

## **An essay on preternatural labours / By Thomas Denman.**

### **Contributors**

Denman, Thomas, 1733-1815.

### **Publication/Creation**

London : Printed for J. Johnson, MDCCLXXXVI. [1786]

### **Persistent URL**

<https://wellcomecollection.org/works/m63e3jqf>

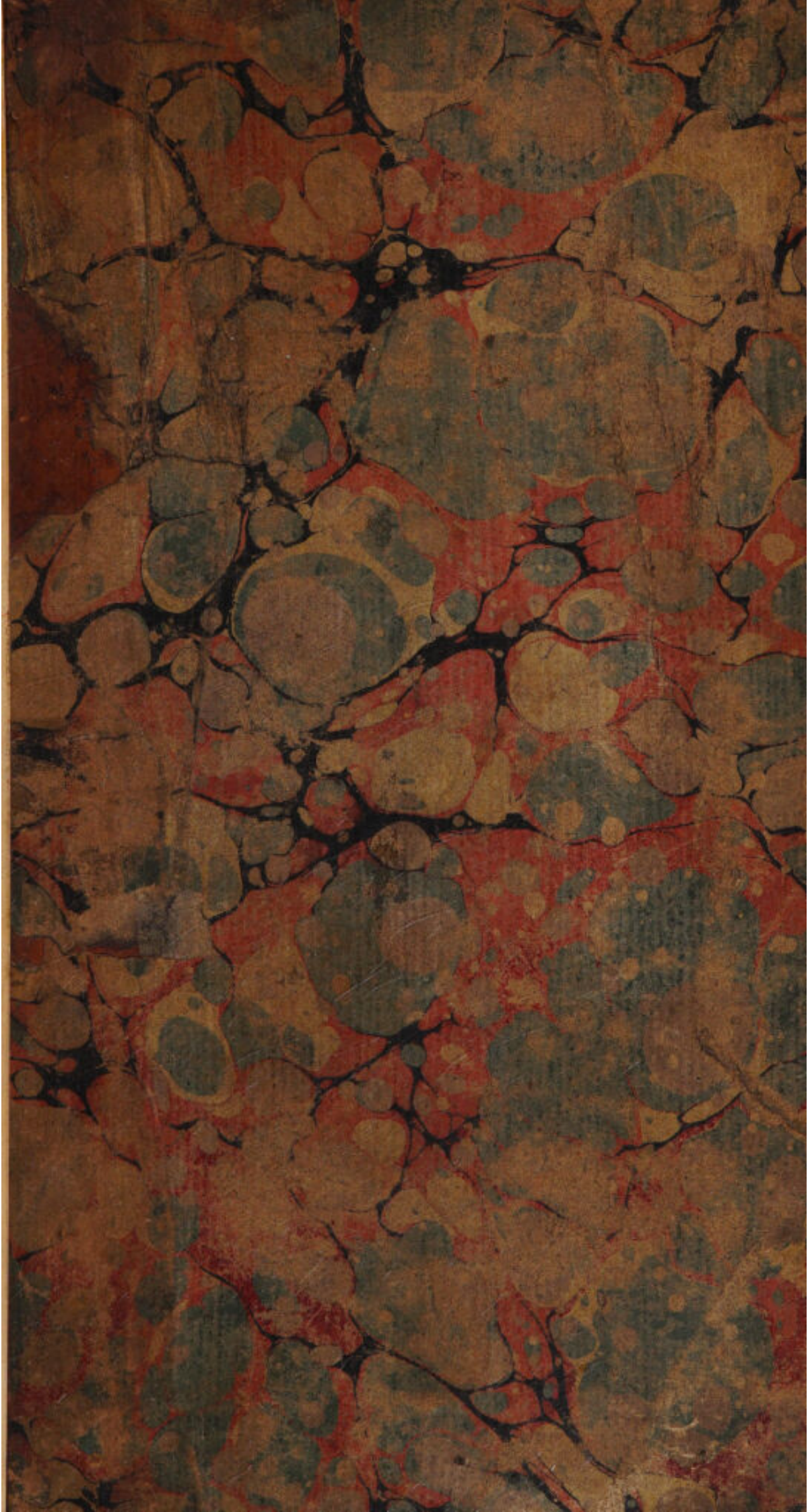
### **License and attribution**

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection  
183 Euston Road  
London NW1 2BE UK  
T +44 (0)20 7611 8722  
E [library@wellcomecollection.org](mailto:library@wellcomecollection.org)  
<https://wellcomecollection.org>



*B. V. n. v. m.*  
O 1295

*Weg. J. m.*  
*for 1807*

J. x x x . e

18.

|       |  |   |
|-------|--|---|
| 20118 |  | B |
| 20116 |  | B |

A N

E S S A Y

O N

## PRETERNATURAL LABOURS

By THOMAS DENMAN, M.D.

LICENTIATE IN MIDWIFERY,

OF THE COLLEGE OF PHYSICIANS.

---

THE SECOND EDITION CORRECTED.

---



---

L O N D O N:

---

Printed for J. JOHNSON, No. 72, St. Paul's Church-Yard,

---

M DCC LXXXVI,

---

THE TERNATURAL LABOUR

BY THOMAS DENMAN, M.D.

LICENTATE IN MIDWIFERY,

OF THE COLLEGE OF PHYSICIANS.

THE SECOND EDITION CORRECTED

L O N D O N

Printed for J. Johnson, No. 7, St. Paul's Church-Yard.

MDCCLXXXV

---

CLASS THIRD.

*Preternatural Labours.*

---

TWO ORDERS,

ORDER I.

Presentations of the BREECH,  
or Inferior Extremities.

ORDER II.

Presentations of the SHOULDER,  
or Superior Extremities.

---

Unable to display this page

---

---

O N

# Preternatural Labours.

---

## S E C T I O N I.

**T**HE technical terms which are used to specify all the other classes of Labours, relate to some circumstance in which the mother is wholly or partly concerned. But the term *preternatural* applies merely to the position of the child; and this kind of labour may occur in a woman in perfect health, when all the changes incidental to the state of parturition, are made in the most favourable manner, and in whom there is the best possible formation. In short, there may be no deviation or irregularity of any kind, excepting only that the head of the child does not present. Should the presentation of another part be combined with any circumstance of importance, either

to the mother or child, the title of *preternatural* is generally lost, and the labour is referred to some other class.

The presentation of children at the time of birth, may be of three kinds; first, with the head; secondly, with the breech, or inferior extremities; thirdly, with the shoulder, or superior extremities. With the first of these the labour is called natural; but with the two latter preternatural. Preternatural labours have been subdivided, by systematic writers, into a much greater number and variety; but as all distinctions are to be made and regarded according to their utility in practice, and as no possible advantage can be derived from their multiplication, but on the contrary much confusion, it will be found expedient to abide by these distinctions only. For though there may be a difference in one respect or other in every labour, and of course a necessity for some change in our conduct, yet notice cannot possibly be taken of every alteration; and these distinctions will be found sufficient for all the general purposes of practice.

