1856

Obstetrics: The Science and the Art - Part III. The Therapeutics and Surgery of Midwifery; Chapter XII. Presentations of Pelvic Extremity of Foetus

Let us know how access to this document benefits you

Follow this and additional works at: http://jdc.jefferson.edu/meigsobstetrics

Part of the History of Science, Technology, and Medicine Commons, and the Obstetrics and Gynecology Commons

Recommended Citation
http://jdc.jefferson.edu/meigsobstetrics/29

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's Center for Teaching and Learning (CTL). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Obstetrics: The Science and The Art, by Charles D. Meigs, M.D. by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.
CHAPTER XII.

ON PRESENTATIONS OF THE PELVIC EXTREMITY OF THE FoETUS.

As the length of the gravid uterus, at full term, does not exceed twelve inches, and as a well grown foetus is nineteen or twenty inches in length, it is evident, as I have already said, that it must, while in utero, be folded up in a very compact form, and that it will be an oval body, one of the extremities of which ought to be directed towards the orifice of the womb, and the other to the fundus. The most natural position of the foetus is certainly that in which the head points downwards; so that the vertex, or some other part of the head, may, in labor, advance first. But it happens that about one in every forty-five or fifty cases presents the other extremity of the ovoid to the os uteri; and in doing so, it is a matter of mere chance whether the breech, or the knees, or the feet, prove to be the presenting part. In strictness, the breech ought to descend first in these labors, but if the feet happen to be near when the membranes give way, they are quite likely to prolapse into the opening, and pass, soon afterwards, out at the vulva; so that, supposing the breech presentation to be, after that of the vertex, the most natural, we may properly include, in the account of the presentations of the pelvic extremity, those of the knees and feet, and regard them as mere accidents of the pelvic presentations, and all to be included under the head of natural labors, agreeably to the doctrine expressed in a former page of this work—a doctrine that announces two essential presentations of the foetus, one a cephalic, and the other a pelvic presentation; each of them is liable to the accidents appurtenant to their form.

It is not an easy matter to determine why the breech presentation occurs about once in forty-five or fifty labors, and it is far less easy to say what is the reason that certain women are prone to this sort of labor to such a degree as to bring all their children so. I knew a woman whose children, four in number, were all born with the breech presentation, and it is by no means very rare to meet with persons who have been similarly situated in more than one of their labors.
Dr. Collins, of Dublin, in his *Practical Midwifery*, informs us that one woman who was delivered at the Dublin Lying-in Hospital had preternatural presentations in every one of her labors, and she had given birth to nine children. While that gentleman was master of the Dublin Hospital, sixteen thousand four hundred and fourteen women were delivered, of whom three hundred and sixty-nine had presentations of the breech, feet, or knees; making rather more than one such labor in every forty-five cases. Out of 54,723 labors stated by Boer, Bland, Merriman, Boivin, Lachapelle, and Nægèle, there were 1694 cases of breech, feet, or knee presentations, which give us one pelvic presentation in thirty-two and one-fifth cases nearly. It is commonly assumed that about one in forty-eight, or more generally two in 100 cases will prove to be pelvic presentations.

**Causes of Pelvic Presentations.**—The causes which produce these presentations must be purely accidental. The most natural presentation is that of the head, which is turned towards the os uteri from the earliest period of pregnancy. The insertion of the navel-string is nearer to the pelvis than to the head of the child, the head therefore hangs downwards; but when the cord, by the growth of the ovum, has become of a very considerable length, the child ceases to be dependent from it, for the cord is not unfrequently from twenty to thirty inches long. It seems very probable that while the foetus is yet small, it may change its position in the uterus; but if it happen to turn as late as the fifth month, it will be apt to retain the attitude it may then acquire till the end of the pregnancy, as its length does not admit of its changing again very readily after that period. It is not to be doubted, however, that the attitude may, by certain extraordinary or violent movements of the mother, be reversed, at a later period, so that the head, which was originally at the os uteri, may be afterwards brought to the fundus, and *vice versa*. Prof. Paul Dubois, of Paris, has an article in the *Mem. de l'Acad. Royale de Méd.*, in which he endeavors to show that the child does turn its head downwards in consequence of a certain instinct at about the seventh month, but I am far from being convinced by his arguments.

