to be the most frequent cause of death after chloroform" (*American Journal*, 1871, p. 437), I can come to no other conclusion than that Mr. Lister's teaching is more than a serious mistake; that in practice it will be found a fatal error.

Mr. Lister has also written as follows:—"When Mr. Clover virtually recommends medical men generally to follow him in abstaining from this practice (drawing out the tongue), he has given about as pernicious a piece of advice as can well be given with reference to the administration of chloroform." (*BRITISH MEDICAL JOURNAL*, 1871, vol. ii, p. 117.)

I know enough of Mr. Clover and his professional character to be able to assert with confidence, that there is not a surgeon in London who would endorse the statement that he ever has given, or could give, "pernicious advice" on the use of chloroform, or on any other subject.

The use of chloroform is a serious business, involving as it does the issues of life and death—how serious few can realise, except those who have seen one or more fatal cases; and sure am I that, when the heart suddenly ceases to beat after its administration, those who rely on pulling out the tongue to save life, will have to witness that sad sight where a person lies dead before them, who but a few minutes before was in full possession of life and strength.

P.S.—When galvanism is employed, the rotatory battery now in general use answers the purpose well; it is portable, always ready, and easily worked. One pole should be applied to the neck, and the other over the lower ribs at the left side.

MALINGERING DETECTED BY FARADISATION AND THE USE OF NITROUS OXIDE GAS.

By JULIUS ALTHAUS, M.D., M.R.C.P.,
Physician to the Infirmary for Epilepsy and Paralysis.

IN November last, I was consulted by the secretary of a working men's benefit society with regard to the case of one of the society's members, who professed to have lost the use of his left arm, in consequence of an accident which he had had three years previously. According to the society's rules, the sum of £100 is paid to members who are permanently incapacitated for work by disease or accident. The patient had had a fall from a considerable height, and asserted that ever since he had been unable to use his arm. He had been admitted into a provincial hospital, where he remained for three months, and where (to use his own words) "the surgeon tried as hard as he could to cure him," but failed. In course of time, the patient, who was known not to have done any work since the occurrence of the accident, applied to his society for the hundred pounds owing to him; and I was then requested to give an opinion whether the patient was permanently or only temporarily disabled.

The claimant was a tall, powerful man, of determined countenance, and evidently considerable force of will. He professed to be unable to undress himself, and had, therefore, to be assisted when the helpless limb was bared for examination. I found that the temperature and the bulk of the left arm were in all its parts quite equal to those of the right. The limb was held in full extension, and drawn to the body; while the fingers were somewhat tightly flexed. On endeavouring to flex the forearm and to supinate the hand, considerable resistance was encountered; and, when additional force was used for effecting this purpose, the patient called out with pain, and said he could not bear the manipulation.

Seeing this condition of the limb, only three pathological conditions could be suspected, viz., paralysis with contraction, ankylosis, or dislocation—provided always that the patient was sincere. In peripheral paralysis owing to injury of the motor nerves of the part, which is the only form of paralysis that could be thought of in this case, there is rarely any very great amount of contraction, since the paralysed limbs are mostly found flabby; and, if the case be of long standing, the muscles are wasted, and the temperature is considerably diminished. But as these clinical signs, although of value, are yet not invariably present, I employed a test which gives absolutely decisive results in such cases, and enables us at a glance to decide the presence or absence of peripheral paralysis—viz., faradisation. It has been shown by the concurrent testimony of all recent observers who have investigated this subject, that, in peripheral paralysis caused by injury to the motor nerves, the muscles animated by those nerves completely lose their

faradic excitability, while their galvanic excitability may be preserved, or, under certain circumstances, even increased. If, therefore, in the present case, the deltoid, triceps, biceps, and the other muscles of the useless limb, could be made to respond by contraction to the faradic current, it would be rendered evident that there was no paralysis owing to injury of the brachial plexus or any of its branches.

On using faradisation, I found that all the muscles of the arm and hand responded readily to the current by contraction of their fibres; yet, curiously enough, the arm of the patient did not execute those movements which are generally produced by such an application. Something evidently resisted the displacement of the bones; and, when I looked at the powerful determination visibly expressed in every feature of the patient's face, his hard stare, his contracted brow and lips, I could not help feeling suspicious that this something might be the patient's own volition. The influence of faradisation being irresistible if a sufficiently strong current be used, I increased the power with which I acted, in order to overcome any possible resistance on the part of the patient; but the latter called out so lustily, saying that he could not bear the pain, that I was obliged to desist. Enough, however, had been ascertained for enabling me to eliminate one of the three pathological conditions which could give rise to the complaint of the patient.

I now informed the secretary that, although I had satisfied myself that there was no paralysis, yet it was impossible for me to give a certificate concerning the exact nature of the affection from which the patient suffered, unless he were previously placed under the influence of an anæsthetic. All parties having consented that this should be done, I procured the assistance of Mr. Clover, who on the following day administered nitrous oxide gas to the patient. The latter was rapidly rendered insensible; and I could now freely move the arm in all directions, there being neither dislocation nor ankylosis. As soon as this was ascertained, the influence of the anæsthetic was withdrawn; and the patient, who recovered himself in a few moments, was informed that his case was not nearly so bad as he had imagined, and that he would certainly recover the use of the arm under proper treatment. I gave a certificate to the effect that the patient suffered from a painful affection of the shoulder-joint, which would yield rapidly to subcutaneous injections of morphia or a judicious use of galvanism; and that there was neither paralysis, nor dislocation, nor ankylosis, seriously to interfere with the use of the extremity. The claim was therefore not allowed.

RECURRENT DISCHARGE OF FLUID FROM THE UTERUS DURING PREGNANCY.

By D. DYCE BROWN, M.A., M.D., Aberdeen.

THE following case is offered as an addition to the interesting cases and observations that have of late been published in this and other journals on the above subject. The case is interesting from the diseased condition having recurred in three consecutive pregnancies, and also from the abundance and long continuance of the discharge in the first pregnancy.

A lady, pregnant about four months, after rather more exertion in walking than usual, was awakened in the middle of the night from a sound sleep by feeling a gush of fluid from the vagina, which, on inspection, seemed the liquor amnii just tinged with blood. After this gush, there was nothing more in the way of discharge that night, and only a slight feeling of uneasiness in the uterine region. I kept her in bed by way of precaution, but nothing further occurred till that day week, when the same discharge returned, and in the same manner. After another week, it again returned, as before, and with the same reddish tinge. Before each discharge there was a feeling of fullness and distension in the uterine region, followed by a feeling of uneasiness, which soon disappeared. The movements of the fœtus were now distinctly felt; the os uteri was slightly open. After this time, the discharge came on every two, three, or four days, and increasing in quantity. When she was about five months advanced, along with the usual discharge of clear fluid, there came an alarming quantity of blood in the middle of the night. The blood likewise came in a gush; so that after what might be supposed to have lodged in the vagina had come away, there was no further hæmorrhage. Nothing else was felt by the patient than the usual temporary uneasiness. For the next month, the watery discharge came nearly every night, in such quantity as frequently to soak a couple of towels. At the time of the hæmorrhage, there was no alteration in the os, and no evidence of partial attachment of the placenta on the os. At this stage, I consulted Sir J. Y. Simpson by letter, at the request of the friends of the patient. Sir James wrote as follows: "I have seen a