Great pains have been taken to discover the causes of the preternatural presentation of children, and with the best intention; that of pointing out the errors and irregularities by which they were supposed to be produced. On this part of our subject, though there have been many different opinions,

opinions, I think it was generally agreed, that preternatural presentations happened more frequently to women in the lower ranks of life, than to those in more affluent condition; the accidents and exertions to which the former are more liable, being presumed to be the causes. Before we consent to the inference, it would however be necessary to examine into the truth of the assertion. I believe it has never been satisfactorily proved that preternatural presentations are really more common in the lower than in the higher ranks of life; the number in one being, almost beyond any comparison, greater than in the other. No station of life is exempt from these presentations, though they rarely occur in any, especially those of the second order; and it is wonderful, that those women who have had such accidents, at different periods of utero-gestation, as would be deemed most likely to produce them, have had them not. But though preternatural presentations seldom occur, when they are dreaded and expected, it is remarkable that some women are peculiarly subject to them; not once only, which might be considered as the effect of some accident, but exactly on the same presentation, whether of the superior or inferior extremities, in several successive or alternate labours. It seems doubtful therefore whether we ought not to exclude accidents as the common

causes of these presentations, and search for the real cause from some more intricate circumstance such as the manner after which the *ovum* may pass out of the *ovarium* into the *uterus*; some peculiarity in the form of the cavity of the *uterus*, or *abdomen*; in the quantity of the waters of the *ovum* at some certain time of pregnancy; or perhaps in the insertion of the *funis* into the *abdomen* of the child, which is not in all cases confined to one precise part, but admits of considerable variety.

Several presumptive signs of the preternatural presentation of children have been mentioned; such as an unequal distention of the *abdomen* during pregnancy; some peculiarity in the motion of the child; the sudden rising of the child, when the woman is in a recumbent position, so as to affect her stomach, or to incommode her breathing; the slow progress of the first stage of a labour, the early rupture of the membranes, or the elongated form which the membranes containing the waters assume, while the *os uteri* is dilating. But these symptoms and appearances will be found very uncertain, as they sometimes occur in natural presentations; nor can we confide in any mark or indication, until we are able to feel and distinguish the part which really presents. It will often be in our power, before the membranes are broken, to discover that the presentation of the child is preternatural;

preternatural; and sometimes, though not constantly, to say what the presenting part is. But when the membranes are broken, a small share of skill and circumspection will enable us to determine what that part is; especially if we have accustomed ourselves to handle the limbs of new-born children. By its roundness and firmness, the head may be distinguished from any other part; the breech may be known by the cleft between the buttocks, by the parts of generation, and by the discharge of the *meconium*, though the last circumstance does not happen even when the breech presents, till the labour is advanced, and sometimes occurs likewise in presentations of the head. The foot may be known by the heel and the want of a thumb; and the hand by the thumb and the length of the fingers. In some cases, I have found the hands and the feet lying together, but this cannot create much embarrassment to an intelligent practitioner; though there is reason to believe that an error or mistake in judging the superior to be the inferior extremities, has sometimes been productive of mischief. I do not mention the marks by which the back, belly, or sides might be distinguished, because these, properly speaking, never constitute the presenting part.

## S E C T I O N II.

**I**N the first order of preternatural labours may be included, the presentation of the breech, of a hip, of the knees, and of one or both legs.

When a labour is so far advanced that the *os uteri* is fully dilated, if no part of the child can be felt, it will be prudent to watch carefully when the membranes break, as there is a chance that the presentation may be of such kind as may require the child to be immediately turned. But if no part of the child can be felt, by a common examination, after the membranes are broken, it will be justifiable to ascertain the presentation by the introduction of the hand. Should the head, or inferior extremities be found to present, the hand may be withdrawn, and we may suffer the labour to proceed without any further interposition; but if it should be that kind of presentation which requires the child to be turned, we shall have an opportunity of performing the operation, before there is any natural contraction of the *uterus*.

In the first order of preternatural labours, two very different methods of practice have been recommended. By the favourers of the first method, we have been directed, as soon as the presentation was discovered, whatever might be the state of the labour,

labour, to dilate the parts, then to pass the hand into the *uterus*, and to bring down the feet of the child; or if these were originally in the *vagina*, to grasp them, and extract the child with all possible expedition, making the labour wholly artificial, without waiting for that help which might be afforded by the efforts of the constitution. To leave a woman for many hours, perhaps a whole day in pain and anxiety, when we have the power of extracting the child in a very short space of time, by which the violence of the pain would be lessened, or its duration at least very much shortened, has been urged by those who approved the first method, as an instance of the imperfection of the practice, and as an argument of want of humanity. But others, on the contrary, have considered this practice as founded in a vulgar and most pernicious error, which makes no distinction between the slowness and the danger of a labour; and these having considered the presentation of the breech and inferior extremities, as generally safe, have taught us that such cases ought, and with security may be left to the efforts of the constitution, no kind of assistance being required. Of the superior advantage of these two methods, it is only possible to judge by the general event of cases of this kind; and if this shall prove, which I believe is scarce to be doubted, that less injury is done to the mother,  
and

and that there is a better chance of saving the life of the child, by suffering it to be expelled, than by artificial delivery, there can be no hesitation to which of the methods preference should be given for the charge of want of humanity cannot be laid against a proceeding which terminates happily for both. From the manner of expressing the directions for the introduction of the hand, for the purpose of bringing down the feet, in presentations of the breech, we might conclude that it would be done with much ease. But on trial it is often found impossible, without the exertion of great force; and when this is done, or if the feet were originally in the *vagina*, though the first part of the extraction might be easy, we should in the progress find an increasing difficulty, which would bring the life of the child into great hazard. The thighs advance more slowly than the legs, and the breech than the thighs; there is some delay with the body, then with the shoulders, and lastly, when the arms are brought down, with the head. These little difficulties and embarrassments, separately considered, might not be of much consequence, but collectively they occasion a compression of the *funis*, continuing long enough to bring the life of the child into great danger, if not to destroy it; and this danger can only be prevented by a hurry in the extraction of the child, which may do much injury to the mother.

ther. If, on the contrary, we suffer the breech, especially with the legs turned upwards, to be expelled by the natural pains, though the labour will necessarily be more slow, the distention of the parts thereby occasioned is so ample, that the body and head will follow immediately, or be readily extracted. In cases of the presentation of the breech, or inferior extremities, it is therefore become an established rule with men of the first abilities and reputation, to suffer the breech to be expelled by the pains, and then to give such assistance as the exigencies of the case may require.

