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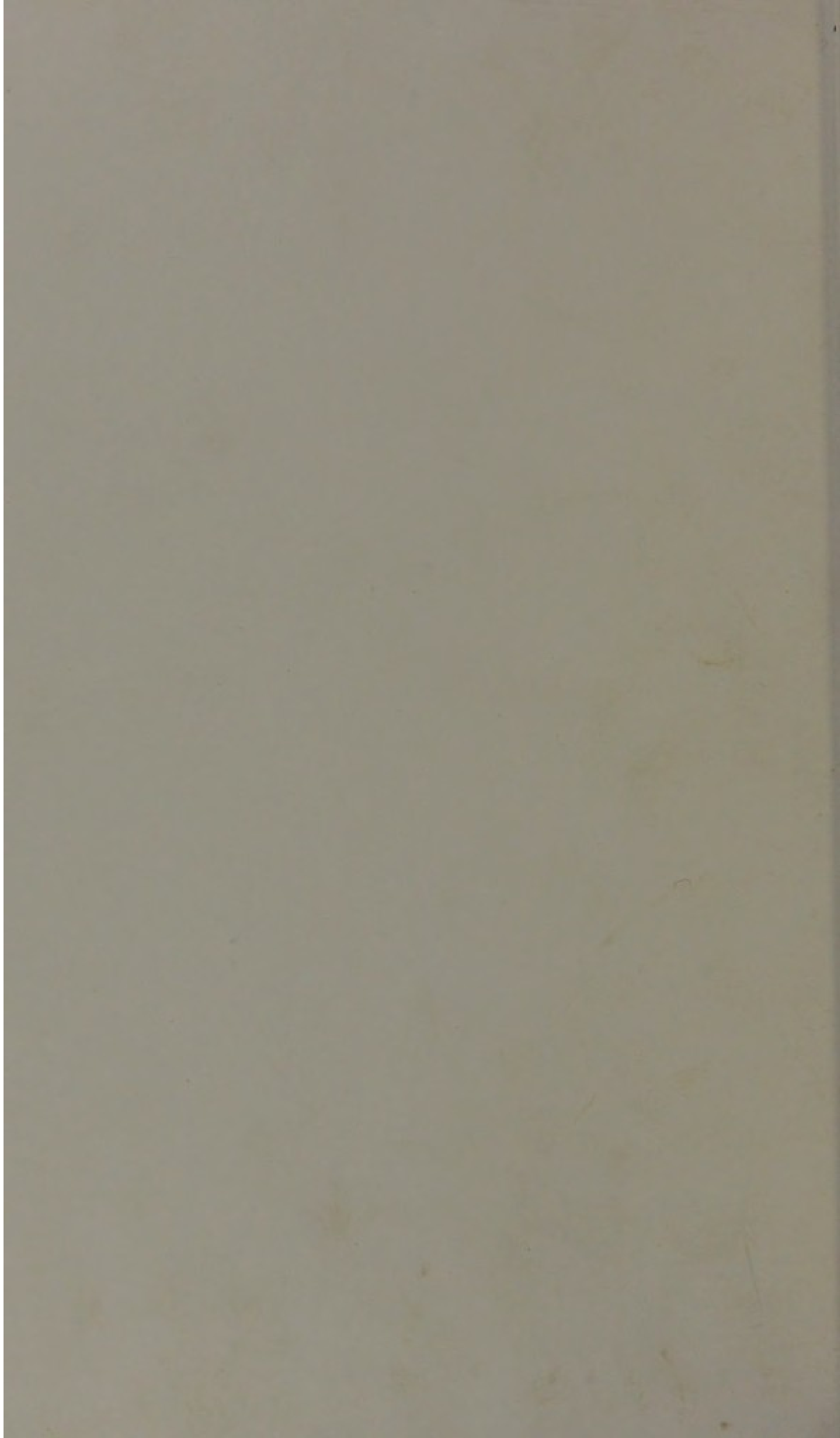

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CASES IN MIDWIFERY

REQUIRING

MANUAL & INSTRUMENTAL INTERFERENCE

FOLLOWED, IN THE FORMER INSTANCE,

FIRST BY TRISMUS, THEN BY HEMIPLEGIA OF THE RIGHT SIDE;

AND

ULTIMATE RECOVERY.