Some persons will not agree with me in regarding the pelvic as a natural labor; yet notwithstanding the breech presentation is met with only once in forty-five or fifty labors, I am not inclined to regard it as a preternatural case, for I cannot discover any reason for classifying it along with that sort of births, in the mere fact that the head does not present. The breech composes one end of the foetal ovoid; and a breech labor requires, for its complete success, no greater dila-
PELVIC PRESENTATIONS.

tation than that demanded for the passage of the head; it may be
effected without any aid, and is, perhaps, not really fraught with
greater danger for the mother than the other, the common vertex
presentation. It is, however, far more dangerous for the child than
the vertex case; and as the object of parturition is the safe birth of
the infant, it might be absolutely proper to include, in the class of
preternatural labors, all those in which the child is exposed to
unusual hazard. Still, many breech presentations terminate favor-
ably with great celerity and without any artificial aid, whence I look
upon them as not really preternatural.

In former times these presentations of the pelvic extremity of the
foetus were regarded as much more serious events than they are at
the present day.

The ancient Romans used to call all those persons that were born
by the pelvic presentation Agrippas, as is seen in the following
passage from Pliny, lib. vii. cap. viii.; and all such labors were
regarded as not natural.

"In pedes procedere nascentem contra natura est, quo argumento eos
appellavere Agrippas ut aegre partos; qualiter M. Agrippam ferunt
genitum unico propé felicitatis exemplo in omnibus ad hunc modum
genitis."

If the birth of Marcus Agrippa were really the only instance of a
safe delivery of the child in a breech presentation, we should not
have occasion for surprise at Pliny's opinion as to the preternatural
character of such labors; but doubtless, thousands of Roman children
must have been safely born so, and that without any assistance in the
birth.

That sprightly and most delightful old book—the first Midwifery
book ever printed in England—I mean the "Byrthe of Mankynde,"
by Thomas Rainald, Lond., 1565, at Fol. liii., has the following:—

"Agayne, when it procedeth not in due tyme, or after due fashion,
as when it commeth forth with both feete, or both knees together, or
els with one foote onyle, or with both feete downwards, and both
handes upwardes, other els (the whiche is most perillous) sidelong,
arselong, or backlong, other els (having two at a byrth) both proceade
with theyr feete fyrst, or one with his feete, and the other with his
head, by those and dyvers other wayes the woman sustayneth great
dolour, payne and anguishe."

Thomas Rainald would be very much surprised and comforted
could he see what facilities modern science has provided for the obvi-
ation of all these terrible occurrences.

The danger to the child, here depends on its liability to asphyxia,
PELVIC PRESENTATIONS.

from several causes: first, from the compression of the cord, which is pressed betwixt the child and the parts from which it is escaping; second, from the detachment of the placenta before the head is born, by which the uterine life of the child is destroyed before its birth; thirdly, the compression of the placenta itself betwixt the uterine parietes and the head of the infant; or fourthly, the constriction of the placental superficies of the womb, during the time that the child’s head, still remaining in the vagina and lingering there, ceases to dis-tend the uterus, which closely contracts on the after-birth, and even though still retaining its connection with it, yet suspends all the utero-placental operations, on which the fetus depends for existence antecedently to the establishment of its respiration.

The last named cause is, I presume, the one chiefly to be feared; and I have long deemed the pressure upon the umbilical cord, in breech cases, a matter of small moment as to the child’s security, in comparison with the asphyxiating influence of the compression, detachment, or constriction of the placenta by the reduction of the superficial content of the placental seat. It is probable that that seat, which is eight inches in diameter before the commencement of the labor, is diminished to a diameter of four or even perhaps three inches by the time the head is driven out of the womb into the vagina in breech cases. Under such a reduction, no valid placento-uterine intercommunion can be supposed possible. Very often it must happen that the whole placenta is off long before the head gets even out of the womb and into the vagina.

The breech may descend into the excavation, and it may even pass through the vulva, without the least danger of compressing the cord; but when the body of the child has sunk so low as to bring its navel down into the bony pelvis, there is little danger that the arteries of the cord shall be completely obstructed for a period long enough to give the child a fatal asphyxia. Such an event is far more likely to occur where the feet present than where the breech advances; because, in the latter case, the thighs, and generally the legs, are extended along the front of the body in such a manner as to protect the cord from pressure, its vessels being fully guarded by its position betwixt the thighs, during all the time the body is escaping; thus enabling the infant better to bear the temporary pressure on the cord for the short time it must be compressed by the head only, while that part stops in the excavation; longer pressure by the head would easily extinguish the remains of a life that was already about to expire from preceding obstruction of the circulation. In general, the danger for the child is not great until the head has sunk down into the exca-
vation, because it commonly does not take a great deal of time for the whole of the body to pass through the dilated canal of the vagina; but the head, being subject to arrest while in the passage, may there fatally compress the cord betwixt itself and the bony sides of the pelvis.