In every labour, in the progress of which we cannot feel the head of the child presenting, or do feel any other part, the membranes being unbroken, we must be particularly careful not to break them prematurely, that is, before the *os uteri* is fully dilated ; because, whatever the presentation may be, the child is in no danger, till the waters are discharged ; and a natural, is always preferable to an artificial dilatation, however carefully made. But when the membranes break spontaneously before the *os uteri* is dilated, and we can discover the presentation of the breech or inferior extremities, it is proper to leave the dilatation to the natural efforts, though it will be effected slowly and more awkwardly, than if it was done by the membranes containing the waters, or even by

C

the

the head of the child. The presentation of the breech is sometimes so untoward, that the *scrotum* and *penis* of the child intervene, and are the parts which are pressed upon the *os uteri* during its dilatation. In consequence of this pressure, which is unavoidable, these parts become prodigiously tumefied, and when the child is born, appear in a gangrenous state. In a few instances I have known, the skin of the *scrotum* or prepuce slough away; but by the assiduous use of fomentations and cataplasms, further mischief has been prevented.

Though it may be proper and is perfectly agreeable to the most respectable modern practice, to leave the child to be expelled by the pains, when the breech or inferior extremities present, unless the circumstances of the mother should require more speedy assistance; yet this resignation of the labour is only to be understood as proper, till the breech is expelled through the external parts, giving time for their dilatation, and guarding them with as much care as when the head presents. For after that time, as there is great danger of the child being destroyed by the compression of the *funis*, though of no long continuance; the labour must be accelerated by the practitioner, but with skill and judgment. That compression is also to be lessened, or any other injury prevented, by drawing the *funis* somewhat lower down, in such a manner

manner that it may never be on the full stretch. In some cases, however, after the expulsion of the breech, the continuance of the pulsation in the *funis* very satisfactorily proves, that no compression has taken place; the child of course being in no danger, there is not occasion to hurry the delivery.

When the breech or inferior extremities have passed through the external parts, great attention is to be given to the position which the child bears with regard to the mother. Whatever that might be, the child would be extracted with equal ease till we came to the head; but then, if the face be turned towards the *pubes* of the mother, the head could not be brought away without much additional difficulty. As soon therefore as the breech is expelled, if the back of the child is not turned towards the *abdomen* of the mother, it will be necessary that the practitioner, while he is extracting, should give such an inclination to the body, that when it is wholly extracted, the hind part of the head of the child may be turned towards the *pubes*, though not with a sudden motion or violence, lest the child should be thereby injured or destroyed. The directions given on this occasion are, that we should make the turn beyond the mere reduction of the back of the child to the *pubes*, and then revert it to a certain degree, by what may be supposed equivalent to a quarter turn. But such rules being very

complex, are more apt to create confusion than to be of use, and they are not founded on practical observation, but on an erroneous opinion that the head of the child could be extracted only or most commodiously, when the face of the child was turned towards the *os sacrum* of the mother. But it is now well known, that the head of the child will pass through the *pelvis*, with one ear to the *pubes*, and the other to the *sacrum*, or in different degrees of diagonal direction regarding the cavity, and that it is not found to proceed exactly alike in any two labours.

When the child is brought down as low as the shoulders, it has been esteemed by some as a very injudicious practice, to bring down the arms of the child; these being turned along the head, preventing in their opinion, such a contraction of the *os uteri* round the neck of the child, as would be an impediment to its delivery. Others have considered this step as absolutely necessary in all cases, the arms, according to them, occupying a portion of that space, which should be filled up by the head only. If the extraction of the head with the arms turned up, be tolerably easy, there is no occasion to bring them down; but if the head should remain fixed in such a manner as to resist the force which we think can be safely or prudently exerted, then the arms ought to be brought down; but  
very

very circumspectly, lest they should be fractured or dislocated, or come along with so sudden a motion as to endanger the laceration of the *perineum*. Nor is there afterwards found to have been any reason for apprehending inconvenience from the sudden contraction of the *os uteri* round the neck of the child.

When the arms are brought down, should there be much difficulty in the extraction of the head, it will be of great use to pass the fore-finger of the left hand into the mouth of the child, and to press down the jaw, but not to pull by it, in order to change the position of the head, which may be easily done, and the extraction be thereby much facilitated; but of this difficulty we shall speak more fully, when we consider the inconveniences produced by the distortion of the *pelvis*.

In the extraction of the child, the body is converted into a lever or instrument for that purpose, and this will act in different cases, or different periods of the same case, with greater advantage, by changing the direction in which it is used. Accordingly, in some cases, greater progress is made by acting alternately from side to side, and in others, from the *pubes* to the *sacrum*, or in the opposite direction; and that way is to be pursued, in which we obtain the greatest advantage. When the head is passing through the external parts, these

these may be supported with the fingers or palm of the left hand spread over the *perinæum*, while we are extracting with the right. As the head advances, the body must be turned more and more towards the *pubes*, and we must finish the operation very deliberately, or the parts will be lacerated; an evil sometimes by precipitation and imprudent management, rendered of almost as much importance as the loss of the child or mother.

Though children presenting with the breech are commonly expelled by the efforts of the patient, it must sometimes happen that these fail to produce their proper effect, and the assistance of art is required. But assistance is not to be given, till by the failure of the efforts, it is proved to be absolutely necessary; that is, when having given full scope and time to the efforts, they are proved to be unequal to the expulsion of the child. Whenever artificial assistance is given in these cases, it ought to be perfectly consistent with the safety of the mother, and if possible, with that of the child, which must be considered and treated as if we were certain it was living. When therefore we are satisfied and convinced that the mother is unable to expel her child presenting with the breech, if the inferior extremities cannot be readily brought down, it will be proper, by hooking one or more fingers in the groin, to try whether

we

we cannot give such an addition to the force of the pains, as may be sufficient for its extraction. Should this force be unequal to the purpose, it will be found expedient to pass a garter, or a tape or ribband, over one or both thighs, as the case will allow, and then taking both the ends of the ligature in the same hand, we shall have the opportunity of exerting great power, with less detriment to the mother or child than by any other means, with much convenience to ourselves, and generally with success. But if the breech should be so high, that the ligature cannot be passed, and the necessity of delivering the mother should be urgent, then the inferior extremities must be brought down; or, if that be impossible, the blunt hook or crotchet must be fixed over the thigh, or in the groin of the child, and we must manage as in other cases of extreme difficulty and danger, as the circumstances will allow, but perhaps without following any general rule.

It has been said that children presenting with the breech are generally born alive, and some writers have even considered the presentation of the inferior extremities, as natural, and preferable to that of the head; because assistance could be more readily given when it was required. It is true that the children will usually be born alive, if they are small, and the presentation occurs to those who  
have

have before had children. But if it should be a first labour, and the children large, or even of a common size, they will be more frequently born dead, in consequence of some casual but destructive pressure of the *funis*, before the breech is expelled or afterward; and with respect to presentations in general, that which is most common, is for that reason to be esteemed natural.

In all cases in which the child is expelled or extracted by the breech or inferior extremities, the *placenta* is usually managed without difficulty or danger, and it is generally excluded in a shorter time than after a natural birth.

---

### S E C T I O N III.

**I**N the second order of preternatural labours, the presentation of the shoulder, or one or both arms may be included; and whichever of these is the presenting part, there is a necessity of turning the child, and delivering by the feet. In the management of presentations of this kind, there is always less difficulty if both arms present, than if there should be only one arm; it will therefore be necessary to speak only of the presentation of a single arm.