BY

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Read before the Medico-Chirurgical Society on the 23d May 1850.

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MDCCCL.

CASES IN MIDWIFERY.

I have been induced to bring the following cases before this society, as they appear to me to possess some important and instructive peculiarities. The first is remarkable from the rareness of its occurrence, and its unusual complications. The second affords an instructive example of the third position of the fœtal head,—a subject which has been a source of considerable discussion among accoucheurs, and the opinions with regard to which are still far from satisfactory.

On the 20th April 1849, Mrs ——, aged 30, a taciturn, delicate, scorbutic-looking woman, was delivered of her fourth child. Her labour was lingering in the commencement, but the second stage terminated hurriedly, and the child was born a short time before I arrived. The placenta was retained; but there was no obvious cause of alarm in the case, and I was in hopes, when the uterus recovered from its apparent inertia, that the labour would be completed without any unusual interference.

Having, however, waited for some time without any indication of this taking place, I gave my patient thirty drops of Battley's Tincture of the Ergot, which I have generally found effectual in rousing the uterine action; but it had no effect in this case. It now became evident that there was something wrong; and on applying my hand to the abdomen, I found the uterus lying high, and conveying a relaxed and doughy sensation to the touch. I was therefore induced to introduce my hand into the vagina, when I felt the *os tincæ* so closely contracted round the umbilical cord, as to prevent the admission of more than one finger. I immediately administered forty drops of morphia, which overcame the spasm, and I was enabled to pass my hand

into the uterus as far as the placenta, which was adhering to the fundus, and it required careful manipulation to separate it from its attachment. The uterus contracted regularly, and there was no hemorrhage. I afterwards ascertained that this patient had experienced difficulty in all her former confinements in the removal of the afterbirth.

The case appeared to go on favourably for some days; but I was kept anxious by her pulse continuing about a hundred, and by her having little sleep at night. I therefore, as a precautionary measure, prescribed a febrifuge mixture,* and that she should take six grains of the compound ipecacuan powder at bed-time, to be repeated if she did not sleep. Even on the morning of the seventh day, when I was induced to make more presssing inquiries in regard to her symptoms, from her pulse being 110, she expressed herself quite free from all uneasiness. In the evening, however, after a full meal of porridge, she surprised her friends by moralising on her past life; and while they were endeavouring to compose her, she was suddenly seized with trismus. I saw her about an hour after the attack, when her teeth were clenched together, her eyes suffused, her face flushed, and she had a wild and frightened expression of countenance. She paid no attention to what was said to her; and when an attempt was made to give her some antispasmodic medicine, she turned away her face with a determined look, which gave rise to a doubt as to whether the jaws were closed by spasms or the will of the patient, such as we find in mania, to the puerperal form of which her case had some resemblance. This state continued for upwards of six hours, when the spasm ceased, and she was enabled to swallow. She was ordered to have, while awake, every two hours, one table-spoonful of a mixture, consisting of three ounces of the camphor julep, three ounces of liquor of acetate of ammonia, and one drachm of solution of muriate of morphia.

There was no return of the spasm, and the symptoms became very much the same as before the attack of trismus,—there being little sleep, and the pulse continuing about a hundred and ten. On the afternoon of the tenth day after her confinement, she had a severe rigor, which was followed by loss of speech, and paralysis of the whole of the right side, except of the face.† She was quite sensible to what was said to her, and

* Liquor of acetate of ammonia, one ounce and a half; antimonial wine, fifty-five minims; water, three ounces. To be mixed, and a table-spoonful of the mixture to be given every second hour.

