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Account of a Case in which the Cæsarean Section, performed by Prof. Gibson, was a second time successful in saving both mother and child. By George Fox, M. D.

Before entering into the details of the case about to be narrated, we have conceived it might be interesting to give a brief account of the previous labours of the patient, in which Dr. Meigs and myself attended.

The subject of the case, Mrs. R., is a native of Ireland; was born March 15th, 1809; is of small stature, not exceeding four and a half feet; is stated to have been a healthy child, till her second or third year, when she received an injury by a fall, after which she was unable to stand or walk for some years; subsequently she regained her strength, and was considered active. Upon examination we find the femur and tibia of each extremity very much curved, forming a considerable arch, convex anteriorly; at the lower part of the spine there is a large cavity, corresponding with the promontory of the sacrum internally; the bones of each upper extremity partake of the general form and disease. It is evident she has, in early life, laboured under rickets. She was married in May, 1830, and has been pregnant four times.

In the spring of 1831 I was requested to attend her in her approaching accouchement, and was accordingly summoned to see her on the 14th of the following June. In this labour the late Professor James, Drs. Hewson, Meigs, and Lukens attended in consultation; for a detailed account of which see the North American Medical and



Surgical Journal, for October 1831, p. 484; also Meigs's Midwifery, p. 322.

It was the unanimous opinion of the above named gentlemen, that the antero-posterior diameter did not exceed two inches, most probably was only one inch and three-quarters; and that there was laterally rather more space, particularly on the left.

After the most mature deliberation, cephalotomy was decided upon as the best means of delivering our patient; the cæsarean section was strongly urged, but its performance deemed inexpedient at that time. However, after cephalotomy had, in consultation, been determined upon, and Dr. Meigs consented to perform it, this gentleman again very carefully examined the patient, and called Dr. Lukens and myself to make another examination, which resulted in the conviction that the operation of cephalotomy, if not altogether incompetent to the delivery, would be attended with as much risk to the life of the mother as the cæsarean section; for it then appeared to us impossible for the cranium to be removed and the base brought through the superior strait, without the most violent exertions and great danger of lacerating the cervix uteri, vagina, &c.; and it was thought better to call our colleagues again together to reconsider the propriety of performing the cæsarean section, the child having been ascertained to be alive.

Accordingly we again met. Our first object was to ascertain whether or not the child was alive. Upon minute examination all foetal and placental soufflé, in the uterine region, was found to have ceased; the child being consequently dead there was no longer any hesitation as to the propriety of cephalotomy, which was immediately performed. The difficulties were great, far exceeding our worst apprehensions; the instruments recommended for similar cases were all tried, but without any benefit. After great perseverance Dr. Meigs was enabled, with the common tooth forceps to accomplish the delivery, thirty-three hours having elapsed from the perforation of the head to the complete delivery of the child.

Our patient subsequently recovered without any untoward circumstance, and so rapidly, as to be permitted to go down stairs in three weeks from the day of her delivery.

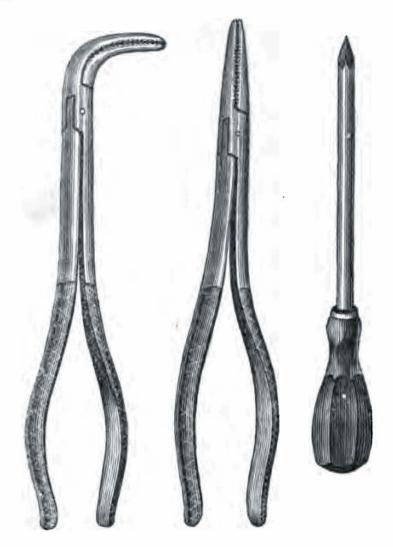
The opinion of all the gentlemen who had witnessed the extreme difficulties and dangers incurred by the mode adopted, was, that the cæsarean section would have been better and attended with no more, if as much, risk to the mother.