We know that the prolapsion of the cord, in an ordinary vertex labor, is very apt to occasion the death of the foetus; and it is therefore easy to perceive that such compression of the cord, between the foetal head and the pelvis, is here the real cause of the loss of the infant. From this we might naturally suppose that those children that are lost in breech and footling cases are lost from the same cause, to wit, a compression of the cord. But I believe upon evidence, that the placenta is often detached as soon as the breech or even the head leaves the uterine cavity: and if so, then the child is rather lost from the suspension of the placenta-foetal circulation by the afore-mentioned detachment, than from the compression of the cord only.

**Fatalities in Breech Cases.**—I think it probable that more than one child in every five that presents by the breech, or feet, or knees, perishes in the birth. Certainly, if we may judge from what Pliny says about the Agrippas, in the passage quoted but a little while ago, the highly civilized people of Rome, and probably the ancients in general, looked upon these labors as replete with danger, and hence, if four out of five children born in this manner escape with life, such a success is as much as we ought to expect—all the world over. In large lying-in hospitals, perhaps, the proportion of fatal cases is rather less unfavorable, in consequence of the prompt attention always paid in such establishments to the parturient female, and to the greater skill and dexterity acquired by abundant opportunities of practice. Of Dr. Collins's cases, 369 in number, of breech, feet, and knee presentations, 234 were born alive, and 135 were born dead—some of which were putrid, premature, &c.

In Dr. Cazeaux's *Traité Théorique et Pratique de l'Art des Accouchemens*, a work published in Paris in 1840, and which is said to enjoy the very highest favor in France, there are the following remarks upon the subject of the danger to the foetus in pelvic presentations. I translate it, as containing a late novelty upon the subject. "Delivery by the pelvic extremity is very dangerous for the child. The statistical results furnished by Madame Lachapelle prove that, out of eight hundred and four presentations of the pelvic extremity of the foetus, one hundred and two children were born feeble, and one hundred and fifteen were born dead. The proportion of dead children to the whole
PELVIC PRESENTATIONS.

number is one-seventh; whereas, in 20,698 vertex positions, there were only 668 dead born; which is one in thirty, or about one-thirtieth. As to the prognostics of the several sorts of pelvic presentations, it has been remarked that, when the breech comes down first, the number of dead born is about one to eight and a half, which is about an eighth and a sixteenth. In footling cases, one out of six and a half die, a sixth and more; and lastly, for the knee cases, one out of four and a half."

M. Cazeaux goes on to say that the above is not a fair representation of the dangers to the child in these cases; for these results do not exclude those cases of dead born that are not properly assignable to the presentations as causes of the death; the statements ought to exclude putrid foetuses and deformed children; and he states, as the opinion of M. P. Dubois, that, setting aside all the cases in which the children appear to have been lost from causes not connected with the presentation, M. P. Dubois has arrived at this result, that in labors with footling presentations, there dies one child out of eleven, whilst in presentations of the head there dies one out of every fifty. It is plain that the difference is frightful.—P. 359.

Diagnosis.—It is a question whether the nature of the presentation can be discovered by reference only to the movements of the foetus in the latter stages of gestation. Some persons have foretold that the child was improperly placed, judging it so to be by feeling a greater degree of motion in the pelvic region than in the upper part of the uterus. It seems not difficult to believe that, if the motions of the child should be chiefly felt towards the cervix uteri, they ought to be accounted for by referring them to the presence of the feet in that quarter. However, I feel assured that those patients whom I have attended, and whose labors were accompanied with this presentation, were in general utterly unsuspicious of it in pregnancy; and they are, commonly, ignorant of it until the child is born. It is not rare, indeed, for women to fear that the child is to be born double, as it is called, when the vertex really does present; and some patients are quite convinced the child is wrongly placed, until labor comes on to prove their fears ill founded. There may be some certainty obtained by a diagnosis derived from the stethoscope applied to different parts of the uterine region; for, if the child's head be directed towards the fundus uteri, there will be heard, in consequence, a pulsation of its heart at a higher level than if the head occupy its more natural position—probably near the navel; but there will always remain some liability to wrong impressions, if they be derived from auscultation alone. The
surest way is that of the Touch, which is scarcely to be confided in except at the commencement of labor, or at a period when the presentation can be touched with the tip of the finger.