† The hemiplegia in this case differed in some respects from the usual form of that disease, as observed by Sir Gilbert Blane, who states that it generally affects the left side and the face, as well as the extremities.—Cyclopædia of Practical Medicine, Vol. iii. p. 252.

was able to swallow; but she could not push her tongue forward when asked to show it. Her pulse was a hundred and ten, but too weak to admit of either general or local bleeding. It was necessary, therefore, to adopt other means to subdue fever and excitement, and she got the following medicines:—

Six grains of calomel, twelve grains of the genuine James's powder, and eighteen grains of the compound powder of ipecacuan, were directed to be mixed, and divided into six powders, one of which, in jelly, was ordered to be given the patient every two hours, while awake.

One table-spoonful every third hour was ordered of a mixture, consisting of three ounces of liquor of acetate of ammonia, the same amount of camphor emulsion, and one drachm of antimonial wine.

On the twelfth day, severe diarrhœa came on, which reduced her strength very much, and her case began to assume a hopeless aspect. This symptom was soon removed, however, by a mixture of chalk, catechu, and laudanum. The calomel and Dover's powder were stopped whenever the diarrhœa appeared; but the febrifuge mixture was continued at longer intervals.

On the sixteenth day, finding that little improvement had taken place in the power of movement and speech, a blister was applied to the back of the head, and she was ordered to take one of the following pills every four hours, until the bowels were freely moved.

Extract of colocynth, six grains; extract of hyoscyamus, eighteen grains; croton oil, three minims. To be carefully mixed, and the mass to be divided into six pills.

The blister rose well, but it soon healed, and another was applied the second day after, which was ordered to be kept open by means of savine ointment. This dressing had little effect, as it was necessary to repeat the blister in two days, and the blistered surface was ordered to be pencilled with the aromatic acetic acid occasionally, and dressed with the issue ointment, so as to keep up the counter-irritation. The croton oil pills acted very freely, and they were in consequence given only twice a-day. From this period the symptoms began to improve, which was indicated by her being enabled to put out her tongue and to utter some words, although very imperfectly. The next step in her progress towards recovery, was her being able to move her right arm. The same treatment was continued, until a large slough formed on the lower part of the back, extending fully six inches in length, and three in breadth; when the counter-irritation on the head and neck was stopped. As

this slough separated, she gradually recovered the use of her leg, and could move her arm more freely. The only medicine she had after this, was the croton oil pill, and occasionally a powder, composed of *hydrargyrum cum creta*, rhubarb, aromatic powder, and the carbonate of soda, when the tongue indicated the necessity of such medicine. Immediately on the slough forming on the back, she was put on nourishing diet, with occasionally wine and ale, as the quantity of discharge was large, and the loss of surface was considerable.

She was able to go to the country about six weeks after her confinement, although the sore on her back was not healed. The change of air had its usual good effects, and, in a few weeks, she returned home with her health much improved, and able to walk and speak nearly as well as before her illness. The only disadvantage she seemed to labour under, was a difficulty in finding words to express her ideas. When I saw her last, however, this defect was less remarkable, and she was able to take charge of her domestic concerns.

On the 6th January 1850, I was called at 10 A. M. to attend Mrs R., aged 25, a coarse flabby-looking woman, who was in labour of her first child. Her pains commenced at five in the morning, and, when I arrived, they were returning every five minutes, and were unusually distressing to the patient, while their effect in advancing the labour was very trifling. On examination *per vaginam*, I found the *os tincæ* considerably dilated, the membranes ruptured, and the head of the fœtus presenting in the third position. From the peculiar sensation conveyed to the finger by the bones of the head, which yielded to pressure like parchment, I was induced to ask the patient if she had reached the full time of gestation, and she said she considered that she was still a fortnight short of her reckoning, and that she attributed her labour coming on to a fright she had two days previously. The *os uteri* was thin and unyielding; I therefore ordered her to have small doses of tartar emetic at short intervals, with the view of promoting relaxation; but it had very little effect, as the pains continued feeble, and the first stage of labour was not completed until three P. M. As the pelvis was roomy, and the child's head small, I was in great hopes that the labour would now proceed more rapidly, either by the forehead being turned into the hollow of the sacrum, or that it would at once pass under the pubis; but I was disappointed, as hour after hour passed without any change or advance being produced in the position of the child's head. The functions of the bladder were seriously interrupted, and it

was necessary to introduce the catheter several times, and, on each occasion, a large quantity of urine was drawn off. Finding at seven the following morning that no improvement had taken place in the case, and that the head had remained stationary for sixteen hours, I proposed to the patient and her friends that I should use instruments. They at once agreed to my doing so, and I applied the forceps with great ease to the patient, and delivered the child, in two pains, without carrying the forehead round to the hollow of the sacrum.