In

In ancient times it was the custom, in every kind of labour, except those in which the head originally presented, to return the part presenting, and to bring down the head ; and if this was found impracticable, directions were given to bring the child away by the feet, or in any manner its situation would allow, or the exigencies of the case might require. But we learn from *Ætius*, who lived probably about the fifth century, that *Philomenes*, whose writings are now lost, except those preserved by *Ætius*, discovered a method of turning and delivering children by the feet ; and this method, with some alterations and improvements in the operation, has been practised ever since his time, and considered as the only one by which the child could be extracted, and the life of the mother preserved. But about twelve years ago it was my happiness to discover, that in some of the worst kinds and degrees of preternatural labours, those in which the assistance of art is sometimes found to be insufficient and often unsafe, the powers of the constitution, if not impeded in their operation, are capable of affording relief, with perfect safety to the mother, and without any additional danger to the child. Of the manner in which this delivery is accomplished by the natural pains, we shall speak in its proper place.

D

Though

Though the necessity of turning the children and delivering by the feet, in this second order of preternatural labours, be universally acknowledged, yet the circumstances of the women suffering them, are exceedingly different. With the view of preventing or lessening the embarrassment of the practitioner, it is therefore requisite to make several distinctions; and we will say that it may be necessary to turn the child,

1. When the *os uteri* being fully dilated, and the membranes unbroken, a superior extremity is felt through them; or immediately upon the rupture of the membranes and the discharge of the waters; before there is any return of the pains, or any contraction of the *uterus* round the body of the child.

2. When the membranes break in the beginning of labour, the *os uteri* being very little dilated, perhaps scarcely in a sufficient degree to allow a hand or an arm of the child to pass through it, or to discover that the presentation is preternatural.

3. When the *os uteri* is fully dilated, the membranes having been long broken, and the *uterus* being strongly contracted round the body of the child, which may be closely fixed at the superior aperture of the *pelvis*.

4. When under any of these circumstances, there:

there is a great disproportion between the size of the child and the dimensions of the *pelvis*.

Under each of these distinctions, a variety of other subjects may require the attention of the practitioner, but of every one of these it is impossible to take notice in the description of any stated case, as no two labours ever were in all points exactly similar.

In the *practice* of every art, some advantages must remain beyond the power of any doctrine to convey. These can only be obtained by the cultivation of our own minds, and by the acquisition of that dexterity which frequent exercise must give to our hands.

---

#### S E C T I O N IV.

**I**T is proper in the first place to speak of the method of turning children in those cases which come under the first distinction; the management of them being more easy and simple, as there is only one object which demands our care, that is, to change the position of the child.

Whenever there is a necessity of turning the child, the patient is to be placed in the same situation as in a natural labour, upon her left side, with her knees drawn up, across the bed, and as near to the edge of it as possible. There have been many different directions and opinions respecting the advantages of particular situations, especially that of turning the patient upon her knees. But as our aim in the choice or preference of these, is merely to obtain the free and convenient use of our own hands, the position of the child remaining the same, however the woman may be placed, the common situation will generally be found the most convenient. Yet as that situation which suits one practitioner may be awkward to another, and as in the course of the operation changes may be expedient, every practitioner must make them when they appear necessary to himself.

Though in the case we are now supposing, the *os uteri* may be fully dilated, it is possible that the *os externum* may be in a rigid and contracted state. For the purpose of dilating this, it will then be necessary with the fingers of the right hand reduced into a conical form, to act with a femirotatory motion and with some degree of pressure upon the sides and towards the *perinæum*. The artificial dilatation of all parts should be slowly made, and in imitation of the manner in which they are naturally dilated.

dilated. We are not to be satisfied with such a degree of dilatation as will barely admit the hand into the *vagina*, because the contraction round the wrist would be an hinderance in the subsequent parts of the operation.

When the hand is passed through the *os externum*, it must be conducted slowly to the *os uteri*, which we presume to be fully or sufficiently dilated:

If the membranes are unbroken, the hand may then be conducted into the *uterus*, and they will be easily ruptured by grasping them firmly, or by perforating them with a finger. The hand must then be carried very deliberately along the sides, the thighs and legs of the child, till we come to the feet. If both the feet should be lying together, we must grasp them in our hands; but if they are at a distance from each other, we may commonly deliver with one foot, without much additional difficulty; though, as in some particular positions we cannot always turn the child, if it be large, by one foot, it is better to make it a general rule to bring down both feet together.

Before we begin to extract, we must examine the limbs we hold, and be assured we do not mistake a hand for a foot. The feet being held firmly in the hand, must be brought with a waving motion slowly into the *pelvis*. While we are withdrawing the hand, the waters of the *ovum* flow away, and  
the

the *uterus* being emptied by the evacuation of the waters and the extraction of the inferior extremities, we must wait till it has contracted; and on the accession of a pain, the feet must be brought lower, till they are at length cleared through the *os externum*. The operation may then, in one sense, be said to be compleated, that is, what was originally a presentation of the arm, is now become that of the feet, which, considered as primary, might have been left to the efforts of the constitution in the manner before described. But as no person who had undergone the operation of turning a child, with the expectation of a speedy delivery, would have patience to wait for the expulsion of the child by the natural pains, it is incumbent upon us to finish the delivery, though there is no occasion for hurry; and violence would be equally unnecessary and improper.

In the first place then, observing the direction of the feet, and knowing if the toes of the child are towards the *abdomen* of the mother, that this position would be unfavourable when the head was to be extracted, we must gradually turn the body of the child during its extraction, in such a manner that the back of the child may be placed towards the *abdomen* of the mother, before the head is brought into the *pelvis*. It was before observed, that this turn of the child has been described with useless intricacy,

intricacy, and in a manner which can only serve to confuse the practitioner, who will reap all the advantage to be gained by any kind of turn, if he remembers in general, that if the back of the child is to the *abdomen* of the mother, the head will pass more commodiously than in any other direction. The opinion of the necessity of changing the position of the child at this time has been so strongly inculcated and so eagerly pursued, that I have more than once seen it attempted with such a degree of force, as must have destroyed, or done very great injury to the child, the operation being evidently more dangerous than the evil it was intended to remove. Nor is this the only case in midwifery, in which the means recommended for the purpose of preserving the life of the child, are utterly inconsistent with its safety.

When the heels or back part of the child are turned towards the *pubes*, the feet wrapped up in a cloth are to be held firmly about the ancles, and when the pains come on, we must extract during thier continuance, in a straight direction, or from side to side, or from the *pubes* to the *sacrum*; taking care that we do not by violence, or by too large a sweep, run the risque of hurting the child, or of lacerating the external parts of the mother. In the interval between the pains we must rest, and in this manner proceed, assisting the efforts of the mother

mother only at the time of her making them, and not rendering the delivery wholly artificial. When the breech of the child is arrived at and begins to distend the external parts, we must proceed yet more slowly, giving time for their dilatation, supporting and favouring any part which may be immoderately distended, and guiding the child in a proper direction, by turning it toward the *pubes* as it advances. The breech being expelled, the *funis* soon appears, and a small portion of it must be drawn out to prevent its being upon the stretch. Then wrapping a cloth over the body of the child, which must be held as close to the mother as it conveniently can, and calling for her voluntary exertions, the child is to be speedily extracted in the manner already described.