In the course of her second pregnancy, premature labour was advised, but not consented to. On the 23d of June, 1833, labour commenced, Dr. Meigs and myself attending her; the cæsarean section having been previously strongly urged, but perseveringly refused, the

only alternative left, was a repetition of the former operation, cephalotomy; this being decided upon, and no good but much injury likely to result from delay, we were reluctantly compelled to destroy the child rather than increase the risk to the mother, by waiting until nature should have accomplished the same end.

The delivery, in this instance, was much more readily effected, mainly to be attributed to the instruments which Dr. Meigs had caused to be made for the purpose.

These instruments are two pliers or forceps, each eleven inches in length, and of the forms represented in the subjoined cut. In one of them, the mandibles, or beak, is straight, in the other it is curved or bent nearly at a right angle. The jaws are slightly serrated in order to hold firmly any body included within their gripe; their edges and those of the joints are rounded or bevelled, so as to avoid all the parts except such as are intended to be pinched, as may be seen in the cut.





They are of great strength, and may be used as extractors, or tiretètes, without the least risk of wounding the mother, a charge to which all forms of the crotchet are justly obnoxious. They cannot wound the mother. With these powerful forceps we can seize, and break, and extract large portions of the fœtal cranium, with the greatest facility; even above a superior strait of only one inch and a half in diameter, an opening being previously made with the common perforator, or the drill or trocar, exhibited in the cut. A head can, therefore, be broken up and reduced to its smallest possible remainders



with these instruments, with which the fœtus can be afterwards eviscerated if needful, and safely extracted from the womb.

The principle of their construction is as follows:-If a pelvis be deformed so as to have only one inch and a half of antero-posterior diameter, a feetal head of three and a half inches cannot engage in the strait, but must lie above it, and resting on the top of the symphisis pubis. If its right parietal bone, (e. g.) is towards the sacrum, the left will project beyond in front of the top of the pubis. Hence, as the crown of the head rests on the top of the symphisis, a straight forceps or pliers could not grasp or bite its horizontal portions, but it could seize all the vertical portions of bone which lie towards the mother's back. Whereas, a curved beak could not seize the vertical pieces, but could readily take hold of all the horizontal portions, as in the cut is well exhibited. The cut will also serve to evince the necessity of a curved beak for seizing all the portions that extend to the left and right of the centre of the strait. Dr. Meigs supposes that these instruments are capable, under all circumstances, of effecting every desirable result attainable by the sharp crotchet, and that the former may be superseded by the latter.

Our patient again recovered, so as to be able in a few weeks to resume her ordinary avocations.

In her third pregnancy, she was under the charge of other medical advisers; in this instance Professor Gibson performed the cæsarean operation, which terminated favourably to both mother and child; for an account of which see this Journal, Vol. XVI. p. 343, and Vol. XVII. p. 264, and Gibson's Surgery, fourth edition, Vol. II. p. 405.

Toward the latter end of August last, Mrs. R. called on me and stated she had nearly completed the seventh month of pregnancy, and was desirous that I should again attend her; this I agreed to, upon condition, that she would consent to the performance of any operation which should be deemed most advisable. Dr. Meigs kindly consented to attend with me.

Premature labour, in her then advanced state of pregnancy, we considered would be attended with as much difficulty, and much greater danger to the patient, than at the full period.

Under the impression that the casarean section would be most proper, we endeavoured to prepare her system for this operation, should it be concluded upon, by a regulated diet, such as would be least stimulating, attention to her bowels, &c.; accordingly for some weeks previous to labour, her diet was chiefly restricted to milk and farinaceous articles.

On Sunday, November 5th, 1837, I was sent for by Mrs. R. about

5 o'clock, A. M. On my way to her house I stopt for Dr. Meigs. We found her labouring under a good deal of mental excitement, with a pulse of 116; countenance anxious and pallid; and apparently in a much more unfavourable situation than in either her first or second accouchements. Her pains had commenced about three hours previous to calling upon us; they were slight, recurring at an interval of about ten minutes; upon an examination per vaginam, the os uteri was found pretty well dilated, swollen, and succulent, as in previous labours; the head presenting to the left side of the pelvis; the membranes had been ruptured. Upon inquiry we learned that on the evening of the Friday previous, there had been a considerable discharge of water from the vagina, which continued throughout the following day; but as it was unattended with pain, she had not thought it requisite to send for us: this discharge was not produced by any exertion on her part. After remaining with her some time, finding that her pains were not urgent, we concluded to meet at 9 o'clock, and invite Professors Gibson and Hodge to join us in consultation.

