would be to give sufficiently large doses of the drug for a sufficiently long time.

Surely a more plausible explanation for the failure of penicillin to cure all cases of the disease can be found. With the humility proper in a medical student I suggest that it is because penicillin cannot always reach the causative organisms. In those cases where the blood culture is positive the bacteria may be found on the surface of the vegetations, and it is probably these cases which have the best chance of responding to penicillin therapy.

In those cases, however, where the blood culture is negative, the organisms are found buried beneath a mass of platelets and fibrin, and it is surely these cases that are likely to prove insusceptible to penicillin. It thus appears to be an unfortunate truth that the very defence mechanisms of the body that tend to wall off and localize an infected area also tend to render that area inaccessible to chemotherapeutic agents.

In the particular case of subacute bacterial endocarditis the causative organism is usually the *Streptococcus viridans*, and this bacterium is said to produce a fibrinolysin which is capable of dissolving fibrin. Were this not so it is probable that more cases of the disease would prove resistant to penicillin than actually do so.

Dr. Davies also suggests that the "sulpha" drugs, and perhaps even penicillin, may cause agranulocytosis. She does not support this suggestion with any evidence. While it is true that the "sulpha" drugs may damage the bone marrow and cause a sharp reduction in the number of granulocytes in the blood, I can find no evidence to show that penicillin in therapeutic doses has ever caused agranulocytosis. It therefore seems clear that penicillin, in massive dosage, has a great part to play in the treatment of subacute bacterial endocarditis.—I am, etc.,

London, W.11.

B. WATERS.

Relief of Pain in Midwifery

SIR,—As a result of my experience of midwifery in general practice I would like to support Dr. H. Thistlethwaite's contention (Feb. 14, p. 318) that the intermittent use of pure nitrous oxide is more effective in relieving the pains of parturition than a gas-air mixture. However, even this method will fail unless the parturient woman is able to "anticipate" her pains. Using the Wembley gas-oxygen apparatus my patients found that their labour pains were insufficiently relieved if they started to inhale the pure nitrous oxide only when a pain was imminent.

One patient explained that, with her second baby, in the second stage of labour (having learnt the technique from the experience of her first baby) she inhaled the gas whenever she was conscious enough to do so, and in this way she managed to achieve a very satisfactory level of anaesthesia, and I have noticed other patients do the same thing.

In only one case was the slightest alarm experienced. This was in the case of a woman who was having her third baby with the aid of nitrous oxide. I was allowing her to inhale pure gas, and so avidly did she inhale it that she became markedly cyanosed and developed a mild tonic spasm, so that though satisfactorily anaesthetized she clutched the face-piece over her mouth and nose. However the face-piece was readily removed and the cyanosis rapidly disappeared.—I am, etc.,

Ilkley, Yorks.

R. JOHN GOURLAY.

Extensive Resection of Small Intestine

SIR,—I was much interested in the extensive resection described by Mr. Leon Gillis and Dr. Michael Newton (Feb. 7, p. 254). Last July I removed rather more than twenty feet of small gut from a very obese patient of 41 years. She had suffered from a large hernia in the umbilical region for the previous 10 years. Two weeks prior to admission there had been a sudden onset of great swelling, tenderness, and vomiting. Such was the tension that the skin overlying the hernia had split open.

At operation, as soon as the sac was touched with the knife huge coils of imprisoned gut shot out of the opening with quite a loud report. Almost the whole of the small gut was found to be gangrenous, and much of the omentum was also strangulated, and was pale green, gangrenous, and foul. Two feet of grossly dilated jejunum remained above the strangulation, whilst distally gangrene extended to within two and a half inches of the ileocaecal junction. As a desperate bid the gangrenous gut was resected and the remaining two feet of upper jejunum was anastomosed to the stump of terminal ileum.