When the breech can be reached per vaginam, it ought to be recognized by its mass filling up the pelvis; by its softness, and its fleshy feel, so different from that of the fetal head; by the tubera ischii; by the point of the coccyx, the anus, and the organs of generation, male or female; by the spines of the sacrum, and by the sulus found between the nates and the thighs, which tend upward from the presenting part; I may add, also, by the meconium, which is often discharged at a pretty early stage of labor, and comes away with the waters on the hand of the accoucheur; but let not the young accoucheur be deceived by this symptom, since it is possible for portions of the meconium to come away even in the best vertex position. It is also to be observed that the form of the bag of waters is commonly not so much like a segment of a sphere in the presentations of other parts than the head. In breech presentations, it is more like an intestine in shape, sometimes descending to the very orifice of the vagina, and yet not very considerably dilating that passage.

Notwithstanding we ought to be able clearly to distinguish betwixt the breech and the head presentations by the first touch, it is, I think, not very uncommon for us to make a great mistake, if I may judge from the instances of mistakes that have come under my knowledge; but I am sure that such errors are the results of mere carelessness, and they could therefore always be avoided. Let it not be here understood that, when the true nature of the presentation is known, it ought to be communicated to the patient; on the contrary, it should be carefully concealed from her, as not calculated to promote her easy deliverance, since she attaches to the circumstance the idea of greater suffering or danger, which, by depressing the powers of her mind, would be very apt to affect, in an injurious manner, the pains or the voluntary efforts, that she ought to have in their greatest vigor. While the nature of the case, then, is carefully concealed from the patient, it should be formally announced to her husband, or to some responsible person, and all the hazards of such a situation for the infant should be explained, in order that, if any untoward incident should cause the infant to be still-born, no unjust imputations might lie against the candor, the skill, or dexterity of the accoucheur.

Not to bring down the Feet.—When the breech is found to be the presenting part, it is very natural to suppose that, could the feet be brought down, they would give us the command of the child, so
that we could very greatly assist in its delivery; and this is quite true; nevertheless it is bad practice to bring the feet into the vagina, except for some very well understood and sufficient cause. When the child descends double, as it is called, the parts yield very slowly for its advance, and this tediousness is a necessary consequence of its bulk, and the yielding nature of its substance. Unlike the head, which is hard and firm, this part, when urged downwards by the pains, gives way before them, and is compressed so much that each pain is half lost in compressing the yielding mass before the part becomes firm or condensed enough to make it act as a dilator. This slowness is greatly to be deprecated; and all proper means to obviate it may be safely resorted to, such as a venesection, or the administration of a clyster or a dose of castor oil, &c.; yet this very slowness, and the great size of the breech, serve as means for the child’s security, at the last moments of labor. By their means the os uteri, vagina, and vulva are so completely opened, become so absolutely cylindrical, and are so entirely deprived of the power of resisting, that, when the head comes to take the place of the body in the excavation, a very little force of the woman’s straining serves to extricate it; or at least the complete dilatation enables the accoucheur to employ his hand or his forceps to extract the head in time to save the child from an asphyxia, which is almost sure to affect children that are not born very soon after the escape of the shoulders, during the whole time the head is passing the vagina; for the placenta would be now so completely squeezed by, or even separated from, the womb, that the utero-placental functions must cease to be performed.

The impatience, which can scarcely be avoided when witnessing the throes of the mother or the struggles of the child, also exposes us to the danger of doing it a great harm by pulling strongly by the breech, shoulders, &c., in order to get both mother and infant the more speedily released; but if any one will take the time to reflect that the spinal marrow may be greatly injured by a violent extension of the neck, it will be evident to him that no very great amount of extracting force ought to be applied. It is best, therefore, as a general rule, to permit the breech to descend, and not in any manner to interfere with the feet until they are spontaneously born: an extracting force has also an invariable tendency to slip the arms upwards, so as greatly to embarrass the last and most important act of the breech labor. The child is wholly expelled by the uterine contraction, being pushed out of the womb in consequence of the approach of the fundus to the cervix of that organ: in that natural process, if the arms happen to be resting on the sides of the abdomen of the child, they ought to descend
pari passù with the parts on which they rest; but if the child be pulled out, then, as the fundus uteri does not press with a proper power upon the head, the arms will naturally slip up over or alongside of the head, where they sometimes are so firmly fixed as to make it a very difficult matter to bring them down again. Hence the soundest discretion teaches us to let the womb push forth the breech as we let it push forth the head, in vertex labors, without laying hold of it to drag it downwards as soon as the least purchase can be had on the presenting part.

