BRITISH LYING-IN HOSPITAL.

DEFORMED PELVIS; INDUCTION OF PREMATURE LABOUR; TURNING AND CRANIOTOMY.

(Under the care of Dr. GRAILY HEWITT.)

THE following is an instance of the difficulties attendant on the management of labour in cases in which the pelvis is markedly deformed.

Mrs. R——, aged twenty-eight, presented her letter of recommendation on Jan. 7th, 1865, being then, as she supposed, about seven months advanced in pregnancy. Her short stature immediately attracted the attention of Dr. Graily Hewitt, who, finding that this was the first pregnancy, made at once an investigation of the condition of the pelvis. Her height was fifty-three inches and a half; the legs much deformed from rickets, the tibiæ arching forwards and inwards in a very decided curve. She wore "irons" for some time when a child. There was no other very obvious alteration in the external framework of the body. She had been married sixteen months, and the last catamenial discharge was observed about May 25th or 27th, 1864. Her idea was that the pregnancy dated from June 1st, and she stated that she had quickened about a month. On these data Dr. Hewitt concluded that labour might be expected to supervene about March 1st. On examining the pelvis internally, the promontory of the sacrum was reached by the finger without much difficulty. The uterus with its contents lay high above the pelvic brim. A more particular examination and internal mensuration showed that the pelvis was contracted very considerably in its antero-posterior diameters; the conjugata vera was as nearly as possible three inches; the distance from the sacral promontory to the margin of the triangular ligament (conjugata diagonalis), three inches and a third. The pelvis was tolerably symmetrical, and was a very well marked specimen of that kind of deformity most generally met with in rickety subjects—namely, the oval pelvis with diminished antero-posterior diameter. (The subsequent history of the case made it evident that the pelvis was also a little contracted in the other dimensions.) It was tolerably certain that delivery of a live child at full term was impossible; for while the dimensions of the pelvis were such as to allow of extraction by craniotomy at the end of nine months, the contraction was such as to forbid the expectation of delivery of a living mature child either by the forceps or turning, or otherwise. After giving the case due consideration, Dr. Hewitt came to the conclusion to induce artificial premature labour at seven months and a half, and to attempt delivery at that period by the forceps or by turning, in order to give the patient a chance of bearing a live child.

On Jan. 20th, 1865, this project was carried into execution. The patient was now, however, about a week over the calculated seven months and a half. The head presented. At ten A.M. the os was gently dilated by means of the finger, and one of Dr. Barnes's india-rubber water-pressure dilators introduced. In an hour the os was enlarged to the size of the thumb. A No. 2 dilator was then introduced, and allowed to remain until three P.M., the dilatation being increased by injection of more fluid from time to time. At three P.M. it was withdrawn for a time. Pains had now set in periodically, at ten minutes' interval; but they were feeble. The dilator was reintroduced, and the patient left again until eight P.M. At this time the pains were pretty strong, and tolerably regular. The membranes were unruptured, the head presenting; but still quite above the brim. The head appeared well ossified. The more complete examination, now possible, confirmed the accuracy of the previous measurement of the pelvis.

The os being now well dilated, the membranes were ruptured at half-past eight P.M. After waiting for nearly an hour, it was found that the pains had no effect whatever in inducing descent of the head. Chloroform was accordingly administered, and the forceps introduced. One blade of Dr. Graily Hewitt's eight-inch straight forceps passed readily, but the second blade could not be applied. No better success attended the use of a pair of curved forceps; and finding the head very hard, larger than had been anticipated, and the pelvis appearing also a little contracted in its transverse diameter, Dr. Graily Hewitt decided to relinquish further efforts to apply the forceps, believing it impossible to drag the head through even after their application. The next alternative was turning. Without further delay this operation was performed at ten P.M., the left leg being first brought down. At this moment the child was alive. The second leg was secured, but very great resistance was encountered in bringing the breech through the pelvic brim; so much so, indeed, as to show that hopes of securing a live child were quite gone. By the time the breech had passed the pelvic brim the cord had ceased to pulsate. The arms were brought down one after the other by the blunt hook, and the shoulders extracted; but, as had been anticipated, there was not room for the head to pass the brim. It being manifestly better to empty the head than to further bruise the soft parts of the mother, the occipital bone was accordingly perforated, and the head (occiput looking directly backwards) extracted by the craniotomy forceps at half-past eleven P.M. Pressure was immediately made on the uterus by the matron, Mrs. Firth, and the placenta thrown off spontaneously in the course of less than five minutes. The uterus was well contracted. The next day the patient felt comfortable, and had slept well. The catheter was necessary to empty the bladder, and the labia were rather more swollen than usual; but she was free from pain. The diet ordered consisted of meat, eggs, and milk daily, and six ounces of brandy. Some slight disturbance attended the formation of the milk, which soon subsided, and the patient is now doing well.

The child was well formed, a female. Examination and measurement clearly showed that the patient must have been mistaken in her idea as to the date of the commencement of pregnancy; for the child measured seventeen inches and a half in length, was well developed, without any sign of immaturity. What offers, however, more conclusive proof of the age of the fœtus is the condition of the lower epiphysis of the femur. Ossification of the lower femoral epiphysis only begins in the thirty-sixth or thirty-seventh week of gestation, and the size of the osseous nucleus is only about three lines in diameter when the fœtus reaches maturity. In the case of this fœtus the osseous nucleus measured over two lines in horizontal diameter, and there can be little doubt that the full term of gestation had only been anticipated in this instance by a week or two at most, instead of five or six weeks, as had been intended. It is unfortunate that the mistake occurred, though that mistake was almost inevitable, for it of course rendered futile the attempts to deliver the woman of a live child. If labour is in-

duced on a future occasion in the manner which was intended, at not later than seven months, the patient may probably have a living infant. With respect to the labour itself, it was completed in a little over twelve hours. The use of the india-rubber bag was of great service in dilating the os and rendering further manipulations easy, and, considering the difficulties of the case, the patient made an excellent recovery. This result is doubtless in great part due to the short time the soft parts were subjected to severe pressure.