When both the arms are brought down, it is of service to suffer the body of the child to rest upon the left arm of the operator, his hand being spread under the breast, with a finger turned back over each shoulder. His right hand is to be laid in a similar manner over the shoulders of the child, and these positions will give him great advantage in the extraction. But if the head should not descend, the operator with his thumbs conducted into the *vagina* may press the head from the *pubes* to the *sacrum*; or pass the fore-finger of his left-hand  
into

into the mouth of the child, and extract as was before advised.

Proper attention must be immediately paid to the child; and of the management of the *placenta* we have already spoken.

---

## S E C T I O N V.

**I**N the second distinction it was supposed, that together with the presentation of a superior extremity, there was at the time of the rupture of the membranes, very little dilatation of the *os uteri*, and some degree of contraction of the *uterus* round the body of the child.

The directions generally given on these occasions are, that as soon as the presentation is ascertained, the operator should sit down and dilate the *os uteri* sufficiently to allow the introduction of the hand, which should then be passed with care and expedition into the *uterus*, and the child turned. But some practitioners have judged it more proper, to wait till the *os uteri* was dilated naturally, before any attempt was made to introduce the hand, and turn the child. As in every case of the presentation of the superior extremities, there is a necessity of turning the child, the sooner the hand can be passed for that purpose, the more safe and easy in gene-

ral will the operation be, as there must of course be less contraction of the *uterus* round the body of the child. But as there is some hazard of doing mischief by every artificial dilatation of the *os uteri*, I believe it is better to wait for the natural dilatation; at least every attempt to dilate by art, should be made with great caution, and only during the interval between the pains. Yet we ought not to wait in these cases, till there is a complete and absolute dilatation of the *os uteri*, but always to consider it as sufficiently dilated when we presume it will readily admit the hand, and then the child should be turned without delay.

If the external parts are rigid and contracted, they must be dilated, but without violence, in the manner before directed; and the hand being passed into the *vagina*, must then be conducted into the *uterus*, on that side of the *pelvis* where it can be done with most convenience; because that will lead most readily to the feet of the child. It is generally better to conduct the hand between the body of the child and the *pubes*, than between it and the *sacrum*; because in these presentations the feet lye most commonly towards the *abdomen* of the mother. In every case which comes under the present distinction there is some degree of contraction of the *uterus* round the body of the child, though trifling when compared with what occurs in the  
cases

cases to be described under the next section. If therefore we understand and are able to perform the operation of turning the child, in the easiest and most difficult cases, we shall certainly be competent to the management of all the intermediate ones; there being in these, no new rules which we are required to follow, but merely an accommodation of rules already known, to the exigencies of any individual case.

---

## S E C T I O N VI.

**U**NDER the third distinction, we are to presume, that together with the presentation of a superior extremity, there is the worst possible situation of the child in all other respects; that is, an exceedingly close contraction of the *uterus* round the body of the child, the membranes having been long broken, and the waters discharged; to which may perhaps be added, very strong pains.

In this case, supposing the difficulty of turning the child as great as it possibly can be, it will follow that there is no occasion for hurry or violence, as we can lose nothing by delay. Before we proceed to the operation of turning, it will be therefore proper to repeat our examination, when we

have taken a little time for the consideration of the case, in order to prevent any error in the first decision we have made upon the subject, and to ascertain the precise position of the child; and to reflect also, whether by some previous management, it be not in our power, to lessen the impediments to the operation, and the general evils of the patient's state. In any of these views there are only two objects which can engage our attention; the wrong position of the child, and the strong contraction of the *uterus* round its body. The first of these, in the account given of the cases which came under the first distinction, was stated to be of little consequence; that is, to be manageable without difficulty, and to be void of danger either to the mother or child. The principal inconvenience will then be produced by the contraction of the *uterus*, which it must be our duty to remove or lessen, before we attempt to perform the operation of turning the child.

The contraction of the *uterus*, under these circumstances, may be of three kinds. There is first, the continued or permanent contraction, in consequence of the waters having been long drained off, and which to a certain degree takes place in all cases, when there has been little or no pain. This may in fact be considered as the exercise of that inherent disposition in the *uterus*, by which its ordinary efforts

are made to recover its primitive size and situation. There is secondly, the occasional or extraordinary contraction of the *uterus*, by which, whatever is contained in its cavity, is ultimately to be expelled, which returns at intervals, and is so constantly attended with pain, that the terms pain and action are used as synonymous. Thirdly, there is an irregular action of the whole or some part of the *uterus*, which is sometimes unfavourable to the expulsion of its contents, which produces effects according to its peculiarity, and this is called spasmodic; a general term, not wrested from its common meaning, but appropriated to every kind of irregular, morbid, or excessive action. Now the difficulty and the danger which attend the operation of turning a child, proceed either from the extraordinary or irregular action of the *uterus*; and in order to avoid these as much as possible, it will be proper to establish it as a general rule, never to attempt the operation when the patient has strong pains.

The consternation of friends, and the suffering of the patient must necessarily raise a suspicion in her mind, that there is something unusual and dreadful in her case; and the solicitude thence arising, will increase the unavoidable inconveniences of her situation. The prudent and steady conduct of the practitioner, will on such occasions,  
 very

very much contribute to remove the fears of her attendants, and to give a composure to the mind of the patient, which will be productive of the most happy effects. If she should be much heated, it will be also proper to take away some blood, and to direct an emollient clyster, for the purpose of emptying the *rectum*, and of relaxing and soothing the parts which are in a very irritable state. Even the time employed in these matters, will give us an opportunity of restoring quiet to the mind of the patient, which was before in dreadful agitation.

We are not at present in the possession or knowledge of any medicine which we can depend upon for suppressing or moderating the action of the *uterus*, when exerted unfavourably, or at an improper time. Almost the only medicine we ever think of having recourse to on such occasions, is *opium*; and this given in two or three times the usual quantity, will in many instances answer our expectations; though it sometimes has a contrary effect, and excites the *uterus* to stronger action. If the opiate should fail to quiet the pains, and to compose the patient, we must wait till the *uterus* is wearied, or ceases to act of its own accord. But if the opiate should produce the effect for which it was given, it will be in about twenty minutes after its exhibition, when we are to consider the  
calm

calm or disposition to sleep, as affording us the most favourable opportunity for turning the child.

