hours. There was no return of the convulsions, and she made a good recovery.

In the following four cases chloroform was not administered at once, other treatment being tried first:

CASE VI.

Multipara. Saw the case in the morning; convulsions had ceased, but the patient lay in a semi-conscious state. Full doses of chloral prescribed with instructions that I was to be sent for if the patient became worse. Through negligence I was not sent for till next morning, when I found the patient quite insensible with stertorous breathing, the lower jaw dropped, the pulse very rapid and scarcely perceptible at the wrist. I thought the case was hopeless, but not liking to let her die undelivered I carefully administered a little chloroform. The breathing became more natural and the pulse became slower and stronger, so I sent for my assistant and while he administered chloroform I dilated the os and delivered with the forceps. The child was dead. The patient slept quietly afterwards, but as the pulse became very weak I tried to give a little nourishment. This was immediately followed by another convulsion, so I at once administered chloroform again. She slept for some hours and there was no return of the convulsions. She made a good recovery.

CASE VII.

Primipara. Attended her for albuminuria and dropsy two days before convulsions occurred. Ordered saline purge and to lie in bed. When the convulsions commenced full doses of chloral were given. After forty-eight hours her condition was getting worse. The os was partially dilated, so I administered chloroform and applied the forceps. She never thoroughly regained consciousness, and died twelve hours afterwards. The child was dead.

CASE VIII.

Primipara. Convulsions commenced and case attended by my assistant for two days, chloral and hyoscyamus being administered. He then asked me to see the case. I gave chloroform and terminated labour with the forceps. No convulsions afterwards, but not thoroughly conscious for some time. She died at the end of the week with apoplectic symptoms.

CASE IX.

Multipara. My assistant was called to the case at 11 a.m. I was sent for at 9 a.m., and found that she had had convulsions all night. Gave chloroform and terminated labour with the forceps. Child alive. Convulsions commenced again directly the effect of the chloroform went off, so my son, who had assisted me, stayed with the patient about four hours, administering chloroform on the slightest return of the convulsions. She was partially insensible for two days and then made a good recovery. Hypodermic injections of morphine were given in this case.

These are not all the cases I have attended, but they are all I can call to mind at the present time, but in no single case in which I commenced the administration soon after the convulsions have commenced has there been any return of the convulsions after delivery.

It takes a good "pluck" sometimes to put an insensible woman fully under chloroform, but the effect is marvellous when done.

If the chloroform is administered slowly, and plenty of time allowed so as to get complete muscular relaxation, I have never had any difficulty in dilating the os with the hand, and it can be done without any laceration if due care is taken. I have also had no difficulty with *post partum* haemorrhage, as the uterus can be well syringed out with hot antiseptic solution and the uterus controlled with the hand while the patient is well under chloroform.

Knowing the good results obtained by the administration of chloroform in uraemic convulsions, has made me rely upon it in puerperal convulsions. A few weeks since I had a case of uraemic convulsions in a child seven weeks old, following scarlet fever. No urine was passed for thirty-six hours. I administered chloroform five times till complete muscular relaxation occurred. The child slept some hours after each administration, and made a good recovery. The points I wish to emphasize are these:

First, that in cases of eclampsia occurring in pregnancy where chloroform was given fully soon after the first convulsion, and when its effect was kept up some time after the termination of labour, no more convulsions occurred.

Secondly, that terminating labour by dilatation of the os can be, as a rule, easily carried out, provided the patient is kept fully under chloroform, and seems to have no effect in causing a return of the convulsions.

Thirdly, in nearly all cases where some time had elapsed before the administration of chloroform convulsions recurred after labour, and the patient did not make so good a recovery.

Fourthly, the danger to the child is increased by delay.

The cases I have given are too few to form a definite opinion, but I think the immediate treatment with chloroform deserves a further trial. Forced delivery is quite a different thing when a patient is fully under chloroform to what it is when there is not complete muscular relaxation.

A PLEA FOR EVACUATION OF THE UTERUS IN UNRELIEVED CASES OF PUERPERAL ECLAMPSIA.

By ERNEST BRICE, L.R.C.P., L.R.C.S. EDIN.,
Landore, Glamorgan.

A PERUSAL of the discussion on the treatment of puerperal eclampsia at the recent meeting of the British Medical Association at Leicester impresses one point very strongly on the mind, and that is that the element of doubt and uncertainty has crept into the minds of our leading obstetricians as to what is the proper method of handling such cases, or even as to whether any treatment at all is called for. This is very unfortunate, for if there is any trying emergency in which a practitioner finds himself where prompt action seems called for, surely a case of this kind is one.

