

pleasure and satisfaction Mr. Holmes' recently-published work on the *Surgical Diseases of Children*, in the course of which he devotes a chapter to "excision of the knee." After stating that he entertains so sincere an admiration for the operation as to believe that it will bear the truth to be told about it, Mr. Holmes adds that he believes it to be more fatal than amputation, and that he is aware of no reason why, under any circumstances, it should prove less so, being, in his opinion, a proceeding of at least equal, if not greater, severity. "But even," says this author, "if I thought that excision would always continue to prove more fatal than amputation, I should still practise it, because I think its results, when it succeeds, are so good that we are justified in running some extra risk to secure them."

I was much gratified to find the opinions I have endeavoured to justify in the foregoing paper were almost identical with those of a surgeon who had won for himself so eminent a position by hard and honest work.

I think enough has been now said to prove that excision of the knee is an operation only to be preferred to amputation where the circumstances of the case are very exceptionally favourable, and only after the most mature deliberation. At the same time I entertain the sincere conviction that the excision of joints, both for disease and for injury, is, in suitable cases, a real progress both in the principles and practice of surgery.

ART. II.—*Version in Contracted Pelvis.*^a By JOHN RINGLAND, A.B., M.B., M.D., T.C.D.; M.R.I.A.; Fellow and Member of the Midwifery Court of Examiners, and formerly Censor of the King and Queen's College of Physicians of Ireland; Professor of Midwifery in the Ledwich School of Medicine; Senior Master of the Coombe Lying-in Hospital, &c., &c.

It is now many years since the late Sir Fielding Ould suggested the operation of version as a suitable means of terminating a labour wherein a diminution of the conjugate diameter of the brim of the pelvis constituted the cause of delay. Since then Lachapelle, Radford, Sir James Simpson, Cazeaux, and M'Clintock have added the weight of their great experience in support of that recommendation.

^a Read at a Meeting of the Dublin Obstetrical Society, 20th June, 1868.

The subject is one of such vast importance, and possesses so much of deep interest for the practical obstetrician, that even a single case added to the history of the subject may be esteemed of value. I therefore offer no apology for submitting the details of the following case, which presents features of considerable and practical value; and I have the less hesitation in doing so, as, in a paper submitted by me to this Society during its first session on March 7th, 1839, on "Labour rendered tedious by Anomalous Conditions of the Pelvis," I advocated "delivery by turning, when there is but slight contraction, and yet there does not exist sufficient space for the application of the forceps." I quote from a *résumé* of my paper, published in the 45th No. of the *Dublin Journal of Medical Science* for 1839, page 493.

I must premise here, that I am about to submit merely a continuation of the history of a case already brought under the notice of the profession. Dr. M'Clintock, under whose superintendence, in the Rotundo Lying-in Hospital, the first three of this patient's labours were completed, having in his able paper on "Turning in Cases of Disproportion," read before the London Obstetrical Society, fully detailed the particulars of these three labours, more especially the third, being one of the cases upon which his paper was founded; whilst Dr. Kidd, who had charge of her in the Coombe Lying-in Hospital in her three labours next ensuing, communicated the details thereof to this Society in his very valuable paper, "A Case in which Premature Labour was induced by the Use of Fluid Dilators," read on the 14th January, 1865, and published in the *Dublin Quarterly Journal of Medical Science* for February in that year. A short *résumé* from that paper will not, I conceive, be out of place here, but will rather constitute a suitable introduction to her subsequent history.

F. K. was delivered of her first child, a boy, on December 16th, 1856, under chloroform, by perforator and crotchet. Great difficulty was experienced in the operation, which occupied an hour and a-half, from the head being above the brim, and the conjugate diameter being contracted. She recovered well, but subsequently got an attack of pelvic cellulitis of the right side.

She was delivered of her second child on the 1st of April, 1858, after a labour of forty-two hours, the breech presenting. Chloroform having been administered, a leg was brought down, and a dead male child thereby extracted. The mother recovered well.