Throughout the operation, it is necessary to bear in our minds the distinctions made between the different kinds of action of the *uterus*. The hand must be introduced with sufficient force to overcome the continued or permanent contraction of the *uterus*, or the operation could never be performed; and the same may be observed of the irregular or spasmodic action, but with perseverance rather than violence. But if we were to attempt to overcome the extraordinary action, either the hand would be cramped, and we should be unable to finish the operation; or, if we had power sufficient to overcome the contraction of the *uterus*, there would be the greatest hazard of its being ruptured. The deduction is therefore plain, that we ought not to attempt to introduce the hand, while the *uterus* is in extraordinary action.\*

\* Qui enim urgentibus doloribus, manus intus dare, vel foetum dirigere, vel aliquod membrum replicare audent, iis evenire potest, ut uterus rumpatur, mulierq. subita morte rapiatur, cujus partus post obitum in ventre reperiri solet.

*Platneri Institutiones Chirurgicae*, Pag. 1040.

*Celsus* seems to have understood, and to have availed himself of the knowledge of the action of the *uterus*—et infans ad os vulvæ compellatur, quæ mortuos partu, id comprimit; ex intervallo verò paulum de hiscere—hæc occasione usus, &c.—Lib. vii. cap. 29.

By the examination of the child's hand which presents, we shall be able to distinguish whether it be the right or the left; and, which is of more consequence, to discover by its position, to which part of the *uterus* the feet of the child are turned. For unless the arm or body be unnaturally twisted, the palm of the hand is always turned towards the inferior extremities of the child.

It is in no case necessary, or in any wise serviceable to separate the arm of the child, previous to the introduction of the hand of the operator. In some cases to which I have been called, in which the arm had been separated at the shoulder, I have found it a great inconvenience; there being much difficulty in distinguishing between the lacerated skin of the child, and the parts appertaining to the mother. The presenting arm is never an impediment of any consequence in the operation, and therefore ought not to be regarded, or on any account removed.

It sometimes happens that the introduction of our hand is absolutely prevented by the shoulder of the child, jammed at the superior aperture of the *pelvis*. It will then be necessary to pass the forefinger and thumb of the right hand, in the form of a crutch, in the armpit of the child, pushing the shoulder towards the head and towards the *fundus* of the *uterus*, firmly and steadily maintaining the  
 advantage

advantage we gain as we proceed, till we have raised the body sufficiently to allow the admission of the hand into the *uterus*.

When we begin to make our attempts to introduce the hand into the *uterus*, though the patient might be in a composed state, the irritation thereby occasioned, will disturb her, and the extraordinary action of the *uterus* be brought on, which will be indicated by the consequent pain. During the continuance of this action and pain, we must not proceed in our attempt, but wait till they cease, laying our hand flattened in such a manner, that no injury can be done by our efforts, or by the action of the *uterus* itself, upon any inequalities of the knuckles. When the action of the *uterus* ceases, our attempts to introduce the hand must be renewed and steadily continued till that action returns, when we must again rest. Thus proceeding, that is, alternately resting and acting, we shall by repeated and sometimes long continued efforts, at length safely accomplish the purpose of conducting the hand so far into the *uterus*, that we shall be able to lay hold of the feet of the child. In some cases our attempts to introduce the hand are very discouraging, as we are sensible of little or no progress; but the hurry or violence are never to be increased on account of the greatness of the difficulty. We must persevere, and be persuaded that

prudent attempts will not be fruitless, though they immediately fail to answer our expectations; as each apparently unprofitable attempt contributes to the efficacy of the succeeding one.

The strongest contraction of the *uterus* is sometimes at the *cervix*, and when this is passed, ample room is afforded for the discovery of the feet towards the *fundus*, without much trouble. But the contraction of the *uterus* is very irregular, being in some cases in the center, or uniform throughout; whilst in others it is contracted into lines, as if a cord had been passed round it externally with great strength, so as even to hurt the hand. In some cases the *uterus* is contracted into a globular and in others into a longitudinal form. These different contractions render some difference in our conduct necessary; but if we have a true general idea of the various kinds of contractions, as before described, the little increase or peculiarity of difficulty will be readily managed. In a globular contraction of the *uterus*, when our hand has passed beyond the *cervix*, there will be no trouble in coming at the feet, and the child will be turned very easily; but in the longitudinal contraction, the feet being at a great distance, there is more difficulty, though it is not always necessary to go up to the *fundus*; for when we come to the knees, these being

being cautiously bent, the legs and feet will be brought down together.

In whatever way we lay hold of the feet, we must examine them before we begin to extract ; for though one arm be in the *vagina*, the other may be high up in the *uterus*, and mistaken for a leg. We must also remember that it is necessary to extract slowly ; for if we attempt to hurry the operation, the feet will slip out of our hands, and immediately recede to the *fundus* of the *uterus*, or to the part from which they were brought, and lay us under the necessity of returning with the hand to bring them down again. When we have laid hold of the feet, if we proceed slowly, the child commonly turns without much difficulty. But when the feet are brought into the *pelvis*, if the turning of the child be not perfected, it will be of great use to fix the noose of a garter or ribband round one or both ancles, which may be conveniently done by forming it upon the wrist, and then sliding it with the fingers of the left hand, over the right hand containing the foot or feet, without quitting our hold of them ; and dexterity in forming and fixing this noose may be of great use in the subsequent parts of the operation. When the noose is fixed and drawn tight round the ancles, we may pull by both the ends of it with either of our hands, at the same time grasping the feet and extracting with the other

hand, till they are brought through the external orifice. Should there be much difficulty in the operation, after the feet are brought low into the *vagina*, we may conclude that it is occasioned by the fixing of the body of the child across the superior aperture of the *pelvis*. To remove this impediment, it will be necessary to take the two ends of the noose in our right hand, and passing the finger and thumb of the left, in the form of a crutch, in the arm-pit of the child, we must extract with our right hand, and at same time raise the body of the child with the left, till the child is disengaged, and there is sufficient room for the entrance of the hips into the *pelvis*. There will then be no further difficulty, and we must deliver as was directed under the First Order of Preternatural Labours.

---

## S E C T I O N VII.

**I**N presentations of the superior extremities, when the waters have been long discharged, and the shoulder of the child is jammed at the superior aperture of the *pelvis*, it was said to be expedient and necessary, to pass the finger and thumb in the form of

of a crutch, in the arm-pit of the child, in order to raise the body towards its head and towards the *fundus* of the *uterus*; till it was sufficiently moved out of our way, to allow of the introduction of the hand into the *uterus*. But in some cases, the shoulder is so far advanced into the *pelvis*, and the action of the *uterus* is at the same time so strong, that it is impossible to raise or move the child, which is so strongly impelled by the pains, as to overcome all the force we are able to exert. This impossibility of turning the child, has to the apprehension of all writers and practitioners, left the woman without any hope of relief. But in a case of this kind which occurred to me about twelve years ago, I was so fortunate as to observe, though it was not in my power to turn the child, that by the mere effect of the action of the *uterus*, an evolution took place, and the child was expelled.

Of the first testimonies \* which prove the possibility of this evolution, which I have called spontaneous †, the public is already in possession. The cases in which it has happened are now become so numerous,

\* See the London Medical Journal, Vol. V. for 1785; and the Journal de Medecin de Paris, pour Avril et Septembre, 1785.