The legs, in a breech presentation, may be turned upwards on the child's belly, or they may be flexed on the thighs, so as to bring the feet very near the nates. If the breech engages in the pelvis, or begins to pass the circle of the os uteri, the feet disappear, rising as the nates descend. There is no danger of injury to the hip or knee-joint, if the child be trusted to the natural powers employed for its birth or expulsion; but whenever much force is employed by putting the fingers in the groin, we do incur the hazard of breaking or dislocating the thighs.

Positions of the Breech.—The breech may have one of four positions: 1st, the child's back to the left acetabulum of the mother; 2d, to the right acetabulum; 3d, to the pubis; 4th, to the promontory. These several positions are easily discriminated in practice by the Touch, which ought not to mislead any attentive or considerate practitioner, since by the Touch it is easy to learn where are the coccyx, the tubera ischii, the genitalia, the sulcus betwixt the thighs, the sacrum, &c. &c.

As the escape of the breech occasions a great distension, the perineum requires very steady support by pressing a soft napkin against it, for the purpose, first, of resisting its too rapid advance, and second, in order to give to its movement that curvilinear direction which ushers it into the world in a course coinciding with the line of Carus's curve. Figure 85 exhibits to the Student the appearance of bending which is acquired by the pelvic extremity of the trunk while passing outwards in a breech labor. It is manifest that the perineum may be here subjected to a great degree of distension. As soon as the body is so far born as to permit the navel-string to be reached, it is to be drawn downwards a little, so as to free it from the danger of being broken
off, or the other danger of a too early detachment of the placenta. It is easy to draw a considerable loop of it downwards, by pulling at the yielding portion, as in Fig. 86. As soon as the feet are delivered and extended, they, as well as the body, should be wrapped in a napkin, in order that the skin may not suffer any injury, and also for the purpose of enabling the accoucheur to hold it more firmly, which he could not otherwise do on account of the viscous nature of the substances that adhere to it soon after it emerges.

First Position.—In the first position of the breech, the child’s left hip should rotate to the left towards the pubis, so as to allow the sacrum to glide down along the left ischium, and the right hip to fall into the hollow of the sacrum. Fig. 87 shows this pelvic presentation in situ before rotation, while Fig. 85, above, exhibits the appearance after the rotation has taken place. But after the hips are fully delivered, they recover the obliquity of their former situation, and the body continues to descend so, until the shoulders, entering into the pelvis in an oblique direction, come to rotate as did the hips; the left shoulder advancing to the pubis, as the hip did, and the right one falling back into the hollow of the sacrum. In Fig. 86, the right shoulder has come to the pubis and the left to the sacrum. When the shoulders do not come down well, a finger should be passed up so far as to reach above the one that is nearest, to depress it by drawing it downwards with the finger, which commonly suffices to cause the arm to escape. But if the arm does not descend readily, let the finger be slid along its upper surface to a spot as near as may be to the bend of the elbow, and then the elbow may be drawn downwards with considerable force, and without any danger of fracturing the os humeri. One arm having escaped, there
will be little difficulty or delay in getting the other down, especially if care be taken to move the body, rotating it in a line of direction opposite to or away from that part where the arm is detained.

As soon as the arms are delivered, an examination should be made in order to learn how the head is situated. If the face is found in the hollow of the sacrum, and the chin well down towards the fourchette, it is well. The child's body ought now to be raised upwards on the practitioner's arm, to a height sufficient to enable the longest axis of the head to become parallel with the axis of the vagina, and the patient should be urgently exhorted to bear down and force the child's head out of the passage; for at this time the head is not in the womb, but in the vagina, and for its expulsion there is required rather the effort of the abdominal muscles than that of the uterus, which doubtless does, in many instances, partially close its orifice above the vertex, in this stage of a footling or breech case. If the patient therefore does not make a very great effort of bearing down, or expulsion, the head must remain in the passage; during all which time the child is exposed to the risk of perishing by asphyxia. It is true that the pressure of the head upon the parts tends to produce a violent tenesmus, which compels the woman to strain very much; but it is also true that in some instances she will not make the smallest effort, unless urged or commanded in the most earnest or even vehement manner by the physician. Should the Student make the grave mistake of waiting for a pain, he might lose the child. Let him not forget what I have above said, viz., that the child's head is out of the womb and in the vagina, and that the action of the womb has nothing further to do with it; for the expulsion of the head is now to be effected by a tenesmic, and not by a womb-contraction.

