vessel is just as absolutely indicated when hæmorrhage is taking place internally as if occurring externally.

May 13, 1890, I was called to see a patient 40 years of age, mother of twelve children, who had had a miscarriage eight months before. She had menstruated some five weeks before. The night before I saw her she went out to an entertainment, and was taken with violent pain in the side and faintness. She fainted several times during the night. When seen she was bloodless, pulse feeble, and unable to raise her head from the bed. The abdomen was large, pendulous, and gave negative symptoms upon vaginal and abdominal palpation. Believing that she was suffering from internal hæmorrhage, an incision was made. Two quarts of liquid and clotted blood were found in the cavity. In the left tube, rupture of a cyst the size of a cherry had taken place, and from it the hæmorrhage resulted. The tube was removed, irrigation and drainage used. The patient had an uninterrupted convalescence.

The ligation of the vessels, the emptying out of the abdomen, of the accumulated blood, the irrigation of its cavity with hot water, the stimulation of the flagging nerve centres with hypodermic injections of strychnine and the application of external heat, would be the measures which would give the most certain promise of relief to the suffering patient. When rupture has not yet occurred and the symptoms indicate the presence of an ectopic gestation, our treatment will depend somewhat upon the stage at which it comes under observation. If before the fifth month a section should be made as early as possible, and the foetal sac with its contents removed. This should be done for the reason that we have developing a foetus in such a position as to give rise to the greatest danger to the mother with the least reasonable probability of its safe continuance to viability.

After the fifth month the pregnancy may be permitted to continue until near the completion of a normal pregnancy, with the hope that a living foetus may be delivered. In the operation for the removal of such a foetus great care must be exercised to prevent hæmorrhage. Where it can be done, the seat of the placenta should be encircled with ligatures before this organ is removed. The placenta may be removed by rapidly peeling it off from its base and arresting hæmorrhage by gauze packing.

In other cases where it has a broad base, and severe hæmorrhage is feared, it may be preferable to permit the placenta to remain and be subsequently thrown off. The sac in such cases should be sutured to the abdominal wall, so as to exclude the peritoneal cavity in the subsequent progress of the condition, and thorough drainage should be secured. If the foetus be dead it is

better to postpone operation for its removal until after six weeks or two months, when the circulation in the placenta will have become occluded and there is much less danger from hæmorrhage. Where the foetus has been dead for a length of time and has become encysted, it is preferable that the operation should be done while the patient still remains in a healthy condition, rather than to wait until through some action or changes that have taken place in the sac and its contents, serious inflammatory conditions may be present which will greatly complicate the removal and the subsequent convalescence of the patient.

If following suppuration of the sac, sinuses have formed through which portions of the bones of the foetus have been discharged, the best results will usually be obtained by dilatation of the sinus and removal of the remaining portions of the fetus found within, irrigation of the sac and subsequent drainage.

A CERTAIN CLASS OF OBSTETRIC CASES IN WHICH THE USE OF FORCEPS IS IMPERATIVELY DEMANDED.

Read in the Section of Obstetrics and Diseases of Women, at the Forty-second Annual Meeting of the American Medical Association, Washington, D. C., May 5, 1891.

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Among obstetricians there is a conviction deepening more and more by experience, that whenever a preference is to be made between the use of forceps and a resort to internal version, the forceps should be chosen. The danger will be much less not only to the child but also to the mother. The risk that the child be born asphyxiated, and often, the difficulty if not impossibility of establishing artificial respiration, when internal version is had recourse to, are admitted by all accoucheurs. Even when in that class of cases in which there is much deformity, or unusual narrowness of the pelvis, the forceps is safer than version. In offering this statement, in favor of the choice of forceps, it is not on the ground that greater skill is required in the management by version, but because statistical reports of the masters of almost every country show that great risks are incurred by the employment of this method. All are aware that the forceps, within a comparatively recent period, has been used much more frequently than formerly. The adoption of the practice has assured greater safety in parturition; the mother has escaped many dangers, the mortality has been greatly reduced, and suffering has been more or less diminished. The timely use of forceps has also resulted in great saving of foetal life. It is said as an objection, that the forceps

