larged and prominent, elevated nearly a sixteenth of an inch above the mucous surface, and had a brush-like appearance. The patches above that distance were abnormally distinct and gradually became normal. Also, the follicles were abnormally distinct for some distance above the region where they were most diseased.

The follicles of the large intestines were less affected the further the distance from the cœcum; but there were diseased follicles scattered thinly over even the lowest part of the gut which was removed, nearly to the end of the rectum.

The appendix cœci was healthy.

The specimen was shown to Dr. J. B. S. Jackson, who considered it a case of acute folliculitis.

The head was not examined.

No microscopic examination was made.

REMARKS UPON A CLASS OF OBSTETRICAL CASES.

By GEORGE CAPRON, M.D., Providence, R. I.

THE class of obstetrical cases to which I would respectfully invite your attention is that in which the head of the child is the part last expelled; whether this occur spontaneously—as in cases of presentations of the breech, knees or feet, or artificially—as in turning in presentations of the arm or shoulder, and other cases requiring that operation. It is a well-known fact that in these presentations a large percentage of the children are lost, and that death in a large proportion of the cases is caused by compression of the funis during the last stage of labor. The percentage is differently estimated by different authors, varying from twenty to thirty-three per cent. The greater estimate probably falls short of the truth; I think I do not err in saying that in primiparæ, it amounts to nearly or quite one half; and it is doubtful whether the greater success in the case of multiparæ reduces it below thirty-five or even forty per cent.

NOTE.—In this estimate of the percentage of loss, reference is had to the *whole class* of cases. Statistics based upon breech presentations *alone*, which is the most favorable variety of this class, would show much more favorable results.

Every practitioner of experience must often have been disappointed and indeed mortified (to say nothing of the emotions prompted by humanity), by having a fine, healthy child die in his hands, notwithstanding his most strenuous efforts to save it. Among our Catholic patients—who believe

the baptismal rite essential to insure the infant the light of Heaven—we are made to feel our responsibility with especial keenness. Whatever views may be entertained upon this subject by the parents or friends; it is plainly our imperative duty to put in requisition all the resources that art or ingenuity can suggest to preserve the life of the child, when its preservation is consistent with the safety of the mother. The opinion of some authors that a considerable proportion of the deaths occurring in these cases are caused by injury done to the spine, and particularly of the neck, is probably unfounded. It is certainly a severe, and we may hope an unjust imputation of ignorance and rudeness, that requires to be well-supported by facts. That it has occasionally occurred, particularly in the hands of rude and ignorant female practitioners, is undoubtedly true. I have recently seen a case in which I thought this to have been the fact, and I have always been of the opinion that too much caution could not be exercised to guard against an accident of this kind, which in the existing weak and relaxed condition of the muscles might happen from a very moderate degree of extension.

My reason for selecting this particular subject is, that as far as I have investigated it I have found in the books no sufficiently full and detailed directions for managing this class of labors, nor any full account of a manœuvre which I have practised for a number of years, by which I am confident that I have saved the lives of a considerable number of children that I should have lost by any other known procedure.

I was led to practise the manœuvre hereafter to be described by observing, by chance, that after the shoulders were expelled—could the head be brought into the most favorable position of which it was susceptible when in the pelvis—the child might breathe and even cry before the head was fully expelled.

Among the obstacles to the delivery of the head, endangering the life of the child, in these presentations, those most frequently met with and most important in the present connection, are a cessation of uterine contractions and unusual rigidity of the soft parts, both of which are liable to be present in the same case. Deformity of the pelvis, it is true, may be a more serious obstacle, but fortunately this complication is of rare occurrence. Where it does exist in a marked degree the child will almost certainly be lost.

While the head remains in the uterus the

stimulus of its presence keeps up the contractions, but where it has escaped from that organ and occupies the vagina, uterine contractions often entirely cease. In this situation the only forces brought to bear upon the head are the contractions of the coats of the vagina, and the forcing down of the uterus by the voluntary action of the diaphragm and other abdominal muscles. The former of these is very limited in amount, and the patient being exhausted and discouraged by long continued hard labor, and thinking, perhaps, that her task is finished, yields herself up to the indulgence of her comparative freedom from pain and withholds all voluntary aid. In this situation of affairs the physician is in a dilemma—extension to any considerable amount is inadmissible, the funis is almost certain to be compressed, pulsation is soon found to have ceased, the child twitches spasmodically, and the experienced accoucheur foresees the result.

Rigidity of the soft parts in a troublesome degree, as is well known, is most frequently met with in first labors, and more especially if the woman be somewhat advanced in life; and I may add that according to my observation it is more common among Irish than American women.

In order to manage with the best chances of success the presentations under consideration, I would suggest the following general plan, which is by no means claimed as original except in a few particulars.

First. All attempts at manual assistance, under ordinary circumstances, should be avoided until the os uteri is fully dilated, and the hips and even the shoulders are expelled by the natural forces.