9 A. M. Met Drs. Meigs, Gibson, and Hodge. We found our patient much the same as when we left her, excepting that the pains were rather more urgent and frequent. Upon an examination of the case in all its bearings, we determined to advise the cæsarean section, as best under the circumstances. I accordingly stated to the patient our views of her case, and after some little hesitation obtained her consent to the performance of this operation; previous to which, upon an examination of the abdomen, we were struck with the complete antiversion of the uterus; the old cicatrix was dark-coloured, hard, and puckered, about five inches in extent; adhesion had apparently united the integuments and uterus for a space of four or five inches, from near the pubis up towards the umbilicus.

We now ascertained, by applying the ear to the uterine region, that the child was living. Our patient's bowels having been opened by an enema, and her bladder emptied, she was placed upon a table, protected by a mattrass, on her back, with her hips at the edge, and the operation immediately performed by Dr. Gibson, in the presence of Drs. Meigs, Hodge, Norris, C. Bell Gibson, and myself. Dr. Norris and myself making firm pressure upon the sides of the abdomen to prevent protrusion of the intestines, Dr. Gibson commenced by making his incision, with a scalpel, through the integuments, muscles, &c., extending from an inch and a half below the umbilicus, nearly down to the pubis, directly through the old cicatrix; the uterus was found connected with the integuments by strong adhesions, for a space of about four inches; the incision into this organ was made near the fun-

dus, and extended down five or six inches; that portion, which was adherent, was much attenuated, being scarcely one-fourth of an inch in thickness. To ascertain the extent of these adhesions, Dr. Gibson, with his scalpel, dissected up the integuments on one side, until a knuckle of intestine protruding, satisfied him of their extent, which might be about half an inch.

When the section of the uterus was completed, the placenta was seen immediately under the line of incision, and partially detached by the separation of the lips of the wound. Dr. Meigs, standing on the left of the patient, now introduced his left hand towards the right side of the womb, displacing the placenta no more than was necessary during the exploration, yet detaching a considerable portion of it, as it filled the wound in the organ; he first extricated the left foot and hand, which were found near each other; the breech soon followed, succeeded immediately by the shoulders, and lastly by the head, after a few moments of resistance, by the contracting edges of the cut, which grasped the neck of the child, and the hand of the operator, with great force. The placenta was soon after removed through the incision, and the cord tied and cut; the hemorrhage from the uterus was at first considerable, but ceased upon the contraction of that organ, after the removal of the child and placenta. The external wound was brought together by six sutures, (introduced from within outward,) and adhesive strips, and a compress placed over it; a broad band, to support the abdomen, was now applied around it; the pressure of its sides, to prevent protrusion of the intestines, was continued until the external wound was closed.

The child thus born, was a boy of good size, but in an extremely feeble state: some time elapsed before perfect respiration was established, but happily, the efforts of Dr. Meigs were completely successful, and all anxiety on its account ceased.

Our patient bore the operation well, scarcely murmuring; in fact, she says, she suffered but little more than with one labour pain, her pains usually being uncommonly severe. Her position was not altered, excepting that her lower limbs were now supported by another table. Her pulse immediately after the operation was 96, just before 112. She is enjoined to lie perfectly still, not on any account to move; to be permitted to take nothing but small portions of barley water; and in case there is much pain, a teaspoonful of the following: R. sulph. morphiæ, gr. ij.; aquæ, Zi. M. Ft. sol.

Soon after the operation, Messrs. J. Forsyth Meigs and Skelton, arrived; these gentlemen assiduously devoted themselves to our patient during the first five days and nights, so that, had any unfavourable symptom appeared, we should have had immediate notice.