has often been used to terminate labor that was in all respects progressing favorably. Admitting that this may sometimes have happened, we are taught, nevertheless, the fact that the obstetrician, having known the advantages to be derived by the forceps, and guided, as we must presume, by an intuitive instinct in the conduct of the right doing, has sought only to minimize a suffering, which to the minds of those less appreciative, would be regarded only as the development of the normal physiological function. Influenced in conduct by such motives the question arises, in what class of cases is the use of forceps imperatively demanded? Formerly the chief indications for the use of the forceps were the undue resistance from the soft parts, the debilitated condition of the mother, and the occurrence of convulsions. The indications here enumerated fall far short of comprising the conditions in which the forceps is now required. Within a recent period great improvements in obstetric practice have been made. The skill exercised in the development of surgical instruments generally has given us important improvements in the construction of forceps; consequently many cases of protracted labor, which would have heretofore been left to other methods of procedure, can now be happily terminated by the timely use of forceps. When the head of the foetus has descended into the cavity of the pelvis, and the labor has become lingering from uterine inertia, the forceps may be used with the greatest advantage. In protracted labor when the foetal head has engaged the pelvic brim, or has only reached that introitus and become arrested in its descent, the forceps should be preferred to all other means for relief. The necessity for the application of the forceps in such cases implies the existence of a normal, or a nearly normal, proportion of the pelvic cavity. In the case of Mrs. B., aged 23 years, who was confined March 10, for the fourth time the foetal head engaged in the pelvic brim, but could make no further descent. The pelvis, however, was well formed; the antero-posterior diameter was three and one-half inches, and the transverse nearly four inches. The position was occipito-anterior.

Regular recurring pains continued until some time after the cervix had fully dilated, and the membranes had ruptured, and the head had engaged the pelvic brim. After this, by some cause, apparently from the breadth of the shoulders and the size of the head, the case did not progress. Ether then being administered and the long forceps applied, labor was brought to an easy and speedy termination. The child was strong and did well. The mother suffered from no serious inconvenience. In her third confinement I was called in attendance. A similar condition of things obtained, except that the os, or rather the cervix, was slower in under-

going dilatation. Ether was given and the long forceps was used, without any mishap. In her second confinement I was also in attendance. The patient was much longer in labor; the position of the head was unfortunately occipito-posterior, and the head did not readily engage, but rested on the pelvic brim. The long forceps was called into requisition and delivery was successful. During her first confinement I was not in attendance. From the history of the case it appears that the patient was some twenty hours in labor. The forceps had to be used. The child was born alive; the head, however, I was informed, was much disfigured.

In a case to which I was called March 15, the head entered the pelvic cavity, but failing to make further perceptible advance, forceps was used. The position was occipito-posterior; delivery was easily accomplished. Both mother and child did well.

In another case to which I was recently called, the liquor amnii had escaped early, and the labor was making but little progress. The os and cervix were only partially relaxed. The pains were unusually severe, and at times almost tetanic. Morphia used hypodermically, and the inhalation of ether served in some measure to overcome the rigidity of the uterine cervix, and to enable me to apply long forceps to the head which was resting on the pelvic brim. In a case to which I was called in consultation the patient had been in labor some eight hours; the membranes had ruptured, and the pains were severe and exhausting, but failed to effect propulsion of the head. Chloral and subsequently ether were administered. This overcame the uterine spasms, and also served to relax and to dilate the cervix. Owing to the rigid and irritable conditions of the uterus generally, a resort to version was deemed unsafe, both to the mother and to the child. Forceps of somewhat unusual length was finally chosen, and delivery was safely accomplished. In reviewing the obstetric practice which I have had for the past twenty-four years, I find that in the cases in which the head became arrested at or above the brim of the pelvis, the results of each of the various methods adopted for relief clearly show that the long forceps is to be preferred. In almost every case in which the head of the child was at the brim, or had rested upon it, if forceps sufficiently long was employed, delivery was accomplished without serious injury. In cases in which the head had not reached the brim, if the cervix was relaxed, and supra-pubic, and abdominal pressure was rightly exercised, forceps could be applied, and delivery safely effected. In giving the results of my experience I make no reference to cases in which the head was above the brim, when there was evidence at the same time that the child was not alive; nor do I intend to consider the class of cases in which

