arity of manufacturing, as it were, an infection of a special potency and virulence.

Another point had also been observed in connection with school attendance, namely, the recrudescence of the infective quality attaching to throat affections, the observations as to this having been mainly recorded by Dr. Astley Gresswell. It had been noticed that a number of persons in different parts of the country, who had years before been attacked with diphtheria, were constantly suffering from throat affections, any change of weather or trifling cold sufficing to produce an acute inflammatory condition about the tonsils. And it having been observed that amongst those associating with such persons there had occurred cases of diphtheria, the origin of which could not be accounted for, the question arose whether the chronic tonsillar affection left in certain persons after diphtheria might not be due to the continued sojourn in them of the material cause of diphtheria. A number of instances were quoted in connection with these occurrences, and it was especially pointed out that in schools diphtheria attacks had occurred immediately subsequent to the recurrence in monitresses, who had previously had diphtheria, of any symptoms of renewed throat mischief, such as was assumed only to have resulted from taking cold. These cases have suggested dormancy and recrudescence in an infectious form of the material cause of diphtheria in an individual. The obscurity involved in such occurrences was also pointed out to be the greater because convalescents from diphtheria who have returned to their work with healthy-looking tonsils, may be found shortly afterwards with creamy patches on the tonsils and pharynx, or even with genuine diphtheria membrane on the fauces, and this apparently without any of those general symptoms usually affecting the system when such results ensue on a primary attack of the disease. Diphtheria would, according to the views expressed, appear at times to become a chronic malady in certain individuals with liability to recrudescence; and glanders in the horse, contagious ophthalmia in children, as also gleet in its relation to gonorrhoea, were referred to as analogous to diphtheria in this respect. A somewhat parallel experience had also been noticed in the case of certain parasitic organisms which exhibited periods of renewed vitality, to which the term "rejuvenescence" had been given. And as regards diphtheria, it was stated that such recrudescences had mostly been associated with unwholesome circumstances and surroundings, much of the same sort as those conditions which had before been shown to induce a form of sore throat which rendered the individual especially liable to receive the diphtheria contagium: the tonsils in such a condition affording exceptionally suitable hosts for sustained maintenance of the virus of the disease. Such experiences, also, may possibly afford one explanation of the circumstance that one attack of diphtheria does not, as is the case with most of the specific fevers, afford immunity against a second or even a third attack.

Dr. Thorne then summed up under a number of headings the various methods in which school influence would appear to be operative in favouring diphtheria, and he laid especial stress on the conditions of school life that tended to communication of the disease from person to person, by reason of the closeness of the mouth and nares of the recipient individual to the faucial mucous membrane of the individual by whom the infection is imparted. And, reverting again to the excess of diphtheria in females at school ages over males, he pointed out how a number of practices which tended to danger—such as the collective singing and intoning of lessons, kissing, and the sharing of sweetmeats—were more commonly sources of mischief amongst girls than amongst boys. And this led him to speak of one possible cause of excess of diphtheria amongst females who had reached more adult years. Premising that age susceptibility had by that time largely passed away, he was inclined to think that a much closer contact with diseased fauces was necessary in the case of adults than in children; and he pointed out that, whereas in diphtheria wards, where nurses were in the habit of carrying the sick children about, the spread of the disease to those nurses was not uncommon, there were instances where no such spread had been known for a series of years, this result being associated with a prohibition ever to lift up or carry about a diphtheria patient. The danger to adults of close contact with diphtheria was exemplified by the terrible

risks incurred by surgeons and dressers in endeavouring to save life by suction of blocked tracheotomy tubes; but whilst such action must be regarded as akin to a deed of heroism, the needless actions of parents, nurses, and others, who could not be prevented from embracing and fondling the diphtheritic sick, amounted only to a wanton carelessness of life; and when, as was not uncommon, especially in some northern counties, children were deliberately brought by school teachers to see and even kiss their dying or dead schoolmates, the practice became one bordering on criminal culpability. The various aspects of school aggregation, involving a steadily increasing stringency in bringing together children to the elementary schools under our present Education Acts and Regulations, were next considered in so far as the success in attaining those educational results may have had a bearing on the increasing incidence and fatality of diphtheria both in the country generally and especially in our large towns and cities.

And in this connection Dr. Thorne explained that again and again had suggestions to exclude from school children residing in infected houses and localities been resented because the step tended to diminish the average attendance on which the financial status of the school, and at times of the teachers also, was dependent. Indeed, when children stayed away from causes such as "sore throat" amongst others, there was at times a "whip up" of this dangerous absentee residuum; and it had become notorious that the suspicious form of sore throat previously adverted to could most easily be found in schools; then often followed "explosions" of diphtheria. "And if," said Dr. Thorne, "as I have suggested, the specific organism of diphtheria tends to behave as do certain low forms of vegetable life, may it not be that, just as special characteristics tend to be developed by the gathering together into a hothouse of selected forms of plant life that have hitherto been struggling towards a tardy and imperfect development in the open, so the increased virulence and greater reproductiveness of the diphtheria contagium, which would appear in point of time to have been associated with the steady growth of a system by which the young are gathered together for educational purposes, may turn out to be dependent on the aggregation, forced or otherwise, within school premises, of children suffering from such throat ailments as I have indicated?"