1½ P. M. Feels quite comfortable; after pains very slight; pulse 80.
4 P. M. Pulse 88; has taken one teaspoonful of morphia solution.
—10 P. M. Met Dr. Meigs. Pulse 88; skin pleasant; gentle moisture; tongue clean and moist; some flatulence; not much soreness; after pains moderate; urine drawn off by the catheter, six ounces; directed sol. morphiæ to be given every three hours if there is much pain, and a small portion of lime water occasionally for the flatulence.

6th, 101 A. M. Met Drs. Meigs, Gibson and Hodge. Mrs. R. passed a restless, uneasy night; was unable to sleep, though not in pain; took a dose of morphiæ at 111 P. M., and another at 5 A. M., also lime water twice. Her pulse is 85 and soft; skin pleasant; slight distension of abdomen, without any increase of soreness; urine by catheter five ounces, of natural appearance.-11 P. M. Symptoms all favourable; pulse 88 .- 4 P. M. Pulse 92 .- 81 P. M. Met Dr. Meigs. Pulse 94; skin and tongue moist and pleasant; countenance good; no expression of anxiety; considerable tympanitis; complains much of flatulence; no after pains; lochia free and natural; urine by catheter ten ounces. At this time, a catheter was introduced into the rectum. which caused the discharge of a large quantity of gas, rendering her much easier, and completely relieving the tympanitis. Directed a tablespoonful of the following mixture to be given every two or three hours: R. bi. carb. potassæ Zij.; sulph. morphiæ grss.; aquæ menthæ, p. Zvj. m. ft. sol.

7th, 10 A. M. Met Drs. Meigs and Gibson. Our patient had a very good night; slept comfortably, without an opiate; pulse 78 and soft; countenance good; respiration natural; skin pleasant; tongue slightly furred, but moist; urine by catheter eight ounces.—4 P. M. Pulse 82; no pain or tenderness; has slept through the day; expresses herself as feeling comfortable.—8½ P. M. Pulse 84; no return of tympanitis since the introduction of the catheter into the rectum last evening; urine by catheter eight ounces; continue mixture.

8th, 10 A. M. Rested well all night; secretion of milk natural; the infant was put to the breast during the night; pulse 100; skin pleasant, moist; tongue slightly furred, moist; urine by catheter eight ounces; wound was examined without removing dressings, suppuration is commencing, there has been throughout a slight oozing of bloody serum; she is this morning removed to another bed.—2 P. M. Pulse 92; secretion of milk increased so much as to cause some uneasiness to her; breasts are directed to be well drawn.—8½ P. M. Pulse 92; breasts relieved by drawing; urine by catheter ten ounces.

9th, 10 A. M. Slept soundly all night; appears very comfortable; pulse 97; skin pleasant, moist; secretion of milk abundant, lochia

natural; urine by catheter eight ounces.—6 p. m. Pulse 96; skin moist; abdomen flaccid, free from all pain or tenderness; no flatulence; urine by catheter eight ounces; directed the mixture carb. potassæ to be omitted: she had taken it occasionally on account of flatulence, since the evening of the 6th; to-night, is permitted to take arrow root gruel; has been restricted to small portions of barley water until this time.

10th, 9 A. M. Slept comfortably; having some return of flatulence, took two doses of potash mixture in the course of the night; relished gruel; external organs were washed with weak wine and water, much to her relief; pulse 104; skin moist; urine by catheter eight ounces.-1 P. M. Pulse 100; wound dressed for the first time; it extends from half an inch of the pubis to one and a half inches of the umbilicus; adhesion has taken place at the upper and lower ends; discharge slight, bloody, dark coloured; at the upper end of the cicatrix from former operation, on the right side of the incision, it is slightly inflamed, of an erysipelatous appearance, and ulcerated, for the space of two inches; I removed a stitch from this point, which seemed to be a source of irritation, also one from the upper end; washed the parts and applied fresh adhesive strips, leaving a sufficient space for the free escape of pus; a piece of lint, spread with cerate, and bandages were then applied; she complained of no pain or fatigue. Bowels not having been moved since the operation, an enema of warm flax-seed mucilage is directed; breasts, which are somewhat troublesome, to be well drawn; the child would nurse, but from the mother's position it is difficult and fatiguing; consequently, we rarely put it to the breast, having from the first had a wet nurse for it .-- 6 P. M. Pulse 100; skin pleasant; no pain; all her symptoms are most favourable; urine by catheter ten ounces; enema not having operated, another to be administered.