Some aid may be given at this critical moment by drawing the child downwards; but the attendant should always carefully reflect, while employing any extractive force, that the child's neck will not bear a great deal of pulling, without the most destructive effects on the spinal marrow. Certain it is that the infant in the birth will not safely bear more force applied to its neck than one after the birth, a reflection that ought to regulate the physician always, who should remember that the infant will not safely bear a more violent pull by the neck in this situation, than it would if dressed and lying in its mother's arms. Such a reflection would be a very useful one for the occasion.

If all his exhortations should fail of causing the woman to assist him by bearing down, let him endeavor to preserve the child from suffocation by passing two of his fingers upwards until they reach the two maxillary bones, and cover the nose; by doing this, the backs of the
fingers, pressing the perineum backwards, serve to keep an open communication with the air, and the child can breathe very well until the tenesmus comes on. I have kept a child alive in this way, breathing and sometimes crying, for twenty or twenty-five minutes before the birth of the head, and thereby saved many a life that must have been lost but for this care. At last the head descends and escapes from the vulva very suddenly, after which, the placenta having been duly attended to, the delivery is complete; whereupon the patient may be put to bed.

**Second Position.**—The rule for managing this case is the same as that for the first position. Here the sacrum of the child is to the right acetabulum of the mother; the right hip to her left acetabulum, and the left one to her right sacro-iliac symphysis. As the presenting part descends, the right hip comes to the pubis, and the left falls into the curve of the sacrum.

**Third Position.**—Here the sacrum of the child lies behind the pubal symphysis—its right trochanter to the left ischium, and its left trochanter to the right ischial plane. In any such case, there will be rotation, converting it into one of the first or one of the second position, as accident may determine. It requires no further observation in this place.

**Case.**—A few years ago, I was engaged to attend a young woman in her first childbirth. When she fell in labor, I discovered that the breech presented. Her residence was about three-fourths of a mile from my house. I was very much inclined to send for my forceps, for fear that when the head should come at last to occupy the vagina, I might be unable speedily to deliver it: but as she was exceedingly delicate and timid, and her friends anxious, I deferred sending for them lest needless alarm should be the consequence of bringing them to the house. The labor proceeded favorably until the shoulders were free, and then, notwithstanding the head took the most favorable position, I found no exhortation or entreaties sufficient to make the woman bear down, and the child soon became threatened with asphyxia, which I obviated by admitting the air freely to its mouth and nostrils, by pressing off the perineum, as before explained. The child cried from within the vagina, and I felt a hope that the forceps, which I now sent for, would arrive in time for its succor. The instruments were placed in my hands in the shortest time possible. In two minutes after I received them they were applied, and the head withdrawn, but it was
too late to resuscitate the child. I have never since failed to order my forceps to be placed within my reach in any case of footling or breech labor, and I feel well assured that the consequence of this care has been the saving of several lives that must have been lost but for this precaution. I have lost but few children in pelvic presentation of late years. It is my invariable custom to order a forceps to be got in readiness as soon as I ascertain that the presentation is not one of the head; and I feel well assured that such a precaution, if generally observed, would preserve many a life that would be lost, either by delay in the delivery of the head, or by pernicious attempts to extract by pulling at the neck, to which the temptation is so strong in moments of great anxiety for both parent and offspring.

It is so unpleasant an event in the practice of Midwifery to lose a child in the operation, that the accoucheur ought to take all the precautions possible to free himself from reproach, which he shall scarcely escape, in consequence of the utter ignorance of the nature of parturition even in what is called educated or good society.

Case.—On the 11th of September, 1848, I visited a primipara lady in labor, at 7 A. M. She had been in sharp pain from 10 P. M., nine hours. The os uteri was not so large as the end of a finger. Upon auscultating and examining by palpation, I determined a pelvic presentation. At 12 M., I thought the labor would continue until morning, so slow was the dilatation; but at 5 the membranes gave way, and all the liquor amnii came off, the os uteri being still rigid and irritable. The bands of the upper os uteri were more tense and unyielding than those of the os tincæ proper. The child was still in health, as ascertained by the regular action of the heart. I had announced all the hazard for the child early in the day. My forceps was at hand; at 8 P. M. the head was thrust into the vagina, and, as I failed to deliver it with my hands, I applied the forceps and speedily drew out the head. The child was quite dead. There was no motion of the heart. When I drew down the feet, I found there was no vital tension in the limbs. Now I feel sure that this child perished by asphyxia from the unmitigated pressure of its placenta against the head consequent to the discharge of the waters. It perished of course before the operation. How could I, by any careful obstetrical measure, have saved it? I regretted, upon finding it dead, that I had not repeated my auscultations, after the rupture of the ovum. Had I done so, I should have been able to announce the loss of the child long before the midwifery operation became possible. I do not suppose that I am blamed by its friends, but a young accoucheur would feel
pelvic presentations.

less uncomfortable in such a case for having announced his prognosis. Hence, let the Student remember to auscult often towards the close of pelvic labors.