Post-operatively she was given continuous drip saline with "soluthiazole" for four days, then fluids by mouth, and a more solid diet seven days after operation. Frequent bowel actions were troublesome about this time but settled down to a regular action twice daily. Faecal fat content after two months was found to be 50%. Ten weeks after the resection she was readmitted to hospital with an attack of colic, vomiting, and pyrexia, which settled in a few days. At that time there was an obvious loss of weight, which she could well afford. Since then she has remained remarkably well.

One might surmise that in such an obese patient the evident reserve in her powers of assimilation from the gut may well have made for recovery where such would have been impossible in a normal type of person.—I am, etc.,

Redhill, Surrey.

N. E. PITT.

Oral Intubation and the Davis Gag

SIR,—Mr. J. S. C. Monro's article on this subject (Feb. 7, p. 267) is of particular interest to me as I have in my possession a standard pattern Davis gag modified some years ago for oral intubation. The modification consists of a deep notch in the distal part of the tongue-piece. The anaesthetic tube is made of thin-walled metal tubing slightly flattened and suitably bent to lie snugly between the tongue-piece and the tongue. The end of the anaesthetic tube is held by the notch. The distal part of the tube is made of rubber.

No originality is claimed by me for this device. A similar piece of apparatus designed for use in cleft-palate operations has been described in the *Journal* by Humby.

While the advantages of intubation in cleft-palate operations are quite clear, particularly in pharyngoplasty, the necessity for the method for the dissection of tonsils in children is open to question. Many experienced surgeons and anaesthetists will agree that a capable anaesthetist should be able to provide adequate facilities for a capable surgeon for this operation, and protection for the patient, without intubation.—I am, etc.,

London, W.1.

I. W. MAGILL.

Severe Reaction to Penicillin

SIR,—The following case presents some difference from those reported by Dr. D. Heffernan (Feb. 7, p. 277) and Dr. J. F. L. Walley (Jan. 24, p. 150).

The patient was a male aged about 65. Apart from some heartburn, rheumatism, and intermittent claudication due to atheroma of the leg arteries, he had no complaints. Five intramuscular injections of penicillin (calcium salt in oil-wax) were given into the right buttock for a boil in the neck. The first injection was given on the evening of Jan. 6 and consisted of 200,000 units (1.6 ml.). This was followed by 125,000 units (1 ml.) night and morning on Jan. 7 and 8.

The boil, which was surrounded by considerable induration, did well. But for the next three weeks the patient felt easily exhausted and tired, and later inquiry elicited that he had had a slight nagging discomfort in the hypogastric region and in a localized spot in the chest where the 5th left costal cartilage joined the sternum. These were not influenced by rest or food. He also mentioned that on Jan. 11 at 11.30 p.m. he had "a ghastly sensation of the head and neck swelling and appearing to extend to the height of 3 feet and returning to normal in about 10 seconds."

On Jan. 29 began a severe reaction to penicillin consisting of urticaria, chest pain, and vomiting, which prostrated him and made him feel extremely ill. Urticaria began about 5 a.m. and, gradually extending, affected the body from scalp to toes, the itching being extreme. This condition, with exacerbations, lasted for several days and then gradually improved under treatment though present to a certain extent for a further week.

Chest pain began about 3 p.m. and was situated right across both sides of the lower sternum. It increased and by 5.30 p.m. had become severe and was accompanied by a feeling as of a tight band and was followed by sickness. Severe pain lasted about 1½ hours before it passed. A second attack lasting 1 hour came on at 8.30 p.m. and a third about 8.30 a.m. the following morning. Thereafter no pain occurred for five days, when there was a short return in the early hours of the morning for 2 or 3 days. Vomiting began after the first attack of chest pain and continued at intervals for two days. The patient could keep nothing down and bile-stained mucus was vomited.

In view of the patient's known atheromatous condition it was thought advisable to exclude coronary thrombosis. Dr. W. A. Bourne was called in and kindly took an electrocardiogram. This showed no signs of coronary occlusion but revealed old myocardial damage, particularly a markedly long P.R. interval.

