiting, and looked quite well. The bowels were opened the next morning; there was a slight stain of brownish blood on the diaper and a small amount of faeces containing raspberry seeds and paper. The stool the following day was absolutely normal with no trace of blood. The child has never been ill since.

—I am, etc..

Keg River, Alberta.

MARY PERCY JACKSON.

Megaloblastic Anaemia of Pregnancy

SIR,—The two cases described under the above title by Drs. M. Gillespie and A. M. Ramsay (May 1, p. 828) are of intense interest to all haematologists, but it is questionable whether they should be grouped with the classic macrocytic anaemias of pregnancy. The proportion of myeloblasts in the blood and marrow is against that diagnosis, while the clinical, haematological, and necropsy findings are in keeping with the small group of cases which can be classified as of the "leukanaemia syndrome." The distinction is important in that the classic cases of macrocytic anaemia of pregnancy respond to appro-

priate treatment or to the termination of pregnancy, while "leukanaemia" progresses to the fatal end. Though the term "leukanaemia" is one of convenience rather than one of diagnostic exactitude, it is interesting to note that Gillespie and Ramsay postulated a possible maturation factor defect involving myeloid as well as erythroid cells. This is a conception of the condition to which H. Foy, A. Kondi, and I (*J. Path. Bact.*, 1946, **58**, 157) were also forced in considering such a case some years ago.—I am, etc.,

Johannesburg.

JAS. F. MURRAY.

Urological Surgeons in Conference

SIR,—In your report (July 10, p. 85) of the Annual Meeting of the British Association of Urological Surgeons held at the Royal College of Surgeons from June 24 to 26 no reference has been made to the papers read by two distinguished honorary members. The discussion on urinary lithiasis was opened by Professor Hellström, of Stockholm, a leading authority on its aetiology; the following day a paper was read by Dr. Michon, of Paris, on the repair of exstrophy of the bladder with restoration of continence. Both these papers will be published in full in the September number of the *British Journal of Urology*.

Professor Hellström was the only official guest, but although no special invitations to attend the meeting were sent to colleagues abroad Professor Fey and Dr. Michon, of Paris, and urologists from Italy, Portugal, Spain, Sweden, Turkey, and Uruguay listened to the discussions. This was a tribute to the prestige of British urology.

Besides these guests the members of council had the pleasure of welcoming Mr. Mortensen, President of the Australasian Urological Association, Mr. Thomson Tait, of Melbourne, and Mr. Keith Kirkland, of Sydney, N.S.W. The policy of developing and co-ordinating the medical resources of this country for the benefit of our colleagues throughout the world is already beginning to bear fruit. In conclusion, may I congratulate the B.M.A. on the formation of the Empire Medical Advisory Bureau.—I am, etc.,

CLIFFORD MORSON,
President, British Association of Urological Surgeons.

London, W.1.

Clinical Records

SIR,—Mr. Malcolm Donaldson (July 3, p. 47) has pointed out the essential weakness in the statistical analysis of medical records. I would suggest that it would help to improve their value if these were compiled in a form that would be of practical help to the clinician and thus enlist his interest. To expect the clinician to fill up a complex form which is rendered to some central bureau for analysis by statisticians is exasperating to him and does not encourage his interest. If the form were such as to be of practical value to him accuracy would be encouraged.

It was with this idea in mind that I devised the record card described in the *Lancet* (1947, **2**, 189), which was based on the Copeland-Chatterton system. This allows for adequate coding and cross references for a moderate-sized hospital department, but it is cumbersome to work in large numbers and would be quite inadequate for a record bureau, where obviously mechanical sorting is necessary. If the initial analysis of clinical records could be done on such a record card the information coded thereon could be transposed to a punch-card system for use at a central bureau, and the record card could remain at the disposal of the clinician for study of his own cases. I have already described the value of such record cards to the clinician in the above-quoted letter.—I am, etc.,

Cheltenham.