Her third child was born on November 12th, 1859, after a

labour of fifty-six hours, the greater part of which was at her own home. Shortly after her admission to the hospital she was placed under the influence of chloroform, and the left leg brought down; immense difficulty was experienced in extracting the arms and head. The child—a large male—was pale and flaccid, but the heart pulsated, and respiration, after a few minutes, was established. The mother and child left the hospital on the ninth day, both well; and it may not be out of place here to add, that the child is still living.

The Rotundo Hospital having been closed at the time of her fourth labour—April, 1862—Dr. M'Clintock sent her for admission to the Coombe Hospital. She had been many hours in labour before she presented herself. When examined the dilatation of the os uteri was found to be complete; but, owing to the narrowness of the conjugate diameter, the head had not entered the pelvis. Dr. Sawyer succeeded in applying Churchill's forceps, but in consequence of the extreme distance of the head, the lock and portion of the handles of the instrument were within the vagina. Under all the circumstances it was deemed expedient not to make further traction with the forceps, delivery by that means appearing to be impracticable. Version was then performed, one leg having been brought down; very great difficulty was experienced in bringing the head through the pelvis. The heart was feebly pulsating at birth, but respiration could not be established. The child was a male. The mother made a good recovery.

Acting on the advice given her prior to her leaving the hospital on this occasion, she presented herself for admission thereto about the termination of the eighth month of the next—her fifth pregnancy—it having been previously determined to induce premature labour. Accordingly, on the 29th of May, 1863, the vaginal douche of Kiwisch, as modified by Dr. Sinclair—who kindly lent his aid on the occasion—was applied for about fifteen minutes. Marked collapse ensued; but although only used the once, labour shortly set in (of a very languid character, however), the first stage not having been completed for five days. The second stage was short, and accomplished without difficulty. The child—a male—presented with the breech, and was born with the heart feebly pulsating, but respiration could not be established. The mother's recovery was very slow.

In her sixth pregnancy labour was again induced. This was effected on the 24th of November, 1864, being the 240th day from

the termination of her last menstruation, by means of "Barnes' Dilators;" frequent labour pains speedily succeeded their employment, which, however, after a time became irregular and feeble. A stimulating enema having produced no beneficial alteration in them, a full opiate was administered at two a.m. on the morning of the 30th, which produced sleep, after which the second stage of labour set in, and she was delivered of a rather large-sized dead male child; the head presented, and its passage through the pelvis was not difficult. The mother made a good recovery, and left the hospital on the ninth day.

For the particulars of her seventh labour I am indebted to the courtesy of Mr. Young, surgeon of the Monaghan County Infirmary, and Dr. Temple, of Monaghan. She was taken in labour in the evening of the 31st December, 1866, but the presentation was not then ascertainable. Mr. Young saw her three or four times between that and early the following morning, when he found the presentation to be the right parietal. At his last visit—about two a.m.—he was anxious to use a blade of the forceps to rectify the position, but could not prevail on her to submit to his judgment, or do anything desired by him; he accordingly—not being in good health at the time—discontinued his attendance, and that of Dr. Temple was procured. Her labour still proceeded slowly, but as the pains increased the head advanced. On the third morning—January 3rd, 1867—she became so worn and exhausted that Dr. Temple determined to perforate, which he effected without much difficulty, the patient having been first brought under the influence of chloroform. Profuse hemorrhage ensued, which was with difficulty controlled. She recovered slowly and gradually, and finally made a perfect recovery.