† I used the word *spontaneous*, though to some it appeared objectionable; but I could not fix upon one better suited to explain my meaning. I only intended by it to say, that the series of effects terminating in an evolution of the child were wholly

Unable to display this page

of a common size, and in such a state as to possess some degree of resiliency, is the best calculated for expulsion in this manner.

Yet the knowledge of this fact, however unquestionably proved, does not free us from the necessity, or lessen the propriety of turning children presenting with the superior extremities, in every case in which that operation can be performed with safety to the mother, or give us a better chance of saving the child. Under such circumstances, the instructions given by former writers must still be considered as proper to guide us in our conduct. But when we are called to patients with preternatural labours, in which there is no room to hope for the preservation of the child, or in which we are assured of its death; when the operation of turning cannot be performed without great danger and violence done to the mother; then the knowledge of the spontaneous evolution will set our minds at ease, and disengage us from the consideration of a hazardous operation, from which no possible good can be derived, except that of extracting a dead child; and which at all events might be effected by a much safer method.

The time required for the spontaneous evolution of the child, and the facility with which it may be made, will depend upon a variety of circumstances, but chiefly upon the size of the child, the aptitude of

its position, the dimensions of the *pelvis*, and the power exerted by the *uterus*. If the child be very large, or much below the common size, the flower I believe will be the evolution, nor can it be made at all, without a strong action of the *uterus*. It is possible, therefore, when we have conducted ourselves on the ground of expectation that the evolution would be made, that the pains may fall off, or be unequal to the effect, and we may be disappointed. It might then be apprehended, that the difficulty of extracting the child, would be infinitely increased. But though the evolution was not perfected, I have not found this consequence; for the child though not expelled, has been brought into such a state, that I could afterwards pass my hand with ease, and bring down its feet, though in an attempt to do this in the beginning of a labour, I had been foiled. In one case, in which the evolution did not take place, I could not bring down the inferior extremities, but I had no difficulty in fixing an instrument upon the curved part of the body of the child, or in bringing it away with entire safety to the mother. It was before presumed that the child was dead, and the sole object was to free the mother from her danger; and with her safety, no appearances of the child, however disagreeable, are to be put in competition.

In the course of my conversation and correspondence with medical friends, I have been informed of several instances of women who have died undelivered, their children presenting with the arm; because the practitioners were not able, by art or by force, to pass the hand into the *uterus*, to turn the child, and deliver by the feet. These cases have been mentioned to me as objections to the idea of the spontaneous evolution; but I apprehend, without any reason. The evolution is supposed to be the consequence of the strong and long-continued action of the *uterus*, uninterrupted. Now the first part of the operation of turning, consists almost wholly in resisting this evolution; and, if the attempts were persevered in, would be an absolute bar to its taking place. To give a full explanation of my opinion on this head, I should say, that a woman in a state of nature, with her child presenting in any manner, would not die undelivered, if no assistance was afforded to her. But if an equally healthy woman lived in a country somewhat civilized, in which the art of Midwifery was in an imperfect state, much would be thought requisite to be done; and violence supplying the place of knowledge and skill, we might expect that such attempts would be fruitless, or that she might perish from the ungainly and rude exercise of art, rather than from the necessity of her case. In the most perfect state of society, all just and true knowledge being founded upon ob-

G

fervation

servation of the proceedings of Nature, and all sound practice upon the imitation, the practitioner would return to the primitive state; that is, he would do nothing unless it was absolutely necessary for him to act, and then he would act in imitation of Nature. From a retrospective view of the practice of Midwifery in all former times, and in all countries, every intelligent person sees, and is ready to acknowledge, that there has been too officious an interposition, and too great a readiness to give assistance, in various ways, for the relief of many difficulties attending parturition, which are not only fully proved to require no assistance, but which are also now allowed to be surmounted in a safer and more effectual way by the resources of the constitution. This should certainly put us upon our guard against hasty determinations upon what is possible or otherwise, or upon the use of any methods or means which may be destructive to the child, or injurious to the mother \*.

Now

\* In *America* and *Africa* the native women, whom we may presume to be healthy, very seldom die in labour, or in consequence of it. Properly speaking, they have no midwives. The same may be observed of the women in *Lapland*, and other northern countries. Yet the *African* women when transplanted to the *West-India* colonies, not unfrequently die. Their constitutions are altered, and they are attended by ignorant midwives. In the *East-Indies*, the midwives of the country are ignorant and daring, interfering perpetually, and

Now I am speaking of the spontaneous evolution in presentations of the arm, it will not be amiss to observe, that several other changes of the position of the child take place, at the time of birth, particularly the following, of which I have seen more than one instance. Having been called to women in the beginning of labour, and finding by an examination, that the head of the child presented, I have left them for several hours till the first changes were naturally made. When I have examined them on my return, I have found the arm of the child presenting, the head being departed out of my reach. I do not know that any practical advantage is to be obtained by the knowledge of these cases; but it is remarkable that the accident has always happened to women who were deformed. Such cases should however be recorded; and it is possible that some time or other, the knowledge of them may be of use. It may lead to an explanation of one cause at least of preternatural labours.

and often in the most outrageous manner, with the women in labour, many of whom die, or suffer grievous complaints for the remainder of their lives. In *England* the practice of midwifery is extremely rational; and it is a rare thing for a woman to die in labour, or in consequence of it. In *France*, the practice of midwifery is more artificial, and there is both in that and other countries on the continent, a very reprehensible fondness for instruments and operations; and the abuse of art produces more and greater evils than are occasioned by all the imperfections of Nature.

## S E C T I O N VIII.

**T**O the preternatural presentation of the child, and the circumstances before mentioned, there may be added, a distortion of the *pelvis*. As there is no occasion to repeat the management which the other circumstances may require, we may confine our attention to the peculiar difficulties produced by the distortion. Some disadvantage may arise from this cause in the extraction of any part of the child; but it will be trifling if compared with that which attends the extraction of the head. We may therefore be allowed to suppose, that the whole of the child is born, except the head, which cannot be got away in the usual manner, or by the means before advised. The force with which we endeavour to bring down the head of the child must then be gradually increased, till we are convinced that a greater degree is inconsistent with the safety of the child.

The wish to extract the head of the child speedily, is founded in the apprehension justly entertained, that in this position, the life of the child is in the most imminent danger from the compression of the *funis*. A vigorous pulsation proves even at this time, that the child is not in any danger, and of course gives us an opportunity of acting with deliberation. But should the pulsation which  
was

was at first lively and strong, gradually decline, and then altogether cease, the head must be speedily extracted, or the child will be inevitably lost; there being no other way of removing the compression, or of preserving its life.