"Antistin" injections (2 c.c.) b.d. were given for three injections until the stomach settled down, then "benadryl," 50 mg. capsules,

were given by mouth for 7 days. By this time the patient was much better though still weak. Temperature was subnormal throughout and there were no joint pains or joint involvement. The pulse was not much affected. There was no special skin reaction at the site of the injections. Trinitrin did not seem to relieve the chest pain. The bowels were not affected. No previous penicillin either by mouth or injection had been administered.

Although the chest pain strongly suggested a cardiac origin, particularly the first attack (position of pain, sense of constriction, some radiation to the neck), yet I am not at all certain that it might not be due to an allergic reaction in the upper abdomen in the region of the diaphragm. Which organ caused continuous pain in this case must, however, be a matter of conjecture. It is noteworthy that in the last 20 years the patient has had three attacks of severe epigastric pain lasting about 1-2 hours, probably allergic in origin.

This case differs from the two others recently reported in the absence of a raised temperature and of joint involvement. Also it differs in the presence of chest pain and of greater gastric disturbance. The onset of severe symptoms took place 22½ days after the first injection.—I am, etc.,

Hove, Sussex.

WILLIAM CORNER.

Photosensitivity to Sunlight from Use of Sulphonamides

SIR,—In the article by Squadron-Leader Geoffrey Watkinson and Flight-Lieut. Barclay R. Hillis (Oct. 18, 1947, p. 609) the striking observation of appearance of a photosensitive skin reaction from the use of sulphonamides simultaneous with the height of reaction to vaccination was reported. The drug was being used as a prophylactic against tonsillitis—in the month of April—and the reaction to sun-exposed parts was greatest on the tenth day following vaccination. The 470 men treated were divided into four groups. In group A, 213 men were given "sulfa" from the first to the tenth day following vaccination, and in this group 50% "rashes" occurred with "an explosive outbreak," the severity of the rash being related to the severity of the pustule. There was a proportionate decrease of "rashes" in the other groups treated after the tenth day of vaccination. In group D, no "rashes" occurred in the 71 men who were not vaccinated (refused or non-reactive). The authors believe that the vaccination pustule may have acted as an inflammatory focus from which toxins were liberated by the sulphonamide causing photosensitivity. They therefore warn against the use of sulphonamide therapy even in small dosage in the presence of an active vaccination pustule—and its use in recently vaccinated ambulatory personnel is not advocated.

These conclusions appear justifiable and with them I am in complete accord. However, it would seem that if one could look upon these results from an entirely different viewpoint there might appear some new highlights upon the subject of vaccination and its possible dangers. Since the authors believe that "sulfa" should not be used in those recently vaccinated, conversely those who are receiving "sulfa," too, should certainly not be vaccinated.

In this opportune group of exposed human experimental animals there is luckily adequate control—group D. The sudden appearance of an "explosive" cutaneous reaction on the tenth day after vaccination is certainly mindful of experimental post-vaccinal encephalitis where an "explosive" type of reaction occurs in the brain on the tenth or eleventh day after vaccination. Even the use of the word "explosive" by the authors is choice. It seems that the appearance of an explosive type of reaction ten to eleven days after vaccination should be stressed in all organs, tissues, or specialties. In other words this incubation period is the important thing whether we are dealing with a post-vaccinal encephalitic problem, a post-vaccinal ocular, or a post-vaccinal dermatologic problem.

In the dermatologic problem confronting these authors the sensitization may have been solar or chemical or both, but this sensitization prepared certain specific cutaneous areas to reactivity when the antigen-antibody reaction of vaccinia reached its height—namely, the tenth day. This very same sensitization can be assumed to occur in other organs such as the brain and in the eye, as I have attempted to show in ophthalmologic circles. There is little awareness of this problem, for no consideration has been given to the host both as regards his past medical history and as regards medical care immediately following vaccination. Selectivity of subjects for vaccination and subsequent medical alertness to possible complications following this form of inoculation will unquestionably reveal data more valuable than that yielded in the experimental laboratories.—I am, etc.,

Newark, New Jersey, U.S.A.

EMANUEL ROSEN.