C. P. DONNISON.

Paludrine

SIR,—Having used "paludrine" prophylactically and therapeutically for just over a year I have been unable to substantiate the rather, I think, excessive claims made for it. Having been in the habit of taking 5 gr. (0.32 g.) of quinine daily for over twenty years, during the war I changed to mepacrine, with about equal results. When paludrine became available in early 1947 I changed to that drug, as neither quinine nor mepacrine had kept me sufficiently free from malaria of a mild type in a highly malarious district. I started taking 0.1 g. paludrine twice

a week, then three times a week, then on alternate days, then daily. I have taken 0.1 g. daily now for approximately eight months, and the results are about equal to those of quinine or mepacrine.

As regards those under my care, the result has not been happy. In the highly malarious port of Bonthe during 1947 I advised those Europeans who consulted me, and who were taking quinine or mepacrine, to try paludrine in the recommended dosage of 0.1 g. twice a week. Three went down with smart attacks of malaria within a month, parasites being found in one instance. Other Europeans suffered less severe attacks under the same regime; parasites were found in one case. Those who wish to take paludrine I now advise to take 0.1 g. daily. A number of Europeans have returned to their former quinine or mepacrine, and I am not now advising those already taking these drugs to change to paludrine if they are satisfied. Except in my own case, I have not been able to follow up the after-history of those taking 0.1 g. paludrine daily.

Therapeutically paludrine seems at least equal to quinine or mepacrine, though I prefer to give two 10-gr. (0.65-g.) doses of quinine at the start of an attack, giving at the same time 0.1 g. paludrine three times a day, and continuing with it in this dosage for ten days. I do not say that initial dosage with quinine is a necessity, but it still seems the best drug to bring down the temperature quickly.

In spite of this not very eulogistic account of paludrine, nevertheless I prefer it both prophylactically and therapeutically to either quinine or mepacrine. In the highest dosage tried, that is 0.1 g. prophylactically and 0.1 g. therapeutically once and thrice daily respectively, it is certainly not inferior to the other drugs and has the advantage of being apparently free from any toxicity in the therapeutic dosage tried. I can myself carry on with my full activities after at most 48 hours' treatment, and usually earlier, and I have had no complaints of unpleasant reaction from patients. The same cannot, emphatically, be said of quinine, and not always of mepacrine. Its freedom from dyeing the skin is also an advantage of paludrine.

Paludrine is a valuable drug which should not be allowed to fall into disrepute when it may be that merely a change in dosage and/or régime may be required. I see the manufacturers have altered the recommended dosage somewhat; but 0.1 g. twice a week would not seem to presage much improvement, since in my own case even 0.1 g. daily is not completely protective. I propose to try 0.3 g. in one dose once a week (as also recommended by the manufacturers) and work from that. It may be that a comparatively large dose taken once or twice a week may work better. I might add that in my own case and that of a number of others an attempt was made to sterilize the blood first with a full therapeutic course of 0.1 g. paludrine thrice daily for ten days before continuing with it prophylactically; but I have not found this makes any difference. The air wants clearing as regards this drug, and I should be grateful for the opinion of practitioners of experience.—I am, etc.,

Shenge, Sierra Leone.

E. S. WALLS.

Odd Legs

SIR,—Although I did not read Dr. Nestá H. Wells's original letter, the communication of Captain Robert Fuller and Lieut. Douglas L. Woolf (July 10, p. 109) interested me personally, since at the age of 12 years I was sent to see the late Mr. T. H. Openshaw about the increasing deformity of my left foot due to infantile paralysis, and he pointed out to my parents that the 3/4 in. (1.9 cm.) shortening of the limb was causing curvature of the spine. I remember thinking that a spine anyway was pretty much given to curvature, but my parents obediently saw to it that my left heel was raised 1/2 in. (1.3 cm.) and my right heel lowered 1/4 in. (0.63 cm.). At that time I also had some sort of a tarsectomy done to stabilize the ankle, and incisions in the plantar fascia—the whole procedure being to correct a fairly well marked equino-varus deformity. The boot prescribed was of the customary type with an iron up the inner side.

