a third confinement), the delay in the labour did not arise from a rigid os, but from a disproportion between the head and the pelvis, causing the head to be arrested at the pelvic brim. The diameter of the os uteri did not exceed three inches, simply because the head did not press down sufficiently upon it after the waters had escaped. This incomplete dilatation of the os uteri in cases of contracted pelvic brim has long been familiar to accoucheurs, and has not been considered to be an obstacle to the performance of craniotomy, or even to the careful employment of the long forceps. It is far different, however, in the other three cases, which were primiparæ, and in which the insufficient dilatation was the result of rigidity. In these, the forceps would have been formerly considered to be quite inadmissible, mainly, no doubt, for two reasons: first, because the dangers and difficulties attending its use are much greater in the first than in the second stage of labour; and, secondly, because, as Dr. Churchill's statistics show, a protracted first stage is not *per se* dangerous either to the mother or the child. He admits, however, that a protracted first stage may, by inducing fatigue and exhaustion, act unfavourably on the second stage. I had once a well marked instance of this kind. The patient, a primipara aged 30, had been in labour five days before the os uteri became dilated to the size of a crown. The anterior lip of the rigid os uteri then gave way, and a considerable rent took place. The second stage went on well for a time, until the pains almost ceased from sheer exhaustion. I then applied the forceps and delivered her, but the prostration which ensued was so great that the patient nearly lost her life. In this case, all the usual remedies for relaxing the os uteri had been tried, but without effect. I have little doubt that, if the forceps had been applied during the first stage, the result would have been much better. One great object in using the forceps is to anticipate evil rather than to remove it when it exists. Before adopting craniotomy, the accoucheur should be satisfied that urgent symptoms exist which render prompt delivery imperative. With the forceps, however, it is far different. It is so safe an instrument in moderately skilful hands, that it ought to be employed before any symptoms of powerless labour set in. No one in the present day would think of endangering a woman's life by waiting, as Denman recommended, until the pains of labour had ceased and the head had been six hours as low as the perineum. It is quite a sufficient justification for using the forceps that the progress of the labour has been arrested for a time, and that the head has ceased to advance. When the forceps is thus employed in good time, the accoucheur can take time about the operation and imitate nature as closely as possible; but, if he wait for symptoms of powerless labour, he will have to deliver in too great a hurry, and when his efforts are not efficiently seconded by the pains. In the first stage of labour, above all, the delivery should be effected slowly and cautiously. Urgent symptoms have not yet set in, and the accoucheur can, therefore, afford to wait. He should only extract during the pains, and should not mind if the operation occupy three or even four hours, as it did in my last case. He will thus give ample time for the soft parts to dilate and avoid the danger of lacerations.

My experience, then, of the application of the forceps during the first stage of labour is, that the operation, when properly performed, is safe and often very useful, although seldom imperatively demanded; moreover, that it requires a considerable amount of that *tactus eruditus* which can only be acquired by practice, and, therefore, it should not be performed by any man until he has used the forceps at least a dozen times during the second stage of labour; and I am induced, on the whole, to agree with Dr. Playfair's conclusion that, "if the os be not fully dilated, but is sufficiently so to admit of the passage of the forceps, the operation, under urgent circumstances, may be quite justifiable, although it must necessarily be a somewhat anxious one".

COMPOUND COMMINUTED FRACTURE OF THE TIBIA CURED, WITHOUT SUPPURATION, WITHOUT REGULAR ANTISEPTIC TREATMENT.

By J. EATON, M.D., Cleator, Cumberland.

ON reading an article in the BRITISH MEDICAL JOURNAL of March 24th by Surgeon-Major Sinclair, M.D., entitled "Compound Fracture occurring in India: Closure of Wound with Compound Tincture of Benzoin", I am prompted to forward a brief report of the following case.

