two years and a half, when he was able to resume his work as a collier.

His present condition as regards sensation has not altered in the slightest degree since the fourth month after the accident, and is as follows. The sensibility in the soles of both feet, and in the posterior portion of both legs, is much impaired; and around the anus, perinæum, inner part of both buttocks, scrotum, and penis, it is *entirely* destroyed. Although there is a slight sensation under pressure in the testicles, so complete is the absence of sensation in the buttocks, that when, last summer, he sat down on a garden-flue, ignorant of the fact of its being heated, his trousers were burnt through, and the skin completely charred, yet he was unaware of the fact till his wife noticed it, three days afterwards, whilst he was washing. The slough was somewhat deep, and the scar is still visible.

Whilst at work in the pit, he frequently gets severe scratches and cuts on the soles of his feet, which he hardly feels. Each day, on his return from work, he regularly goes to the closet, and, by dint of powerful efforts, forces the fæces to pass when solid, for, when liquid, they are not retained. At this time, the urine runs involuntarily in a stream, though at other times it drips continuously into an India-rubber urinal which he wears permanently; but in neither case is there any feeling of the passage of fæces or urine.

At the time of the accident, he was married, and the father of one child a twelvemonth old. Six months after the accident, in spite of the utter absence of feeling in the penis, he began to resume his matrimonial duties; and two children have been born to them since the resumption of the functions of his generative organs.

The first loss of sensation and motion below the seat of injury was doubtless owing to the pressure on, or the solution of continuity in, the nerves forming the lumbar and sacral plexuses, the former of which evidently recovered its powers gradually during the first four months. The total loss of sensation can, I think, be only attributed to the breach of the pudic lesser sciatic nerve. Hence it would appear that, if the fact asserted by Günther—viz., "that the erection of the penis in the horse entirely ceases on cutting the pudic nerve"—be correct, it has no analogy in the case of man; for here we have the pudic nerve evidently destroyed (as proved by the entire absence of all sensation in the perinæum, integument of the penis, etc.), and yet the power of erection is retained to such an extent as to allow fruitful coition. I cannot, therefore, but hold the opinion that the erection of the penis is due to the operation of the sympathetic system, the functions of which, I think, still remain in considerable obscurity. I take it there is very little doubt that the nerves of the sympathetic system may be regarded as conductors of impressions; and, this being the case, what more natural than that the fact of dwelling upon the enjoyment to be derived from coition should cause a turgescence of the organ lasting sufficiently long for it to enter the vagina and there fulfil its purpose in the animal economy? Moreover, the sympathetic system seems in general to influence the processes of involuntary motion, secretion, and nutrition; and this, considering the fact of the continued secretion of the semen by the testicles, and its ejection on coition, accompanied by no diminution of the sensations usually accompanying the act, may, I think, be fairly considered an additional argument in favour of my opinion that the pudic nerve can have but very little to do with the erection of the penis; whilst the nerves of the sympathetic system, which have not suffered any material injury, are directly concerned in that erection.

MECHANICAL PRESSURE IN INERTIA OF THE UTERUS.

By A. B. STEELE, L.K.Q.C.P.,

Lecturer on Obstetrics Royal Infirmary School of Medicine, Liverpool.

THE application of mechanical force to push out the fœtus instead of dragging it out, of arousing or imparting a *vis a tergo* in lieu of giving oxytocics or of resorting to the *vis a fronte*, or as an auxiliary to the latter, is an important principle in obstetrics, and one that I have for some years taught in my class-room.

It is specially noticed and recommended by Dr. Barnes in his admirable Lectures on Obstetric Operations. Dr. Barnes quotes Von Ritgen as the first to direct attention to the subject in a memoir published in 1856, and Dr. Kristeller as having carried the idea into practice. The method is thus described by Dr. Barnes. "The patient lying on her back, the operator places his hands spread on the fundus and sides of the uterus, and combining downward pressure with the palms on the fundus with lateral pressure by means of the fingers, the uterus being brought into correct relation with the pelvic axis, its contents are forced down into the cavity. The pressure is so ordered as to re-

semble the course and periodicity of the natural contractions." (*Op. cit.*, p. 5.) This appears to me a more simple and effective mode of applying pressure to the uterus than that of passing the arm round the patient's body, as described by Mr. Lawson Tait in the JOURNAL of June 22nd. This resource, as Dr. Barnes states, may in certain cases obviate the necessity of using the forceps, and may stand one in good stead when instruments are not at hand.