The extraction of the head may then be attempted with two views, either to save the life of the child, or merely to free the mother from any danger which might arise from its detention. When the first is our aim, the force with which we extract must be moderate, and consistent with the safety of the child; it must be exerted in a proper direction of the *pelvis*; it must be uniform and commanded, and if there be any pains, it must accompany them. Should the head descend in ever so small a degree, we must not act precipitately, and increase the force in order to finish the delivery suddenly; but we must proceed with circumspection, or we shall add to the danger which the child is already in, and run the risque also of doing injury to the mother. When the head begins to advance, there is seldom much difficulty, the cause usually existing at one particular part of the *pelvis*. It has been said, that children have been sometimes born alive, when the strongest efforts, and those continued for many hours, have been made to extract the head detained in this position. But I have not been so fortunate as to meet with any such instances, a short space of time having been sufficient to frustrate

frustrate my hopes, and convince me that the child was dead. Though, sometimes beyond my expectations, I have been agreeably surprized with the discovery of some faint signs of life, which, by the assiduous and careful use of the common means, have been improved, and the life of the child at length perfectly recovered.

But when we have abandoned all hope of preserving the child, and have no other view but simply that of extracting the head, we must be particularly cautious, that through our conduct the mother does not suffer either any immediate injury, or that any foundation of mischief be laid, which may shew itself at any future time. When we have in vain exerted all the force which we think reasonable and proper, and which in some cases must be more than any circumstances would be thought to require, it will be expedient to rest, for the purpose of gaining all the advantage to be obtained by the compression of the head. On this account, the mother will actually suffer no more inconvenience than would have been produced if the head had originally presented, and been locked in the *pelvis*. After waiting some time, we must renew our attempts to extract, and thus proceed, alternately resting, and acting with efficacy and resolution. If the hold we have of the body or extremities of the child does not suit, a silk handkerchief or  
other

other band may be passed round its neck, and this will be found a very handy and convenient instrument.

The great impediment to the extraction of the child exists in the disproportion between the head and the *pelvis*. Another of no little consequence may be produced by the dislocation of the neck of the child, or the laceration of the skin, either of which would lead to the separation of the body from the head; an accident one would wish to avoid, as it would lay us under the necessity of using some awkward instrument, instead of the body of the child. Either of these inconveniences may readily take place through the impatience or despair of the practitioner, who is apt to twist the neck while he is extracting, or pull with a sudden motion, instead of the uniform one before recommended.

In these cases of extreme difficulty, it will always be of service, and often succeed when other means fail, if we conduct our thumbs between the head of the child and the *pubes*, and press the head forcibly towards the hollow of the *sacrum*. It would also be of service if we were able to pass a finger into the mouth of the child, to change the position of the head; but in the worst cases, that is impracticable, the head being obstructed so high, that the mouth of the child is beyond our reach. When all these means fail to answer our purpose, it will be

be necessary to leave the head a yet longer time, that it may undergo a greater degree of compression and accommodation to the *pelvis*, and then to renew our attempts to extract it.

It must be a very great disproportion between the head of the child and the *pevis*, which is able to withstand this method of proceeding, if we persevere in it with prudence and steadiness; because the integuments of the head will burst, or the bones be bent inwards in an extraordinary manner, or even broken. Sometimes, however, an hemorrhage comes on, or the situation of the mother will not allow us to take so much time, or to proceed so slowly, as is generally proposed, and we are compelled to the use of such means as promise a more speedy completion of the delivery. Different kinds of *forceps* have been advised for this purpose; but no instrument of the kind ought to be used on such occasions, because the child is dead; and it would be impossible but that the mother must by their use undergo the chance of mischief, without any equivalent advantage. It then only remains that we should lessen the head of the child, and the operation is as easily performed in this, as in the natural presentation of the head. In the description of this operation it was said, that it clearly divided itself into three parts: 1. perforation of the head; 2. evacuation of the brain; and lastly, extraction.

It

It will not be possible to make the perforation in the usual place, but we must select that which offers itself most conveniently. We must recollect that there is a small fontanelle behind each ear in the head of the *fetus*, which is the place to be chosen; for if we were to make the perforation in the occipital bone, we might cut the ligaments which join the neck to the head; and when we thought to extract, we should leave the head behind. When the perforation is made according to the rules before mentioned, and the brain evacuated, the head may be readily extracted, either by pulling the body of the child, or by inserting a crotchet in the opening made by the operator. But it would be scarcely believed how seldom this operation is necessary under these circumstances, if we are not in a hurry, but act with prudence. Nor have I ever known any ill consequences follow the compression which the soft parts undergo, between the head of the child, and the sides of the *pelvis*, if proper attention was afterwards paid to the bladder and *rectum*.

## S E C T I O N IX;

**T**HOUGH with cautious management the head of the child is seldom separated from the neck, and though with indiscretion it could not often be produced, yet the possibility of the accident, especially in the case of a child some time dead, makes it necessary for us to be prepared, if it should occur. It has moreover been surmised, that under peculiar circumstances it might be eligible to separate the head from the body, with the expectation of afterwards extracting the head with more ease; but this, however just in theory, will not, I believe, give us any advantage in practice; at least such the accident seems to have proved, when it has unavoidably happened.

When the head of the child is separated and left behind, we have been taught to consider the case as frightful, and exceedingly difficult to manage, because the *pelvis* may be expected to be very small in proportion to the size of the head, and because this could hardly be fixed in such a manner as to subject it conveniently to the instruments which it may be necessary to use. Of these there has certainly been a sufficient number of almost every denomination. It is nevertheless evident to practitioners,  
that

that all of them were contrived by ingenious men in their closets, and either could not be applied, or if applied, could not be of any service in a case of real difficulty.

The chief obstacle to the extraction of the head, must arise from the disproportion between it and the cavity of the *pelvis*; and this disproportion can only be removed by lessening the bulk of the head. If this was fixed firmly in the *pelvis*, there would be no more difficulty in making the perforation, or in any other part of the operation, than in a case in which the head originally presented. But should the head be disengaged, and lying loose at the superior aperture of the *pelvis*, it would not make due resistance to the point of the instrument, which would be apt to slide, we should be foiled in our attempt, and incur the hazard of injuring the mother. To avoid this inconveniency and mischief, external pressure must be made either by the hands of an assistant, or with a napkin passed tight round the *abdomen*, with sufficient firmness to keep the head steadily fixed. Then the operation may be performed without any chance of failure or of mischief.

In the very few cases of this kind to which I have been called, the difficulty has not by any means been equal to what I expected from the representation of different writers. It is a case to be prevented

prevented or avoided; but when it does occur, there is neither that danger in the case, or that difficulty in the operation, which ought to terrify a practitioner who gives himself time for a little reflection. It is however said, that in some instances every attempt to extract the head has been in vain; yet in these, after a certain time, the action of the *uterus* has come on, and at length expelled the head; in one case, if I am not mistaken, so late as the twentieth day after the accident had happened. The degree of distention of the *uterus*, occasioned by the mere head of a child, would not indeed be so great as to make us apprehend any immediately fatal consequences on that account; and if the *uterus* were in an healthy state, a substance of that bulk and kind would probably be managed, either by common putrefaction, reducing its size, and dividing it into portions, or, it would by repeated efforts be expelled.





