My answer to all objectors is this: first, labour as it occurs in crowded cities and highly civilised communities, occupies in part the domain of pathology; to wait is to prolong disease; secondly, timidity is no proof of scientific election and discriminating caution; the motto of the accoucheur should be "*nec temerè, nec timide*"; and, thirdly, if people will confound between what is vital and what is mechanical; if they cannot separate between a case of pure atony or inertia uteri, and a case of delay arising from an *obstacle*, however slight, they had better leave obstetrics alone. Diagnostic skill, finally, is attainable by all; the facts of every induction lie ready to hand.

Galvanism and Electricity. Like all agencies which produce marked and powerful effects upon the animal economy, *galvanism*, and its allied forces, have attracted the attention and excited the hopes of physicians in no ordinary degree. The analogy which subsists between electricity, galvanism, and that which, for lack of a more definite knowledge, we call *nervous force*, has materially augmented the conviction that these imponderables contain great therapeutic virtues. Accordingly we find that numerous applications of them have been made. It cannot, however, be said that the therapeutical experiments which have been instituted have been guided by anything more than conjecture, except in some exceptional cases, or that any great amount of success has attended them. Mature reflection might, perhaps, have damped the sanguine expectations of those who looked to electricity or galvanism for much assistance in the treatment of disease; however analogous to nervous force these agents might be, whether in their mode of generation or in their manifestations, they could never in any degree supply its place. The one is essentially a function of animal life; the others quasi-chemical, and incapable of conversion into their animal analogue, or permanent importation into the system. There are doubtless normal electrical conditions of the body, which being abrogated would induce pain and inconvenience; in the same manner there are conditions of heat and light which are necessary to health. To a certain extent, too, heat and light may be turned to therapeutic advantage. But we rather look to the continuous action of proper degrees of each, as conditions necessary to the preservation of health, than to extreme applications of them for the cure of disease. In like manner, galvanism and electricity, like other imponderable agents, must take a comparatively low place in the scale of therapeutics.

The first application of galvanism in obstetrics was made by Herder in 1803. In 1834, Dr. Ramsbotham proposed its use in cases of inertia uteri, in the lectures published in the *Medical Gazette* of that year; but I am not aware whether he carried his proposal into practice. In 1839, Stein and Kilian constructed galvanic forceps, making the blades of different metals. As might have been anticipated, the instrument turned out to be an utter failure, and its inventors had the candour to acknowledge this in 1845. Everyone accustomed to obstetric practice knows that the mere application of the forceps will quicken the action of the uterus, and it was the observation that this exacerbation was as marked in cases where common forceps were used, as where galvanic ones were resorted to, that convinced Stein and Kilian of the inutility of their invention. In 1844, Hœninger and Jacobi made experiments upon galvanism as applied to inertia of the uterus, but as they gave ergot also in their cases, the results arrived at must be nugatory. The most prominent advocate of galvanism has been Dr. Radford, of Manchester.

I have collected sixteen cases from other sources, in which galvanism has been used, either for the purpose of hastening delivery, setting up uterine contractions during pregnancy, or in cases of *post partum* hæmorrhage. They are recorded by Professor Simpson, Dr. Oldham, Mr. Cleveland, and others. Of these sixteen cases, in six no effect whatever was produced; in eight the application was successful; in two the uterine contractions were suspended, and in one of these, not merely for the time being, but for twenty-four hours afterwards. These results are not very encouraging; and, indeed, though Dr. Radford's results are more favourable, there are fallacies attaching to the employment of the remedy which seriously affect his conclusions. Such fallacies consist of the influence exercised upon the mind of the patient by the apparatus and the ostentatious nature of the proceeding. The objections to the use of galvanism consist in the possibility of its altogether suspending uterine action; in the well known fact that its continued application exhausts the irritability of the nervous centres; and in the practical fact, that in those very cases in which its use would be most justifiable and most necessary, the apparatus

would almost infallibly be quietly at home in our own cupboards instead of at the bed-side of the patient. Gardini found pregnant women to be in a state of negative electricity. I do not know whether this fact has been applied to any practical purpose, or whether it has occurred to obstetricians to insulate the persons of women to whom galvanism has been applied for obstetric purposes. This might easily be done by means of the glass pedestals upon which pianos are commonly placed. Galvanism and electricity act as exciters of the various nervous centres, both ganglionic and spinal; not exalting their polarity, as some other agents, but simply *exciting them to act*, and simultaneously exhausting them.

[To be continued.]

SEROUS EFFUSIONS IN A FŒTUS.

By WILLIAM WALKER, Esq., Surgeon.

Mrs. F., aged 30, a small, healthy person, was taken in labour with her seventh child on December 3rd, at 4 A.M., and at her full time. On examination, the os uteri was found to be fully dilated, and the head low down. The pains were feeble, but still sufficiently effective to expel the head at half-past seven. For fully half an hour afterwards no further advance was made, when I managed to hook my forefinger into the axilla of the child, and almost perforce effected delivery. A profuse flow of amniotic fluid immediately followed. I found, on examining the infant, no evident signs of life; the abdomen was enormously enlarged, with extreme puffiness of the eyelids. I had it immediately placed in a warm bath, and friction made over the chest. After several minutes, it showed signs of vitality, as evinced by slight gaspings, and in a short time it uttered a feeble cry. It survived till 4 P.M., and passed a considerable quantity of urine two hours before death. As I felt somewhat curious to know the state of things, I requested permission for a *post mortem* examination, which was readily granted. I found, on removing the sternum, that the lungs were free from disease, but the cavity of the chest contained three or four tablespoonfuls of serum. The heart was free from adhesions; but there was more than the usual amount of fluid in the pericardium. On opening the abdomen, a large quantity of thickish fluid escaped, somewhat of the colour of dirty water. The peritoneum was firmly adherent to the liver and colon throughout their whole extent. The stomach, spleen, and kidneys were healthy. The small intestines were forced back into the lumbar region, had a thickened feel, and were filled with a greenish-looking substance, almost of the consistence of putty. The bladder was empty.

REMARKS. One would expect, from the *post mortem* appearances in the foregoing case, that some form of inflammatory action had been set up; else how can we account for the great amount of effusion with extensive peritoneal adhesion? more particularly as regards the colon, which was so entirely fixed as to prevent any degree of motion whatever. On referring to several works on midwifery, and to others, I find cases mentioned where abdominal dropsy was found, with tubercular disease scattered through the several organs of that cavity; but nothing relative to any morbid state of the peritoneum.

I have been induced to publish this case owing to the appeal made some time ago by my friend Dr. Barker, of Bedford, when he spoke of the few contributions made on foetal diseases; and join him in the hope "that some central mind may group such diseases together in their respective classes, and elaborate a true and philosophical system of uterine pathology."

PRESENTATION OF A TESTIMONIAL TO R. TURNER, ESQ. A gratifying occurrence took place on December 23rd, 1857, in the National School Room of the village of Frant, Kent—the presentation of a silver tea-pot, cream-jug, and sugar basin, to R. Turner, Esq., surgeon, of Tunbridge Wells, in testimony of the great kindness and attention the poor of the parish of Frant have received at his hands during a lengthened period of his attendance upon them as their union medical attendant. The subscriptions in the first instance originated with the poor themselves, who were afterwards generously assisted by their more wealthy fellow-parishioners. The articles presented were neat in pattern, and good in quality. The tea-pot bears the following inscription:—"To Richard Turner, Esq., surgeon: presented by the parishioners of Frant, of all classes, in grateful remembrance of his unexampled kindness and attention, during many years, to their sick poor: 1857."