a preternatural presentation occurs. In every such case the medical attendant can be guided only by the history of the patient, his own experience, and the indications before him. In regard to the great resistance offered by the soft parts as an indication for the choice of forceps, other methods of procedure may be resorted to with the most beneficial effect. Ether, and in cases of suspected renal complications, chloroform, chloral, opium, or morphia, hypodermically used, and nitrate of amyl will often assist in overcoming the vulval resistance. The administration of any one of the above may be supplemented by ergotine or by a milder oxytocic. The recent advances made by the development of the practice of gynecology unmistakably show, that the great resistance which is sometimes offered by the soft parts to the descent of the foetal head, especially when such resistance occurs in the vulva, should not be overcome by the application of forceps. By the employment of force, undue distention, and laceration of the vulva and of the vaginal introitus, as well as the lower segment of the uterus, the tissue and vessels of the bladder, and also of the perineal structures, are liable to take place. In cases of posterior occipital presentation we have a different element opposing the descent of the head. After the head has entered the pelvis the force of the uterine pains becomes misdirected. In this class of cases it is seldom that the soft parts offer any considerable resistance. The employment of the forceps, as has been said, merely regulates the propelling force, and soon without producing any untoward results the child will be in the hands of the nurse, and every danger which can reasonably be apprehended is found to have been averted. In regard to that class of cases of protracted labor in which the head has descended to the pelvic brim, experience shows, if I mistake not, that the forceps is imperatively demanded. In a case of protracted labor in which the head has not reached the brim, and the child is still alive, the results of my experience are largely in favor of the forceps. For every such case the forceps selected should be of the required length, and of a curve adapted to the peculiar features of the pelvis. The following case, to which I was called in consultation, illustrates the advantages of forceps in high operations: Mrs. H., aged 35 years, had been in labor twenty-seven hours. This was her first labor. Her physician had been in constant attendance. When I arrived I found that the membranes had been ruptured and that the os and cervix had fully dilated. The head was considerably above the pelvic brim. After the patient had been profoundly etherized long forceps was applied, but as soon as traction was made the blades slipped because they had not been curved sufficiently to allow their convex edges to sweep the hollow of the sacrum.

Forceps with a sharper curve was more easily applied, and the patient was quickly delivered of a living child whose weight exceeded nine pounds. The patient recovered without serious, constitutional, or local disturbances. Occasionally I have been called in consultation to cases in which I was expected to apply forceps before the cervix had fully dilated. In all such cases I advise waiting and endeavoring to effect by some of the different means proper dilatation of the lower uterine zone. In cases of puerperal eclampsia in which it is deemed necessary to hasten labor, digital and manual dilatation of the cervix should first be accomplished. Then, if the head presents, whether at the brim of the pelvis or above it, the forceps should be used. In breech or footling presentations, after the head has descended into the pelvis, the forceps is often of the greatest benefit in expediting labor, and thus preventing asphyxia of the child. In deciding in any case as to the necessity for the use of the forceps careful consideration has to be exercised. In reviewing discussions on the subject we have noticed that the advantages and safety of the forceps has been variously estimated. In the practice of some, the forceps has been used as often as once in every four to six cases. The necessity for such frequent use may not seem unlikely to occur in the practice of those who are connected with lying-in hospitals, or in the practice of those who are often called in consultation. This frequent employment of the forceps merely for shortening the time of labor betrays lack of appreciation of the real advantages to be derived by instrumental interference, and also want of conception of the dangers, either immediately or remotely, that may follow in any case in which forceps has been brought into requisition.

A REPORT OF TEN SELECTED CASES OF LAPAROTOMY, WITH REMARKS.

Read in the Section of Obstetrics and Diseases of Women, at the Forty-second Annual Meeting of the American Medical Association, held at Washington, D. C., May, 1891.

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The following brief report of laparotomies is made in the hope that its variety may not be wholly devoid of interest:

Case 1.—Mrs. D., æt. 38, presented herself at my office in the early part of April of last year, suffering considerable pain and inconvenience from a rapidly growing tumor in the abdomen, situated immediately to the right of the umbilicus. The growth was somewhat movable, and the size of a foetal head.

She presented an anxious expression, suffered from insomnia, and was rapidly losing flesh. A short time previous to this interview, a council