It was a remarkably small female child, and so very weak, that the only sign of life it gave for some time was a faint quiver of the lip. The cord soon ceased to pulsate, when I immediately separated the child, put it in a warm bath, used artificial respiration, and applied stimulants to the nose and chest; which were ultimately attended by success, as the feeble creature began to give convulsive sobs at long intervals, then to breathe, but not regularly for more than half an hour after it was removed from the mother. The head was so much misshapen and elongated backwards, that the people feared that it would never assume the human form. This apprehension, however, was soon removed, for when respiration was fully established, the head gradually regained the natural shape, leaving no trace of the impression of the forceps.

On returning to the mother, and applying my hand on the abdomen, I found the uterus nearly as large as if no child had been born; and examination *per vaginam* disclosed the head of another child, presenting in the first position. But the uterine contractions were not renewed for two hours; and when they did return, they were of the same lingering and inefficient character as in the former part of the labour. As there was apparently a large quantity of the *liquor amnii*, I ruptured what seemed to be the bag of membranes, when a fluid came away, but on examination it proved to be pure blood; immediately after this, another set of membranes came down distended with fluid, which I also ruptured, feeling satisfied that the labour would be facilitated by reducing the contents of the uterus. Unfortunately, however, as the waters flowed off, a loop of the umbilical cord descended, and was instantly followed by the head of the child, which became so wedged between the two cords, that it was impossible to push it, so as to admit of turning, and there was no time to send for the forceps, which I had taken home after the delivery of the first child, not expecting that I should require them for the second. The consequence was, although I made every endeavour to protect the cord by pushing it up during the interval of the pains, it ceased to pulsate

a few minutes before the head was delivered, and, as was to be expected, so the child was still-born. It was a remarkably large child, and formed as great a contrast to the first-born, to encourage the notion that this was a case of superfœtation, and that the second child had been conceived some time prior to the first.

The placentæ were soon expelled, and there was no hemorrhage. On examination, they seemed to be united only by membranes; and what I had taken for a second bag of waters was an intervening cavity between the two sets of membranes containing clots of blood,—the fluid part having escaped when I ruptured the membranes.

The mother suffered for some days from retention of urine, and required the use of the catheter. There was also a considerable discharge of pus from the vagina; but these symptoms gradually disappeared, and in six weeks after her confinement, she was able to take a nursing.

This case presented some very interesting points of practical importance, on which it may not be out of place to make a few remarks. The first of these was the peculiar character of the pains, which, throughout the whole labour, were situated in the back, and although of frequent occurrence, and very distressing to the patient, they had scarcely any effect on the *os tincæ* during great part of the first stage of labour; at least it was not appreciable to the finger during examination;—and in the second stage, they had no influence whatever in advancing the child's head, or in changing its position. They were obviously confined to a limited portion of the posterior fibres; as there was none of that foreshortening of the uterus and semi-rotatory movement during the pains, observable in ordinary labour on applying the hand to the abdomen, or in examination *per vaginam;* on which depends so much the adjustment of the child to the passages of the mother.

As the patient was strong and healthy, the lethargic state of the uterus was the more remarkable; and I think it is to be accounted for by one or other of the three following causes: First, by the uterus having been called into action prematurely, and before it had acquired the peculiar vigour and strength it usually attains at the full period of gestation. This was rendered the more probable, by the statement of the patient, to which I have already referred, viz., that she was still a fortnight from her full reckoning. And the statistics of abortion clearly prove how irregularly and incompletely the uterus acts in such circumstances; hence the frequent delay in the expulsion of

the blighted ovum, and the occasional retention of the placenta, giving rise to alarming hemorrhage weeks after the birth of the imperfect fœtus. Second, the uterus may have been rendered inactive, by being over-distended, such as takes place in the bladder, when that organ either acts partially or not at all. This is no unfrequent cause of tedious labour; and when its existence is suspected, our highest authorities recommend the rupturing of the membranes. Third, the uterus may have become powerless, in consequence of the peculiar position of the children preventing that perfect and synchronous contraction of its fibres which is required for the natural accomplishment of labour.