**Fourth Position.**—In those cases in which the sacrum of the child is directed towards the mother's back, it is highly desirable so to conduct the labor as to effect a complete rotation of the child before the head begins to get fairly into the excavation. If this change does not take place spontaneously, or by the skilful interference of the accoucheur, it must happen, at the last and most important stage, that the chin will be to the pubis, and then there will be some difficulty in obtaining the requisite dip of the head or its due flexion. It is exceedingly dangerous for the child to be so situated, but happily there is a method by which it may be hopefully assisted.

As soon as the shoulders are fairly freed from the vulva, the edge of the perineum tends to compress the neck of the child, and force it upwards against the arch of the pubis. In some cases, the perineum is so strong or elastic as to exert a considerable power in this way; and it is clear that, if it be not counteracted, the chin may be lodged upon the top of the symphysis of the pubis, which will wholly prevent the flexion of the head from taking place. For, if the perineum should press strongly on the nucha, it would push the front of the neck or throat hard against the symphysis, so as to prevent the chin from coming down. Under such circumstances, the child speedily perishes. The indication is to push the perineum back again, or carry the child far back towards the coccyx, and afford space enough to let the chin descend, either spontaneously, or by pulling it down, after introducing the fore and middle fingers of the right hand into the mouth. As soon as the chin is well brought down, the woman should use all her power to assist in the expulsion of the head. I have found that the best attitude for the mother, in this kind of delivery, is that which is advised for forceps operations, to wit, that in which she is placed on her back with her hips brought quite over the edge of the bed, the feet being supported by two assistants; so that, when the shoulders are delivered, the child may be supported almost in a vertical posture, as if standing, by the left hand of the accoucheur, while his right hand aids in the delivery of the head. I am sure that much greater command of the labor may be had in this position of the patient than in any other that can be devised.

But, as I have already observed, we should always endeavor to manage the case so as to get the face into the hollow of the sacrum,
PELVIC PRESENTATIONS.

instead of letting the chin come to the pubis. If, therefore, the breech sink into the excavation in this unfavorable manner, we should, by pressure with two or three fingers, endeavor to force that hip which is nearest the front towards the symphysis, and if we succeed in effecting its delivery in that position, we should, with a proper degree of force, continue to turn the forward hip more and more round, so as to bring the child's spine at least as far in front as the ramus of the ischium or pubis; so that, when the shoulders begin to enter, they may enter obliquely, and that, after they have passed down, the head may also enter obliquely, or at least transversely. For example, let the sacrum be towards the mother's back, the child's right hip will be on the right ischium of the mother. We might try to get the right hip towards the ramus of the ischium, then towards the ramus of the pubis, and, as it advances, cause it to emerge just under the arch. When fully emerged, the hip should be turned more and more round to the left of the mother, so as to let the right shoulder enter the brim at the left acetabulum, afterwards to escape under the arch, in doing which the child's chin will enter near the left sacro-iliac symphysis, or at least near the left ischial plane, and at last slide into the hollow of the sacrum, as in the second position of the breech.

Where, in consequence of the grasping force of the womb holding the child's body tight during a pain, this desirable rotation cannot be gently effected, we ought to watch for an opportunity, during the absence of a pain, to push the child's body upwards again as far as we conveniently can, and then draw it downwards, endeavoring, while pulling it downwards, to twist or rotate it in the manner that is required, and above recommended.

If, on the other hand, we endeavor to bring the left hip to the pubis, we shall also get the left shoulder there; and at last, compelling the face to enter at the right sacro-iliac symphysis, we shall terminate the labor as in the first position of the breech.

CASE.—I shall here relate a case taken from my record book, which may serve to show the Student what a great rotation may be effected by the hand of the practitioner, in cases of the fourth position.