Secondly. In making examinations great care should be taken not to rupture the membranes, as the nearer the labor is to being accomplished before this happens, the more successful is the result likely to be. Unfortunately, the membranes often rupture spontaneously in the early stage of the labor; sometimes they are ruptured accidentally in making an examination, and I have known them to be ruptured intentionally, with the view of ascertaining more precisely the presentation, and much trouble, including the death of the child, has been the consequence.

Thirdly. If there be great rigidity, bleeding, nausea, anodynes, pediluvia, fomentations to the pudenda or a hip bath, warm sudorific and relaxing drinks, the use of belladonna ointment and time, will be preferable to any manual assistance that can be rendered.

NOTE.—In modern days bleeding is so much out of fashion that it is rarely proposed, though formerly it was considered one of the safest and most reliable means of accomplishing this end. In the meantime, however, the use of anaesthetics has been introduced into obstetrical practice, and it must be admitted that they have claims to the highest rank in overcoming rigidity, alleviating the suffering, and shortening the pangs of child-birth. The effects of chloroform are often charming, but it is a treacherous agent, sometimes killing when danger is least suspected. It has not been my misfortune to kill any one with it, but I have seen effects from its use that have entirely deterred me from administering it by inhalation. From the use of ether, on the contrary, I have never witnessed any evil consequences, and in cases to which it is adapted, and when the amount of suffering is such as to demand it, I administer it freely and fearlessly.

During the last stage of the labor frequent draughts of cold water are often beneficial in stimulating the uterus to increased action, but the agent upon which the greatest reliance can be placed when the soft parts are in a favorable condition is ergot. When ergot is used, the choice of the time to administer it is important. Its full effects are desirable only during the last stage of the labor.

Fourthly. When the breech presents it is rarely, if ever, necessary, or even proper, to bring down the legs, and more especially in first labors, in which the gradual distention produced by the slow advancement of the breech is of the greatest importance in preparing the way for the head.

Fifthly. In regard to bringing down the arms, notwithstanding the high authority to the contrary, I am decidedly of the opinion that it should not be hastily done, or even under ordinary circumstances done at all, for the following reasons:—While they remain in the vagina and perhaps extend up into the neck of the uterus, the distention they occasion is the most natural and certain stimulus to expulsive action; and, by their position, they may in some measure protect the funis from compression. After the hips, with the legs folded upon the abdomen, have passed through the external parts, there can be no great difficulty in the passage of the shoulders and arms in almost any position they may chance to be, and the greater the distention of the external parts, and the greater the effort required to accomplish this part of the labor, the more readily will the head follow, so far, at least, as to descend into the pelvis, where it can be successfully managed.

Sixthly. The most favorable position of the head after the expulsion of the shoulders is with the face inclining posteriorly, and when delivery is effected by turning and in aiding the child along in the presentations under consideration, this position should be favored by acting upon the body and shoulders, and also by passing the left

hand or a finger or two up upon the head, when practicable, and making pressure in a direction to favor this position.

We will now suppose the head to be in the pelvis, the face inclining backward into the hollow of the sacrum, the shoulders and arms liberated, the funis compressed, but the child still alive, the pains inefficient, the woman discouraged; there is great anxiety about the life of the child, and we have not our forceps at hand; what shall we do?

Under these circumstances the body of the child should be carried directly forward between the thighs of the mother, until it forms a right angle with the long axis of the pelvis, or even until its back is nearly in contact with the abdomen of the mother, and be supported in this position with the right hand, or, if the labor be not immediately finished, by an assistant. In the meantime, one or two fingers of the left hand should be passed so as to reach the chin or a higher portion of the face, which should be gently depressed and brought down, and at the same time, if necessary, the occiput may be pushed upward by the fingers of the right hand in such a manner as to give the head a quarter turn on its own axis, and bring the mouth and nose directly to the vulva. This manœuvre can usually be accomplished with great facility, especially if favored by a pain or a little voluntary aid of the mother in forcing down the uterus. In order to be successful, however, this evolution must be performed with dexterity and not with force, and should not be attempted until the head has descended or is descending into the hollow of the sacrum; as to separate the chin too early from the breast deranges the natural process of labor, and while the head is high up the body should be kept in a line with the axis of the pelvis, and should be gently swayed from side to side or backward and forward to excite the womb to action, and the chin, when it can be reached, be depressed upon the breast. The uterus should in the meantime be gently compressed and kneaded, with the view of exciting action. When the head has been brought into the position described, the mouth and nose presenting at the vulva, the child, if not asphyxiated or too much exhausted, can breathe freely, and will sometimes attempt to cry many minutes before the head is expelled, and with a little attention to keeping the labia separated and the perineum pressed backward, its chances of life are for a sufficient length of time nearly as great as after complete delivery. The most

favorable position of the woman is on the left side, a little inclining towards the back. The thighs should be widely separated, and the right one supported by an assistant.