In her eighth labour, having proceeded to full term, she was admitted into the Coombe Lying-in Hospital at ten p.m. on the 21st April last, the membranes having spontaneously ruptured some time previously; although she had experienced severe pains, the os uteri—which was reached with difficulty—was found at this time to be only sufficiently dilated to admit the point of the finger. Uterine action altogether ceased for fifteen hours after her admission; at the expiration of that time, however, vigorous labour was established, and left parietal presentation ascertained. Dr. Kidd saw her shortly afterwards—namely, at about two o'clock p.m. on April 22nd—and had the advantage of the opinion and advice of

Dr. M'Clintock. As the os uteri was not yet fully dilated, and was somewhat rigid, the patient herself being very irritable and unmanageable, small doses of Antim. Tart., with Tinct. Opii. in Mist. Camph. were ordered at intervals of half an hour. At seven o'clock p.m. I saw her in consultation with Dr. Kidd, when the os uteri was found perfectly soft and dilatable, but not larger than half-a-crown, the head completely above the brim of the pelvis, and not making the least descent into it, even under the influence of the most powerful uterine action. The promontory of the sacrum projected downwards and forwards to a great extent, and the conjugate diameter of the brim was estimated, by mere digital measurement, to be from 3 to $3\frac{1}{4}$ inches, but no alteration appeared to exist in any of the other diameters. The pulse had now gone up to 120; she was very restless, and a copious olive discharge came from the uterus. Delivery by version was now determined on; she was accordingly brought completely under the influence of chloroform, and I experienced but little difficulty in introducing my hand and grasping both feet. Some little exertion was required to deliver the breech, and still more to bring down the arms. The funis continuing to pulsate, we were most anxious to complete the delivery with as little delay as possible, but it required every effort of Dr. Kidd and myself to bring the head through the brim; the transit through the outlet was effected with but slight difficulty, and it was with no little satisfaction we found that the heart was still pulsating, although its action was very feeble. After a few minutes our efforts at resuscitation were attended with success; respiration was established, and, after about an hour's attention, was altogether perfect. The child was a male, of good size, well thriven, and weighed 5 lbs. 15 oz., and left the hospital quite well. The mother was placed on a grain of opium every third hour. She did not suffer from a single bad symptom throughout her convalescence, and was discharged quite well on the tenth day after her delivery.

Whilst my hand was in the pelvis, during the course of the operation, I carefully examined its condition. The promontory of the sacrum projected forwards to a great extent, and when the finger surmounted it, the upper surface of the projection lay nearly at right angles with the concavity of the bone, to the extent of somewhat more than half an inch, and the spinal column thence ascended in its normal course. Moreover, immediately behind the left pubic bone, there existed a bony knot projecting backwards

into the pelvis, with an elevation of about a quarter of an inch. From these facts I am somewhat inclined to believe that a portion at least, if not all, the deformity of the pelvis, is the result of exostosis; and on mentioning these points to my colleague Dr. Kidd, he expressed to me his opinion that the conjugate diameter is somewhat less than when he saw this patient on former occasions; but as he did not note down the measurements, this is merely conjectural.

With the view to a proximate measurement of the deformity, I placed my hand directly across the antero-posterior diameter, the knuckle of the first finger being against the promontory of the sacrum, and that of my little finger against the projection behind the pubes, and I found it impossible to spread my hand completely flat. The measurement of my hand between the points indicated is exactly three inches; and as I was obliged to very slightly contract my hand while in position, I conceive I may fairly specify that of the diameter under observation at somewhat less than three inches.

An analysis of the history of this woman's eight labours gives the following results:—In her first and seventh labours she was delivered by craniotomy, with, of course, the loss of both children; in her fifth and sixth by the induction of premature labour, one child being still born and the other having the heart pulsating at birth, but respiration could not be established; in each of her second and third the breech presentation was converted into a footling; in one of these the child was still-born, and in the other the child was born alive and is still living; whilst in her fourth and eighth she was delivered by version, in the former of which the heart of the child pulsated at birth, but respiration could not be established; and in the latter the child was born and continues alive. Thus, of the four instances wherein delivery was completed by the feet, one of the children was still born; in one the heart pulsated but animation could not be established, and in two the efforts to induce respiration were attended with success; whilst in the other four instances the loss of the children resulted—strong testimony, I maintain, in favour of the operation of turning in other like cases.