The principle of arousing the uterus to action by external manipulation as a substitute for the uncertain and uncontrollable action of ergot, was taught at least thirty years ago by my preceptor, Dr. Robert Lee, at St. George's Hospital. I fully endorse Mr. Tait's protest against the use of ergot by midwives; and in my own practice and in my teaching, in accordance with the views of Dr. Tyler Smith, I restrict its employment to cases of abortion, when all hope of saving the ovum is lost, or to promote uterine action after the expulsion of the fœtus—in other words, I never give it or recommend its use as an adjunct during labour, except immediately before the expulsion of the head where *post partum hæmorrhage* is anticipated.

A NEW MODE OF PERFORMING THE OPERATION OF PARACENTESIS THORACIS.

By T. J. MACLAGAN, M.D. Edin., Dundee.

THE usual mode of drawing off fluid from the pleural cavity is well expressed by the word "tapping." Until very recently, the operation was regarded as a last resort; and even now there is great difference of opinion regarding the exact time at which it should be resorted to in cases of serous effusion. The tendency of the present day, however, is to regard unnecessary delay as a greater evil than too great haste. The entrance of air during or after the operation has very generally been looked upon as a source of mischief, and many devices have been had recourse to in order to prevent this accident; the most efficacious and commonly adopted of these being Dr. Bowditch's.

From what has been written in the BRITISH MEDICAL JOURNAL during the last few months—notably from the observations of Drs. Fuller, Playfair, and Douglas Powell—it is evident that the profession is by no means at one as to the evils likely to follow the admission of air into the pleural cavity. My own belief is, that the dangers likely to result from its admission are much overrated. I would not, however, ignore or disregard the opinion of those whose experience has been different; and if there is any truth (and I believe there is not a little) in the views with which Mr. Lister's name is so intimately associated, there is at least a strong theoretical reason for excluding air if possible. I do not think, however, that we should try to exclude it at the expense of retaining any part of the fluid which ought to be got rid of. Is there any way by which both objects can be attained, by which the fluid may be effectually drawn off, and yet no air be admitted? It seems to me that there is, and that its adoption might obviate many of the objections which are advanced against a free evacuation of the fluid, and the consequent risk of the entrance of air.

Mr. Lister and those who have adopted his views and treatment have shown us how incisions may be made into joints, and how psoas and lumbar abscesses may be opened without any of those dreadful consequences which, prior to the adoption of his mode of treatment, used frequently to follow such surgical interference. Why not apply the same practice to the treatment of empyema and hydrothorax? If the entrance of air be an evil to be avoided, why not guard against it by creating an artificial atmosphere around the wound by means of a spray-producer, so that, if anything enter the pleural cavity from without it will not be air, but whatever the operator chooses to put in the spray-producer? And furthermore, if we wish to guard against such an accident during the subsequent progress of the case, why not adopt the same means which are found efficacious in lumbar and psoas abscess, and dress the wound in the same way as surgeons do an opening into such an abscess? I see no reason why we should not do all this, and no reason why we should not expect good results from its adoption. Had I the opportunity, I should certainly put this plan into practice. In performing the operation, I should discard the trocar and canula altogether, and simply make an incision with a bistoury. As one does not often have an empyema or hydrothorax to treat in private practice, I have ventured to suggest this mode of treatment to those who may have such cases to deal with.

In performing the operation, I would simply carry out Mr. Lister's instructions for opening a psoas abscess. A filtered solution of carbolic acid, of the strength of 1 in 100, should be put in the spray-producer, and the spray kept playing around the part at which the opening is to be made. The usual precaution should be taken of first inserting a