Now, is the impression one gathers from this discussion a true representation of the feeling of the profession at large? I am aware that at the present day it is fashionable to doubt everything; this is an age of doubt, and every one is tempted to question the wisdom of his fathers—and this is especially true in matters medical. It is true that we are bound to admit that, as science and art advance, new rays of light are shed upon what was once obscure, and we are bound often to sacrifice our household gods to new truths; yet I cannot help feeling that a grave danger exists of treating old loves too lightly; of forgetting that old views, although not ideal ones, meant something, for they represented years of effort on the part of those who went before. True conservatism in medicine is a valuable principle. We must advance in thought and teaching; but we must think, not twice, but twenty times before we sweep away the wisdom of the growth of generations.

Applying these thoughts to the matter of the treatment of puerperal convulsions, I find that Meadows, in 1876, wrote:

"There is, indeed, little or no chance of the convulsion ceasing so long as the child remains in the uterus, with probably the head pressing upon a tender and irritable cervix, but no sooner is delivery accomplished than, as a general rule at least, the fit subsides; it may, of course, recur, but the patient's chances of recovery are decidedly better after delivery than before."

We may take this statement as representing the consensus of the opinion of his time, and the highest wisdom up to date; the acme of truth on the matter since the time when physicians began to consider it at all.

In 1891, fifteen years later, Galabin wrote:

"No time should be lost in inducing labour, since nothing exercises so favourable an influence as the completion of delivery, both as regards the convulsions and the condition of the urine."

Here we have practically the same view expressed, namely, that hope only lay in the evacuation of the uterus; thus, after fifteen years' further research by obstetricians of no mean order, no better treatment can be suggested; the burden of treatment is still—evacuate the uterus.

Fifteen more years have passed, and now doubt seems to be thrown upon the efficacy of this method. Why, it is difficult to say.

One can understand a new view of the pathology of a disease, or the discovery of a more effectual remedy altogether affecting our course of action, but of the pathology of puerperal eclampsia we have no more definite knowledge than we had twenty years ago, nor can we offer any better method of conducting a case. Yet the methods with which our forbears were successful are now being brought into question, and by some we are advised practically to leave things alone, "as we are as likely as not to do more harm than good by interference." One has the highest respect for those who express such views, and one feels that, coming from the source they do, they are bound to receive our most earnest consideration. Yet after all, it is hard to believe that the non-interference policy embodies the result of the experience of the whole body of the profession. It would be very helpful if the general practitioner could be induced to give his experience.

In thinking over cases of my own, I have in my mind six, in each of which relief followed the birth of the child. Unfortunately I have not an exact record of the cases, as notes were not taken at the time, but the details are substantially correct, and one fact is very plainly stamped upon my mind, and that is that the convulsions were always relieved after the evacuation of the uterus.

CASE I.

The patient came under my care during the absence from home of her own medical adviser. There was considerable oedema and albuminuria, and also valvular disease of the heart. Her doctor had given a very poor prognosis of the result of her confinement. She sent for me one evening suffering from severe headache; the next morning convulsions set in. I kept her well under morphine hypodermically administered. The convulsions were controlled, but she remained in a comatose condition all day. Next morning spontaneous labour came on, with complete relief of the symptoms, followed by an uninterrupted recovery.

CASE II.

On my first seeing this patient there was albuminuria and convulsions. Spontaneous delivery was followed by cessation of the fits; the patient, however, remained comatose, and died in a few days.

CASE III.

A primipara with severe convulsions. I kept her well under chloroform, and when I found a slight dilatation of the os—no help being at hand—I ruptured the membranes, turned, and delivered. The fits then practically ceased, and the patient made an uninterrupted recovery.

CASE IV.

This case I saw with a friend. The patient had severe convulsions. I advised inducing labour, and while my friend administered chloroform I commenced manual dilatation, and after some perseverance managed to deliver. The convulsions then ceased, and I was told that the child lived and the mother made an uninterrupted recovery.

CASE V.

I was asked by a friend to see a case of puerperal convulsions with him. The attacks were frequent, and I advised inducing labour. My friend, however, seemed to prefer temporizing. We therefore decided to try the effect of the hypodermic injection of the hydrobromide of hyoscyne. The patient went from bad to worse, and later in the day my friend agreed to the advisability of inducing labour. The result was everything we could wish as regards the convulsions, but I understand that the patient afterwards died from other causes, remaining conscious to the end.

CASE VI.