However, whilst recommending this proceeding I must not be supposed as either altogether ignoring, or in the smallest degree detracting from the great difficulties and dangers which present themselves during the progress of the operation of version. Every

practitioner who has performed it knows but too well that such may arise in its every stage; and the history of the case I have now submitted proves that it offers no exception to this experience; had I not had the valuable aid of Dr. Kidd, at the close of the operation, to supplement my physical powers, utterly exhausted by my previous exertion, I apprehend that the child would, in all probability, have been lost, the great disproportion between the size of the head of the child and the bony passage, offering obstacles which demanded every effort we could jointly employ to complete the labour within the limited time compatible with the merest possibility of saving the child's life.

It would be impossible here to discuss the many difficulties of this operation; but it may not be uninteresting briefly to detail the particulars of two cases I have met with since the details of the preceding case were written, and which present some interesting features in illustration of the subject.

At about six o'clock on the morning of the 16th of May last, I was requested by Dr. Keiran to see a patient of his who was in labour of her third child. Her two previous labours were not attended with much delay, but the children were premature, and very small. Her present labour commenced at about six o'clock on the preceding evening, and proceeded steadily. The nurse did not deem it necessary to seek for the attendance of Dr. Keiran until 3 a.m., when he was summoned in consequence of the rupture of the membranes; but although the uterine action was very strong from the time of his arrival, no progress whatever was made towards delivery. When I saw her the head was still at the brim of the pelvis, very tightly fixed, the brow presenting, and the face directed to the pubes; the cavity and outlet of the pelvis were sufficiently roomy, but I could not make a satisfactory measurement of the brim, which, however, I subsequently found to be considerably diminished in all its diameters; the uterus was firmly and persistently contracted, and apparently moulded to the figure of the child; her pulse was quick and small, but she was remarkably cheerful. After the administration of a full opiate in some brandy I made several attempts, both with my fingers and with a blade of the forceps, used as a vectis, to rectify the position of the head, but in vain. I then applied Kennedy's short forceps, but failing to bring the ends of the handles within two inches of each other I withdrew them and resorted to a longer instrument—Murphy's long forceps, about 13 inches in length—but no force I felt justified

in using produced the least alteration in the position of the head. I now determined to resort to version, and, the use of chloroform being altogether contra-indicated by the state of the pulse, I administered a second dose—40 drops—of tincture of opium, and, after a brief delay to permit time for the action of the drug, I proceeded to pass my right hand, but experienced great difficulty and delay in doing so, owing to the still powerful action of the uterus, and its completely moulded apposition to the head of the child. By gentle but steady persistence for a lengthened time, I succeeded in overcoming the first obstacle, only, however, to encounter a virtual hour-glass contraction of the uterus tightly ligaturing the neck of the fetus. This stricture was with patience overcome, and my hand passed into the cavity of the body and fundus of the uterus, when after some little delay, owing chiefly to the numbness of my hand from the long pressure it had sustained, and which precluded my feeling whether there existed pulsation in the funis or not, I succeeded in grasping one foot, which, despite the still violent contraction of the uterus, I was enabled to bring down external to the vulva; beyond this, however, all the traction I dared use could not move it, the persistent uterine action precluding the version of the child and the descent of the nates. I now gave her 40 drops more of laudanum in half a glass of brandy and awaited its effect. After a lapse of about an hour, finding that the violent pains had subsided, I again proceeded with the operation; the foot which I had previously brought down had now receded, but was at the brim of the pelvis and in close proximity to the second foot. Both feet being thus within easy reach I grasped them and made traction, steadily and firmly, but without undue force, and I was gratified to find, after a few minutes, that the difficulty was overcome and the nates were descending. Owing to the general diminution in the size of the brim of the pelvis, great delay and difficulty arose in the delivery of the head. The heart of the child—which was a large-sized male—pulsated slightly after birth, but our efforts had not the effect of establishing respiration. I feel persuaded, however, that were it not for the very great obstacles which presented themselves in almost every stage of this case, and the delay consequent thereon, the life of the child might have been spared, to be another triumph to this operation. This lady was put on grain doses of opium every third hour, and she recovered without a bad symptom.