The next point of interest was the first child presenting in the third position. This is a subject which has given rise to much diversity of opinion among accoucheurs, in regard to its frequency, its results, and treatment. The older authors considered that it was of rare occurrence, and, when it did take place, it gave rise to tedious and difficult labour, requiring the application of the forceps, if not of the still more serious operation of perforation of the child's head. This opinion, however, will appear the less remarkable, when we consider that, until the publication of Naegele's valuable Treatise on the Mechanism of Parturition, accoucheurs were satisfied with ascertaining that the head presented, without troubling themselves to inquire whether the forehead were towards the *sacro-iliac synchondrosis*, or to the *foramen ovale.* I remember well, in a conversation with the late celebrated Dr Hamilton, referring to the mineral arrangement of the presentations of the fœtal head, when he ridiculed the notion of such minuteness as totally unnecessary for the successful management of labour. The knowledge of the third position, formerly entertained, therefore, was derived entirely from the management of those cases in which the labour had become tedious and difficult from some other cause than the mere position of the head, as recent experience proves that this circumstance does not necessarily occasion unusual tediousness, and that, in general, the case requires no artificial aid. The third position was well known to Smellie, who, more than a hundred years ago, laid down the principle of practice to be pursued in cases requiring interference, viz., "that the forehead ought always to be turned into the hollow of the sacrum."* This practice was afterwards carried more extensively into operation by Dr John Clarke, who reports the successful results of fourteen cases;† and it has been approved of by the profession since his time.

* Smellie's Midwifery, Vol. i. p. 283.

† Transactions of the Medical and Chirurgical Society, Vol. ii. p. 229.

The remarkable difference of opinion among recent authors as to the frequency of the third position is less easily explained; and, although Naegele has given much instructive information on the subject, there still seems to be great misapprehension in regard to it. This is obvious from the very opposite statements given even by our highest authorities, in which the proportion, in regard to the first position, varies from 1 in 1336, according to Collins, to one in two and a-half according to Naegele. This celebrated author not only considers that, after the first position, the third is the most frequent in occurrence; but that these positions are " The usual presentations of the head, and the rest are unusual." I have paid particular attention to the positions of the head ever since I had the great advantage of studying the subject in the General Lying-In Hospital in London, under the superintendence of Dr Rigby, the talented translator of Naegele's work; and I have no hesitation in saying, that my experience does not induce me to admit the high average given by Naegele and other recent authors; neither am I satisfied that the statistics in regard to the fourth position are correct and established beyond a doubt. I am more inclined to believe that this position, like the third, is one of the stages in the progress of the child through the pelvis, which is of more common occurrence than is generally supposed; and that it has escaped observation in many instances, in consequence of the rapidity and facility with which the head passes into the first position.

The mechanism by which parturition is effected is another important question connected with this subject, which appears to be imperfectly understood. Naegele considers that the rotation of the forehead into the hollow of the sacrum in this case depends on the resistance opposed to the occiput by the inferior part of the pelvic cavity. This opinion has also been adopted by Dr Simpson, who treats this subject with his usual talents and research in a clinical lecture published by him some years ago. It is remarkable, however, that these eminent authors should suppose that so important a process should be the mere result of chance; and that Dr Simpson should ask the question, " What part of the floor of the pelvis serves as the resisting plane upon, and by the aid of which the occiput is thus made to rotate forward?" and should make answer, "In some, any, and in others apparently every, successive portion of the concavity of the floor of the pelvis seems to serve this purpose." Were the change in the position of the head entirely dependent on the incidental resistance of some part of the pelvis, the result would be rendered very uncertain; which is not the case; as experience has proved, what was first observed by

Solayres, that, in a large majority of the cases of the third position, if left to nature, the forehead is turned into the hollow of the sacrum; and it is in consequence of this fact that our present practice is established. But that the hypothesis is erroneous, is shown by Dr Simpson himself in a subsequent passage, in which he says, "I have repeatedly observed the rotation, when, in fact, the occiput was so low as to be beyond the influence of the bones and ligaments." It thus appears that the important resistance ascribed to the pelvis cannot always be relied on.