A primipara. When first seen the patient was in a comatose condition, with occasional convulsions. She also had albuminuric retinitis. She remained a day or so in this condition, when spontaneous labour set in. Her condition immediately improved, and she made a good recovery, as far as the eclampsia was concerned, although the eye trouble persisted for some time.

It will be noticed that in each of these cases evacuation of the uterus was followed by relief. To my mind, the course of treatment in every case of puerperal eclampsia is clear and definite. First, try to control the convulsions by the administration of morphine or chloroform (I have never found difficulty in getting the patient under the influence of chloroform; in the various convulsive movements of the mouth and chest enough is drawn into the lungs to produce the desired effect). If the convulsions pass off, well and good; if not—you cannot keep the patient indefinitely under the influence of these drugs—and labour does not soon ensue, then induce delivery. For the latter purpose I prefer Nature's instrument—the human finger—as much the safest, for it is endowed with sensation, and knows what it is doing, and is, moreover, effectual earlier than any other form of dilator. If it is impossible to commence the dilatation with the finger, the sound may be used to start the process, there being no time, of course, to wait for the action of tents.

I offer these suggestions and experiences for what they are worth. I am convinced that if other general practitioners would give us their experiences, it would be useful to all who have these appalling cases to deal with, and would be immensely to the advantage of those most concerned—namely, the poor mothers who are thus so grievously afflicted.

REMOVAL OF IRON FROM INTERIOR OF THE EYE BY ELECTRO-MAGNET.*

By A. S. PERCIVAL, M.B., B.C. CAMB.,
Surgeon, Northumberland and Durham Eye Infirmary.

It was in 1881 that Mr. Snell of Sheffield devised the small electro-magnet that I have here. If the foreign body lie in front of the lens—that is, in the anterior chamber—it is an efficient little instrument. If it be behind the lens, in the vitreous, or embedded in the retina, I have found Snell's instrument to be very unsatisfactory. Suppose that there is a perforating wound in the sclera, Mr. Snell tells one to boil the probe-pointed terminal to sterilize it, then to attach it to

the magnet and insert it into the wound carefully, and to listen for a "click"; this will indicate that the iron fragment has touched the probe end of the magnet. If no sound be noticed, the probe is to be gently moved about until the "click" is heard. As soon as this is heard, the magnet is to be withdrawn with the steel chip attached to it.

In practice I have found that these directions are usually impossible to carry out. If one does succeed in hearing the "click," on withdrawing the instrument the foreign body is wiped off by the edges of the wound; if one enlarges the wound sufficiently to avoid this, there is such a prolapse of vitreous that the eye is subsequently lost; and even the mere act of moving the probe about in the vitreous leaves little hope of preserving a useful eye. The vitreous is a tissue consisting of cells and a fluid matrix, and bacteriologists tell us it is one of the best nutrient media for germs, so that it requires to be treated with even more reverence than most of the other parts of the body. Finally, there is a great physical objection to this little magnet: (1) A screw junction makes a most inefficient magnetic connexion; (2) the pull of an electro-magnet decreases very rapidly as the distance from the coil is increased.

The dimensions of the bobbin are $\frac{3}{4}$ in. by $\frac{1}{2}$ in. The diameter of the core is $\frac{1}{8}$ in.

Haab and Hirschberg have used giant magnets weighing 250 lb. to 600 lb.; these are certainly powerful enough, but they are unwieldy, and require the greatest care in their application, or irreparable damage may be done. Some six years ago I devised this magnet for eye work. It can be held in the hand, and when required the plunger can be removed and a pair of forceps inserted. I will endeavour to show, on this "phantom eye" how the magnet is to be worked.

[The "phantom eye" was represented by a wineglass filled with water, its mouth being covered with a piece of india-rubber sheeting. Part of a needle was passed through the rubber into the glass, from the bottom of which it was then removed through the minute hole of entrance by the electro-magnet.]

The greater number of iron particles enter the eye either through the cornea or the scleral border, and as we must at all costs prevent the foreign body from getting entangled in the ciliary body, in the majority of cases the best way out is through the pupil into the anterior chamber. The eye must be carefully watched the whole time, and if the foreign body lie behind the iris, it must be coaxed round the anterior surface of the lens, until it can enter the anterior chamber through the pupil. In some cases, where the wound is in the sclera, and is quite recent, one is tempted to extract the foreign body by its wound of entrance. There is then, however, the great risk of injuring the ciliary body. The specimen I send round was extracted in this way. I saw the case three

* A paper read before the all-day scientific meeting of the Newcastle-upon-Tyne Division of the British Medical Association, July 16th, 1905.