The next case to which I would direct attention is that of

a patient admitted into the Coombe Hospital, on the 16th June inst. She had been in labour for some hours previously, and was sent to the hospital by the midwife under whose care she was, in consequence of excessive hemorrhage. Dr. Kidd and myself having been in the hospital at the time of her admission, saw her immediately afterwards. The case was one of complete placenta previa, the os being soft and dilated to the size of about half-a-crown. Her pulse was so feeble, and her condition so low, that immediate delivery by version was at once decided on. Dr. Kidd had no difficulty in passing his hand and grasping a foot; when, however, the breach had descended so far as the perineum, all further progress was arrested; and on relaxing his tension on the limb to ascertain the cause, it receded to a considerable extent. He now found that the funis—which we subsequently ascertained was very short—had been caught between the nates of the child, which was thus slung up and precluded from descending below the point the strained funis permitted. The tension having been completely relaxed, Dr. Kidd was enabled to slip the coil of the funis over the hip of the limb still in utero, and this difficulty was thus overcome. The delivery of the shoulders was effected without much difficulty. The opposing diameter—the occipito-mental—of the child's head having been converted into the occipito-frontal, Dr. Kidd proceeded with the delivery through the brim of the pelvis; but with all the force he dared to use he could not succeed in this, and being utterly exhausted by his fatiguing exertion in the early part of the operation, he requested me to take his place, and although coming fresh and unwearied to its performance, it was not until after considerable delay, and the use of all the strength and energy I possessed, that I was enabled to complete the delivery of a very large male child. It was thought that its heart pulsated after birth; respiration, however, could not be established. In consequence of the excessive hemorrhage the brim of the pelvis was not carefully examined prior to the operation, but a subsequent examination demonstrated a very great contraction of all its diameters. This patient made a good recovery.

Before I close this communication there is one point connected with the first case I have detailed, which appears to me to possess so much interest in a medico-legal point of view, that I would not feel justified in omitting mention of it. In the *Dublin Quarterly Journal of Medical Science* for May, 1865, page 491, I have published the particulars of three cases wherein accidental injuries

arose to the fetus in utero. The possibility of such accidents in the parturient woman has been frequently questioned, and were circumstances similar to those I have specified to arise in any case wherein suspicious features presented themselves, and no undoubted evidence to the contrary could be found, innocent parties might be inculpated and unmerited odium cast on those altogether blameless. I therefore add the present as a supplement to my former cases. It will be recollected that I have stated in the case of F. K. that "the left parietal bone presented;" that "the promontory of the sacrum projected downwards and forwards to a great extent;" and that "when the finger surmounted it, the upper surface of the projection lay nearly at right angles with the concavity of the bone, to the extent of somewhat more than half an inch." Thus the right parietal bone was in direct apposition with the projecting promontory of the sacrum, against which it was pressed for a lengthened period by the violent action of the uterus. When the delivery was completed a deep depression was found across the centre of this bone from the sagittal to the coronal suture. We at first thought we could feel a crepitus in the bone, but subsequent examination did not confirm this opinion. I have not seen the child for some weeks, but on the last occasion it was with me I could not discover any appreciable alteration in the depression; still no untoward symptom of any kind had up to that time arisen. The mother was in attendance with the child at the last meeting of this Society, when I had hoped, had time permitted, to have been enabled to submit it for examination together with this communication. I have, however, since lost sight of them, and I regret that I have been unable to procure their presence at this meeting.

ART. III.—*Gunshot Wound of the Knee—Excision of the Knee-Joint.* By HENRY THOMPSON, M.D., Surgeon to the Tyrone County Infirmary, Omagh.

THE history of the operation of resection of the knee is, I believe, as far as the continent of Europe is concerned, as yet incomplete in the want of a case in which the operation has been performed, as a *primary* measure, in consequence of a wound.

Mr. Butcher has published an elaborate and very valuable list of all the known cases that have occurred without one, in which the