POINTS FROM LETTERS

Civil Service Control

Dr. N. C. HYPHER (Slough, Bucks) writes: In Mr. Bevan's State medical service all doctors will be at the mercy of permanent Civil Servants. They will keep a tally on our prescriptions, watching for over-prescribing and high average cost. Arguments concerning individual cases of certification will be framed by these clerks with plenty of time on their hands, and the very busy doctor will be tempted to give up the wordy battle. The doctor who is unhappy in a State medical service will be well advised to use all his powers of persuasion with the lesser officials if he wants a transfer to a better area. This may involve another doctor being pushed around. . . .

Plebiscite and Foreign Doctors

Dr. I. PLAKANS (Askern, Yorks) writes: As there appears to be a divergence of opinion as to the attitude to be adopted by the foreign doctors—namely, at the meeting held at B.M.A. House on the evening of New Year's Day it was stated: "It is not to be assumed that alien practitioners would not stand in with the British profession," whereas at the meeting of doctors called by the M.P.U. in Manchester it was assumed that these aliens would prove to be "blacklegs"—may I please be allowed to state our case, as I see it? To defy the Government responsible for our being allowed to be in England, and to whom we are more than grateful, would be ridiculous: to disagree with the majority of the members of the British profession, with whom we wish to work, would be equally fatuous. I think, therefore, there remains only one course open to us—that of strict neutrality.

Make the Best of It

Dr. J. J. ROHAN (Biggin Hill, Kent) writes: Why not make the best of it and try to render the Service first class? If we all go with good intentions into this coming Health Service (which after all is for the benefit of our own people) we will be a very strong union—so strong that if the Minister of Health should ever get it into his head that he could dictate terms to us as regards work and payments we would be in a position to lay down our arms—to a man. all together.

Smallpox and Chicken-pox

Dr. A. J. AMBROSE (Beckenham, Kent) writes: Dr. C. Simpson Smith's interesting article on smallpox in Staffordshire (Jan 24, p. 139) must have been of great interest to medical men who have had difficulty in differentiating smallpox from chicken-pox. But though the pundits attach much importance to umbilication, shotty papules, etc., the most important sign in my experience has been the greater number of pocks on the head and face area as compared with the chest, trunk, and limbs. In the 1914-18 period I saw three patients in whom the rash was indistinguishable from chicken-pox, but whose pocks gave this numerical preponderance in the head and face region, and their prompt isolation prevented an epidemic of smallpox.

Relief of Pain in Midwifery

Dr. ELIZABETH A. NETTELL (Exmouth, Devon) writes: To my mind what is needed is re-education of the midwife. Even to-day many midwives seem incapable of dissociating themselves from the idea that analgesia slows down labour and makes it more difficult. Many times, having visited a patient during the first stage and left her with Minnitt's or triline apparatus rigged up and ready for use, I have returned later to find the face-piece flung aside and a pushing, groaning patient—a roller towel her only analgesia. The midwife's triumphant, "She thinks she can push better on her own, Doctor," leads me to suspect that the patient is only doing what is suggested to her.

Until the midwife has a change of heart or unless the doctor can be present throughout labour I feel that analgesia for the whole of the second stage will never be adequate.

Dressing of Finger-tips

Dr. C. R. B. VINCENT (Walthamstow, E.) writes: Finger-tips dressed with routine firm bandaging for bleeding due to nail avulsion, "slice injury," or removal of warts often reappear several hours later with a saturated dressing and continued oozing.

The following method of treatment has been applied successfully in many cases. It is simple and rapid, and obviates the blood-stained bandage and the necessity for a sling. The wound is cleaned and a penicillin tablet or powder applied. The raw area is covered by a small square of tulle gras, and a rubber rectal finger-stall is fitted over this without displacing the dressing and is rolled down as far as the centre of the middle phalanx. A small gauze dressing encircles the finger-stall and is bandaged firmly and left for 48 hours.

A.T.S., penicillin, and analgesics are given as indicated. No sling is needed, and the smallness of the dressing allows early finger movements. The dressing is easily removed without any sticking.