We must therefore look elsewhere for the power by which the head is rotated, and a favourable termination effected in the case; and we naturally turn to the uterus itself as the most likely source. It is an organ obviously of great strength, and its fibres are so wonderfully arranged, as to call into operation all the advantages of lever force. This is strikingly illustrated during labour, when its powers are gradually developed, and constitute a series of movements which seem admirably adapted to effect the delivery of the child, unless when there is some preternatural condition of the parts concerned.

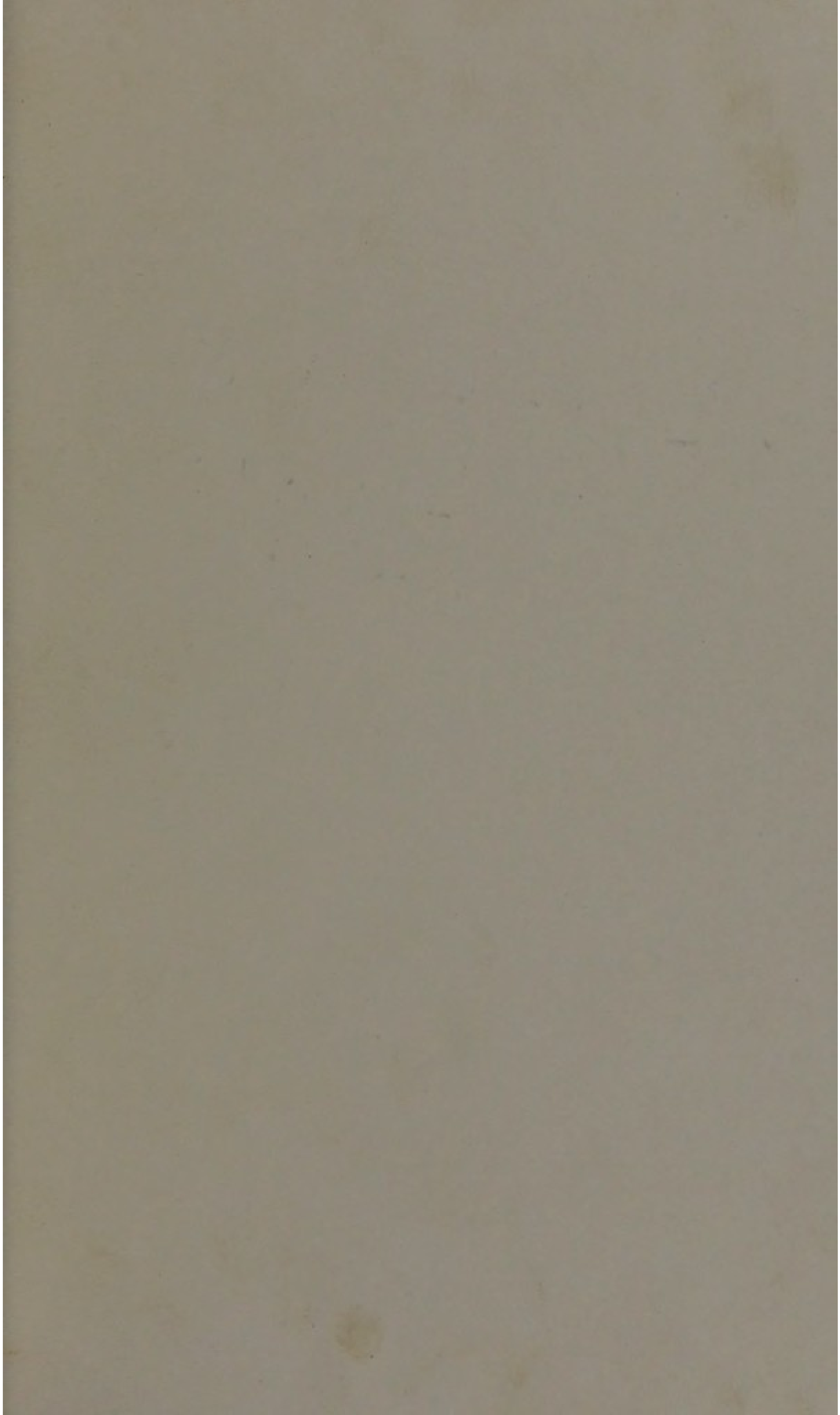
If we carefully watch the process of parturition, we observe how regularly these movements succeed each other, and how effectually they perform their specified duty. Our attention is first attracted by the "*dolores præsagientes,*" as they are called, which indicate the contraction of the fibres connected with the round ligaments, whose duty seems to be to direct the uterus into the axis of the pelvis, and retain it there. This operation is rendered obvious, not only by the diminished size of the woman as labour advances; but if the hand is applied to the abdomen during a pain, the uterine tumour will be felt to descend and become fixed.