Tuesday, October 5th, 1830. Mrs. J., a young woman in her first pregnancy, sent for me at eight o'clock P. M. The waters had come off at five o'clock P. M. The os uteri, at my arrival, was almost completely opened. I touched the breech and feet; the toes were towards the left acetabulum. At a quarter before nine o'clock, I disengaged the right foot, and then the left one. At nine, the arms were both delivered, the left one escaping first along the perineum, and the right
PELVIC PRESENTATIONS.

one under the pubis. I could not effect any further rotation, and was sorry to find the chin immediately behind the symphysis pubis. I then turned the child's body on its axis, and pulling the chin well downwards pressed the face with two fingers, on its right side, and with great ease turned it into the hollow of the sacrum. I next made a channel by passing up two fingers to the superior maxilla, so as to admit air freely to the nose, and the infant breathed; there was a total cessation of pulsation in the cord. The child breathed and cried at least twenty minutes before the head was extracted, which I could not effect until I carried its body upwards towards the mother's abdomen, and rolled her over on her right side, which gave me far better power to aid her with my right hand. The infant was born living, and did well. Let the Student remark that I turned the woman on her right side at the close of this labor. I wish that, in any case where he encounters delay or difficulty, yet not to such an extent as to demand the forceps, he would, at the last moment, turn his patient upon her right side, so as to enable him to make use of his right hand in assisting to make the head roll out under the crown of the arch. The fingers of the right hand are stronger and more apt than those of the left, and in these cases, where expedition in the operation is so essential to safety, it is desirable to obtain even this not inconsiderable facility and advantage.

Case.—On Thursday, July 14th, 1836, Mrs. —— was seized with labor pains, which came on with a rupture of the membranes. At six o'clock, I made an examination, and found the left foot in the vagina, accompanied by the umbilical cord, which pulsated. The toes were directed to the pubis. I could reach the breech of the child, but the right foot was so high up that I could not touch it. In a short time the left foot came quite down; and in order to rotate the body I drew moderately upon the foot, which caused the left hip rapidly to approach the pubis. I could not even yet get at the right foot, wherefore I permitted the child to descend with that limb pressed upwards against the belly; the left hip came under the centre of the arch, and, as soon as I could command it, I turned it more and more round, so that when the arms were delivered I found the face in the sacrum, soon after which the head was expelled. I immediately ascertained that there was a second child; pains came on, and in fifteen minutes after the first one was born, I broke the membranes of the second, which presented the nates and the right foot. The foot prolapsed, but the other limb was pressed against the child's belly, so that I could not get it; the sacrum was to the right acetabulum. When the
shoulders were delivered, I found the child's face rather transversely directed towards the left ischium. I brought it into the hollow of the sacrum, soon after which it was also expelled. Both children were well.

It is so easy a matter, in general, to cause the body to rotate during its transit through the pelvis, that it very rarely happens, if the physician is called early, that the face at last is found towards the pubis.

With regard to the presentations of the feet and knees, I do not feel that it is necessary for me to enlarge upon them before I close this chapter, inasmuch as the footling case is a mere accident happening in a pelvic presentation, and which, moreover, can never prevent it from being at last a pelvic presentation—for all footling and knee cases are certainly breech presentations. I may remark, however, that the knee presentation is found to be embarrassing from the tendency there is to a sort of arrest, in consequence of the knees abutting against the sides or parietes of the pelvis, which is sufficient to prevent the descent of the child's nates, so that they, being thereby thrust over to the opposite side, cannot enter the excavation. Hence, where the knee presents it is advisable to convert it into a footling case, which can be done by pushing the whole presentation upwards, during the absence of pain, in order to gain space enough to bring down the feet.

The Student will perceive, if he refers to the axis of the womb and that of the vagina, that in a knee case, in which the child's back is towards the left front of the mother, the thighs would be very greatly extended, or bent backwards, before they could emerge from the external organs; an extension that must be very difficult to effect where the legs are bent up on the back of the thighs—for in such circumstances the rectus femoris, and indeed the whole quadriceps muscle must be put excessively on the stretch. It is a good rule, therefore, in knee presentations, to get the feet down as soon as it can be prudently done; whereas, in the well defined breech cases, the feet ought not to be brought down, except for some valid and well-understood cause.

In order to distinguish the feet from the hands, for which they are sometimes mistaken, it is only necessary to give attention to the sensations imparted by the operation of Touching. The even range of the ends of the toes, and their shortness, compared with the length of the fingers; the closeness of the great toe to the one next to it, in contrast with the wide separation of the thumb from the forefinger; the ankle and the heel, are marks that might be supposed sufficiently prominent to guard us against even the danger of mistake; yet very
great attention is in some instances required to enable us to aver positively that the presenting part is, or is not, the foot.

As the footling is but a deviation from the breech presentation, its positions are like the original four—namely, the heels to the left acetabulum; the heels to the right acetabulum; the heels to the pubis; and lastly the heels to the sacrum. As the treatment is precisely the same as in presentations of the nates, I shall not detain the reader by any further remarks upon the management of them.