11th, 9½ A. M. Slept well, but in consequence of some pain in the evening, caused by the enema (which operated freely), she took two doses of morphia solution; pulse 96; tongue less furred, moist; urine by catheter eight ounces; abundant secretion of milk; no unfavourable symptom; slight, dark coloured discharge from wound; fresh cerate applied; asks for increased diet; is to be allowed the soft part of six oysters and a biscuit, in addition to the gruel.—6 p. m. Pulse 96; urine by catheter six ounces.

12th, 10 A. M. Rested well; took one dose of morphia; pulse 98; skin pleasant; has passed water twice through the night, without the catheter; the wound looks well, healing; inflammation about the old cicatrix much diminished, I removed three more stitches, and



applied fresh adhesive strips to lower parts of it; diet, milk, eggs and oysters.

13th, 10 A. M. Pulse 96; no pain; skin natural; tongue clean; slept well; wound looks well; removed the last suture, and applied fresh dressings.

15th, 10 a. m. Has slept well for the two last nights; pulse 96, soft and pleasant; skin and tongue natural; countenance good; very cheerful; spirits throughout have been excellent. Wound looks well; adhesion perfect above and below; is filling up rapidly; inflammation of right edge subsided; suppuration moderate, lighter colour; lochial discharge has ceased. This morning, for the first time, she complains of her position, which has been altogether upon her back; upon examination, a small slough (size of a cent) is discovered upon the sacrum; inquiry had frequently been made upon this point, but the fear of being moved induced her to conceal the pain and soreness until this time; her position is now changed to the side, hips being protected by adhesive plaster; a poultice of bread and milk to be applied to slough; diet as before—5½ P. m. Much more easy since change of position; pulse 92; has for the last two days suckled her infant.

17th, 10 a. m. Pulse 84; bowels were opened yesterday by an enema; slough separating, superficial, does not complain of it; wound looks healthy; suppuration slight.

25th. Has been very comfortable since last report; no pain or tenderness; pulse 88; wound nearly closed, a small opening merely remaining, about the top of the old cicatrix; the discharge from it very slight; bowels being confined, she is requested to take ol. ricini Zj.; to-day is permitted to set up in the bed.

We have conceived it unnecessary to head each daily report, "Met Drs. Meigs and Gibson," we having continued to meet regularly during the first week, after which time, Dr. Gibson saw her occasionally, during the progress of the case, as convenience or inclination dictated; Dr. Meigs continued in regular attendance some time longer.

December 26th. Mrs. R. has continued perfectly well; soon after date of last report was permitted to leave her bed; the slough on the back soon separated and caused but little inconvenience; the incision in the abdomen has healed, with the exception of a small fistulous opening, which is occasionally touched with lunar caustic; her diet has for some time past been generous.

February 21st, 1858. The fistulous opening heretofore noticed, continued a source of annoyance till the 10th inst., since which time it has been entirely closed; the cicatrix is now complete, and looks healthy.

Remarks .- Our patient had a better "getting up" than many

females after an ordinary accouchement; her sufferings after the operation, were slight indeed; in twenty days from the day of its performance, she sat up; and for some days previous, constantly nursed her infant. The adhesions connecting the uterus and abdominal parietes in front, were so extensive, as almost to have permitted the performance of the operation, without necessarily opening the peritoneal sac; very much diminishing its dangers. It may be worthy of notice, that nine months subsequent to the former operation, during lactation, the menstrual discharge returned, healthy and natural in every respect. During the progress of the case, the patient was visited by many of our medical friends.

The infant has grown finely, not having had an hour's sickness since birth,

Philadelphia, February 22nd, 1838.