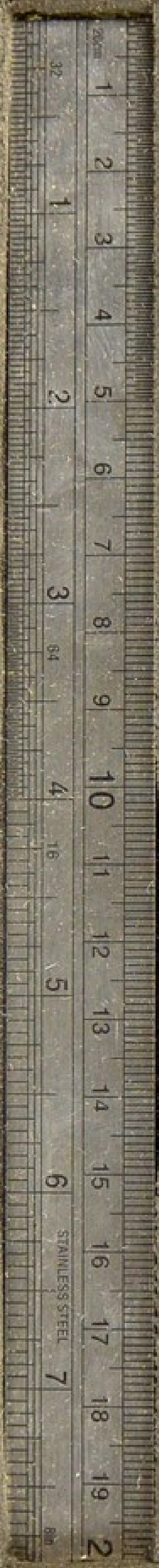
We next observe the semi-rotatory motion, by means of which the head of the child is slowly adjusted to the intricate passage of the pelvis. This movement seems to depend on the circular fibres of the organ, but more especially those of the fundus, acting on the broad basis presented by the nates and lower extremities of the child, producing very much the same effect as the rudder on a vessel. The child floating in the *liquor amnii,* or gliding on the lubricated surface of the uterus or vagina, moves easily, and the head turning as on a pivot in a semicircular form, finds its way through the spiral cavity of the pelvis. To whichever side this semi-rotatory movement first tends, whether to the right, as in the fourth position, or to the left, as in the third, it continues to hold the same direction throughout the labour; for the pelvis, although apparently oval, presents two semi-spiral

inclines, which diverge from the pubes downwards and backwards towards the lower part of the sacrum ; and along one or other of these the child's head seems to descend during parturition, unless it shall be so small as to be pushed onward without turning to either side, as sometimes happens in premature children, or when the head is unusually disproportioned. This semi-rotatory movement is readily ascertained by applying the finger to the head during the pains, and it is still more observable in the progress of the child through the external passages.

The third great movement in this interesting series is apparently the result of the contraction of the longitudinal fibres, which having dilated the *os tincæ*, expels the child from the uterine cavity and pelvis, by the aid of the abdominal muscles, which are called into action like a *corps de reserve*, in the last pangs of labour. There is nothing in all this process the effect of chance; every thing seems to go on with wonderful uniformity, and is the result of the most perfect mechanism.

Although we thus see that the uterus is quite competent in ordinary cases to accomplish labour, we must guard against trusting too far the unaided efforts of nature, when anything unusual occurs in the presentation; otherwise we may meet with serious disappointment. I am the more convinced of this fact, from the case just reported, as I think I committed an error in delaying so long to interfere. Should I again meet with a case in any degree similar, I should consider myself justified in having recourse to the forceps at an earlier period.





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