Two or three years later my head master, Dr. J. R. C. Greenlees, seeing my keenness for chasing balls and recognizing perhaps the possibilities of an exceptionally powerful right leg, suggested that I might take up rugby again. The late Sir John Fraser, whom I consulted, did not forbid me, and he pointed out to my parents that the contractures of the calf muscles had exactly compensated for the shortening of the leg. I could not of course stand to attention with both heels on the ground. I presume, therefore, that it was fortunate for me that the plantar and not the dorsiflexors of the foot were paralysed. By

a simple adaptation of the boots I was able to continue playing full-back at school and later for my hospital ward. In the same way cricket, hockey, etc., presented no difficulty. Tennis, however, proved a problem, since on no type of court are boots welcome. For some years I wore a galosh over my left boot, but after a time, when I found I could not beat the other members of the family, I became exasperated. So taking an old worn-out boot I performed a Syme's operation on it and began to wear an ordinary gym shoe together with the "stump" in order to give my ankle support. It was entirely successful.

During six years in India I very soon—after about five weeks—gave up any attempt at wearing boots, because of the heat. I had a modified pair of sandals made which were very comfortable and light, and were ideal for ordinary hospital work. However, after six years of sandals I found that my original footwear was intolerable, so I searched Edinburgh for a boot which would give me some of the advantages of those sandals; and now I get "odd" factory-made boots, the left being two sizes smaller than my right. Since my left boot pre-war cost about £5, this is also a considerable saving of expense. The fact that I must wait 3–5 months for delivery might seem a disadvantage, but I sometimes waited nearly that long for a boot to be specially made for me.

No doubt over the past 15 years facilities have vastly improved and ideas become more generous in their outlook. It is our job to see that the "lame man shall leap as an hart" and that "the tongue of the dumb shall sing"—even if the lameness and the dumbness remain. Better a deformed limb useful than a straight one loaded down with theory.—I am, etc.,

Edinburgh.

M. LUDLAM.

Vaginal Injury at Coitus

SIR,—The following case of a vaginal vault injury due to normal coitus in a young parous woman may be of interest in view of a previous article in the *B.M.J.* of April 24 (p. 786).

CASE REPORT

A tall, well-developed married female of 17½ years old, 1-para, 3½ months post partum, was admitted complaining of severe haemorrhage per vaginam which had begun during intercourse. She also complained of slight pain in the lower abdomen. The incident occurred one hour before admission.

Her period had been due on the day of admission, but the present loss was in no way like her menstrual loss, being much more rapid, with brighter blood, and of sudden onset. Pulse rate 116, and of diminished volume; respiration 24; temperature 99° F. (37.2° C.); B.P. 115/80. The patient was pale and conjunctivae were poorly coloured. The abdomen was soft and there was very slight tenderness over the pubis. The uterus was not palpable per abdomen. Per vaginam the external os was closed and the cervix was firm and "non-pregnant." The vagina was packed with gauze in the receiving ward, and the patient was sent to theatre.

The possibilities considered were trauma, abortion, and sub-involution of the uterus. Instructions were given to "lay up" for a possible repair, vaginal packing, or dilatation and curettage. The patient was examined under a general anaesthetic and the introitus was found to be of a parous type, with a small amount of unrepaired perineal tearing at delivery. An Auvarud speculum was inserted and inspection showed the vaginal vault to be somewhat relaxed. The cervix was closed and not bleeding. High in the posterior fornix there was a linear laceration 2 in. (5 cm.) long, extending from one lateral fornix to another across the vault. The floor of the laceration was composed of vascular cellular tissue, and peritoneum was not visible. The vulsellum forceps were transferred to the posterior lip of the cervix, and by holding this up excellent exposure was obtained. Eight No.-1 catgut interrupted sutures co-aped the edges and completely arrested the haemorrhage. The area was sprayed with penicillin powder.

The patient made an uneventful physical recovery, although there appeared to be a certain amount of residual emotional trauma. Haemoglobin on the fourth day was 66%. She was discharged in seven days.

DISCUSSION

The patient was interviewed both on admission and after operation in regard to the use of artificial appliances, birth control apparatus, etc. The use of these was denied with apparent honesty and sincerity. The husband was also interviewed separately, and bore out his wife's statements. Intercourse was in the dorsal decubitus position. The husband permitted examination of himself, and there was no undue enlargement or distortion of the parts. The patient was a tall well-built woman, and there was no question