On July 9th, 1875, R. I., aged 30, an iron-ore miner, sustained a compound comminuted fracture of the left tibia by some iron-ore falling on his leg. A piece of the tibia about two inches long was broken from about the middle of the bone; the upper end of the fragment being slightly de-

pressed, and its lower end protruding a quarter of an inch through a small circular opening in the skin. There was no laceration, nor disturbance of the relations of the muscles of the leg. The whole leg was more or less bruised from the knee to the ankle. Above and below the wound, there existed an abrasion of the skin three inches and a half long; and a continuous stream of blood, free of all appearance of air-bubbles, issued freely from the orifice of the wound.

No difficulty was experienced in reducing the fractured fragment; and, from the favourable condition of the soft parts, it was easily retained in position. As the wound was small and blood issued freely, and as almost certainly no air had got among the tissues, I aimed at healing the wound by "scabbing", and therefore covered it with a fold or two of dry lint. The foot and leg were then carefully bandaged to an external hollow wooden splint (Cline's), which had been well padded by a layer of cotton and a layer of tenax; the wound remaining exposed, so that the lint could be easily changed, if necessary, without the splint being disturbed. An internal (Cline's) splint, similarly padded, was then applied and bandaged on, and the leg placed on a pillow.

The case went on favourably till the evening of July 13th, four days after the accident, when the patient became restless and slightly delirious, was thirsty, had a hot skin and a quick pulse. I took off the internal splint, and found the leg hot and tender to the touch around the seat of the fracture. I did not remove the lint, which had become saturated with blood and formed a hard crust over the wound, but poured carbolic oil, of strength one of acid in twenty of oil freely on the lint, and applied more lint soaked in the oil over the part. The splint was reapplied, but not quite so firmly as before. The patient had a mixture containing thirty-minim doses of spiritus chloroformi every four hours; and a towel wet with equal parts of vinegar and water was kept constantly applied over the front of the leg outside the bandages, and frequently changed, so that it might always be cool. The patient's bowels were also attended to, and his diet consisted principally of milk. For three or four days and nights, he did not sleep soundly; but, after this, each successive night seemed quieter than its predecessor. On July 21st, I again removed the internal splint, and also removed the whole of the lint from the surface of the wound. Not one drop of pus had formed; but the surface of the skin from three to four inches in extent was red and tender. I then applied an alum lotion of strength twenty grains to the ounce, and so arranged the bandages that the lint could be changed twice daily by the patient without removing the splint.

August 14th. I removed the splints; found the skin sound, the bone well united and straight, but the leg weak. I reapplied the bandages without splints, and allowed the patient to move more about on his crutches.

The patient returned to his work November 6th, seventeen weeks after the accident.

THE TREATMENT OF INTERMITTENT OR FEN FEVER BY SALICINE.

By W. THOMSON, M.D.,

Consulting-Surgeon to the Peterborough Infirmary; Medical Officer of Health, Peterborough Urban and Rural Sanitary Authorities, etc.

ON making the acquaintance of Dr. MacLagan at Dundee last spring, and discussing the now recognised curative power of salicin in acute rheumatism, I gave it as my opinion that we have in it a remedy equally energetic in staying or cutting short the paroxysm of ague. I determined that, as soon as cases presented themselves, I would give it a fair trial, acting on Dr. MacLagan's suggestions as to its administration in full doses. And I hope that the following cases will prove that the failure of the old-fashioned decoction of willow-bark, both in the hands of the inhabitants in the marshy districts and of the medical men, was from the want of concentration, or the inability to prescribe a sufficiently large dose of the specific drug.

CASE I.—R. B., aged 32, a native of the Isle of Ely, had been twice under my care, first in November 1875, and, secondly, in March last, for severe attacks of ague. He was treated with quinine, and was three weeks under treatment on each occasion. He said that was a shorter time than usual. On October 2nd, I was sent for to see him at 10 A.M. I found him in bed shaking all over, his teeth chattering, with the painful unhappy expression of countenance one invariably finds in these cases; the skin was moist and clammy; temperature 103 deg.; pulse weak and frequent, 110. He had a hot bottle to his feet, and had taken hot port wine without feeling better. I told him I was going to send him a new remedy, and he was to be