The idea of admitting air to the child before the head was delivered was suggested many years ago. The plan proposed was to keep the perineum pressed back and to introduce a female catheter for the admission of air to the nose or mouth of the child, and I recollect being highly gratified with the occasional success of this plan, but I became convinced by observation that the success depended entirely upon the situation of the head. If low down, and the face situated posteriorly, by separating the labia and pressing back the perineum, sufficient air will sometimes be admitted to enable the child to catch its breath. The catheter is of little use. While the body of the child is nearly in a line with that of the mother, the face is so shut in by the perineum and the closure of the vagina, that to supply it with air is an awkward business; besides, when this can be done the operation above described can more easily be performed, and success will be much more certain. When the face is forward—a somewhat rare occurrence—the body of the child should of course be carried backward, when the same object will be attained. With the view of expediting the delivery of the head the vectis or forceps can often be used with great advantage, and the position into which the head is brought by this manœuvre is the most favorable position possible for the operation. The body is held entirely out of the way, and instruments can be applied with great facility and in a moment's time. We are cautioned by authors to guard well the perineum, as though this was the most important duty of the physician; but it seems to me that it is of secondary importance when compared with the life of the child, and especially as it is presumable that after the shoulders, perhaps with the arms up, have passed, the head will follow with but very little danger of this accident. I am aware that it does sometimes happen under the most careful management, but it is probably of rare occurrence in these presentations, and whether it does or does not happen will depend more upon the time taken up in the delivery and the consequent condition of the organs, than upon anything that can be done by protecting the perineum with the hand. Aside from all considerations in reference to the life of the child, I am confident that this is the easiest and most expeditious method of delivering the head. It requires the least possible room,

is the most favorable for the application of instruments, and, whether the child is in danger or not, is the method I usually pursue. It is, perhaps, unnecessary to remark that the manœuvre here recommended has no application to those cases in which the head is detained at the superior strait—a class of cases much more difficult to manage, and attended with much more danger to the child.

The utility and frequent applicability of the plan above imperfectly described might be illustrated by the relation of a very considerable number of cases, in one of which the child absolutely cried before the head was born; but as this paper is perhaps already too long, I shall relate one only.

On the 27th of February, 1851, I was called to see a Mrs. G., an American woman, aged 27 years, who was in labor with her first child at term. She had been married nine years, during which time she had miscarried six times in the early months without much trouble, except that on one occasion she had profuse hæmorrhage, on which occasion only I had attended her. She had been in labor about two hours when I arrived and learned that the membranes had ruptured previous to the commencement of the pains. On examination I found the inferior or pelvic extremity of the body and one foot presenting. The arms, genital organs, and os coccygis of a female child could be distinctly made out, and the situation of the foot indicated that the knee was drawn up upon the abdomen. The os uteri was not fully dilated, but there was no evidence of extreme rigidity, and as the pains were efficient and the process of labor going on naturally, I did nothing of importance except to watch its progress. In less than an hour the os uteri was fully dilated, and the inferior part of the body and foot presented at the vulva and were soon expelled. The other leg was flexed upon the abdomen as is usual in breech presentations. The shoulders, with the arms up over the head, soon followed, and, as the child was not large and the external parts apparently not very rigid, I apprehended no delay in the expulsion of the head. As soon, however, as the head had escaped from the uterus, the pains in a great measure ceased, and what few there were seemed to produce no impression upon the child. I found also that the external parts were more unyielding than I had supposed, and that the funis had ceased to pulsate. By performing the evolution above described the face was made to present at the vulva, when the

child at once began to breathe, and made a feeble attempt to cry. Air was freely admitted to the face by separating the labia, and a quantity of bloody mucus which seemed to obstruct the breathing was wiped away. The woman was urged to aid such pains as she had as much as possible, and an assistant was directed gently to grasp and compress the uterus. In this situation of affairs I waited several minutes, rendering such assistance as I could, expecting momentarily that the head would be expelled. Being disappointed, however, in my expectations, I sent her husband for my forceps, which were in my chaise standing near the house. The child being held by an assistant, one branch was passed over the head and used as a vectis. In this manner the delivery was soon effected. The child was alive and strong, and the mother had a favorable recovery. As nearly as I could judge, five or six minutes elapsed after the child began to breathe and made an attempt to cry, before the head was delivered.

In one case, to which allusion has been made, and which occurred a number of years before, the child breathed and cried stoutly nearly or quite double that length of time. The woman lying on her back, the child was supported in a perpendicular position, standing, as it were, upon its head. On that occasion I had not my forceps with me.

Having spoken of the use of instruments in this class of cases, I would remark that I have lost a considerable number of children by not having them at hand, and I have so often regretted this occurrence that I now make it a point to be always provided with short forceps or a vectis. The forceps is evidently preferable, as both branches may be necessary, while one branch answers the purpose of a vectis perfectly well.

In conclusion, I would remark that others may have understood the directions given by authors differently, and may have practised this or a better method; but it has seemed to me that there were no sufficiently particular directions for the management of this class of cases to enable the inexperienced to manage them with confidence and the greatest attainable success.

If the perusal of this paper should suggest to the mind of the practitioner a single new and practical idea, that may save the life of an individual or serve the cause of humanity, the ends of the writer will have been answered.