ON THE RELIEF OF LABOUR WITH IMPACTION BY ABDOMINAL SECTION, AS A SUBSTITUTE FOR THE PERFORMANCE OF CRANIOTOMY.

By MURDOCH CAMERON, M.D.,

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Physician for Diseases of Women to the Western Infirmary,
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It has always been a recognised rule in midwifery that no woman should be allowed to die undelivered without some attempt being made to save her and her offspring, or, at least, to save her at the expense of the child.

Concerning the latter point, whether we are justified in destroying the infant when alive, there has been, and still exists, difference of opinion, due, in some measure, to religious belief, and likewise to the personal feeling of the husband, who felt that very little hope was held out to him that his wife could be saved by section. Amongst such men we had Napoleon, who, when appealed to by Dubois, said: "Treat the Empress as you would a shopkeeper's wife in the Rue St. Martin, but, if one life must be lost, by all means save the mother." In marked contrast to him we had Henry VIII, who, when thus questioned before the birth of his son Edward, exclaimed: "Save the child by all means, for other wives can be easily found." At the present time such men might be put down as either a good husband but a bad father, or a good father but a bad husband.

The doctrine of the Roman Catholic Church has been that, if you could not extract the child without killing it, you could not, without mortal sin, do so, and likewise, until

lately, it was held that the infant could not be baptised in the uterus, as it should be *natus* before it could be *renatus* by baptism.

Of late years the happy results following Cæsarean section and Porro's operation have done much to efface the dreadful feeling that we have got in such cases to decide whether the life of the mother or that of the child is to have our preference, seeing it is now quite possible to save both.

We must never forget that we have a sacred trust, and I hold we have no right to sacrifice a child, however unequal its life may be in some cases to that of the mother. In advocating the preference for section as against craniotomy in the living child, I do so only after very mature consideration, and with a feeling that to do otherwise would be to sacrifice a life which I was bound to preserve. I think the time has come when the lives of the mother and child may alike be saved, and prefer to think that an infant come to maturity is destined for something greater than to have its glimmering life extinguished by an accoucheur skilled in the use of a dreadful perforator. Let our motto be, "We live to

FIG. 1.—Case III. Height, 48 inches; diameter of conjugate, 2 inches.

save and not to destroy." Dr. Barnes has recently said: "It is no longer permitted to us, without ample proof of clear necessity, to sacrifice the child in order to save the mother. The cases in which the two lives are supposed to stand in antagonism are vanishing before the light of modern science and skill."

If anything is needed to sicken one at the revolting practice of craniotomy, I might be allowed to recite the obstetric history of a rachitic woman, who during her three last confinements was under my personal care:—

1st	.....	1862	.....	Embryotomy
2nd	.....	1863	.....	Embryotomy (labour induced)
3rd	.....	1864	.....	Embryotomy
4th	.....	1865	.....	Induced labour at half term
5th	.....	—	.....	Embryotomy (Birmingham L.-I. Hosp.)

6th	.....	1868	.....	Induced labour at half term
7th	.....	1870	.....	Embryotomy
8th	.....	1871	.....	Embryotomy (eighth month)
9th	.....	1873	.....	Embryotomy
10th	.....	1874	.....	Embryotomy
11th	.....	1875	.....	Induced labour at half term.

Comment upon the above case is needless; but I may be allowed to say that I informed my patient that if pregnancy again resulted she would require to submit to section. She took the hint, and I have had no further trouble on her account.

In considering the treatment of cases of obstruction, our decision should be based upon the degree of contraction of the pelvis, the size of the child's head, and its reducibility—unless the obstruction be due to some other cause, such as cancer or the presence of a tumour in the pelvic cavity.

Every practitioner should be able to form a fair estimate of the amount of contraction, as it is easier to measure a contracted pelvis than a normal one, and, therefore, I hold that it does not require a highly skilled obstetrician to say before

FIG. 2.—Case VII. Height, 50 inches; diameter of conjugate, 1½ inch.

labour has begun, or during the early stage of the process, that the diameter of the pelvis is, or is not, less than three inches, and that as a matter of fact such a pronouncement is within the skill of the ordinary practitioner. Further, I will assert that the general practitioner must, in the practice of midwifery, be more than a generally useful person, otherwise he will sink to the level of an ignorant midwife. Not only must he be able to form an estimate of the amount of contraction, but, by the patient study of normal cases, qualify himself to form an opinion as to whether it will be impossible for a living child to pass, and also whether, under the circumstances in which he may be placed, it would not be wiser to send the patient where Cæsarean section could be safely performed than to extract a mutilated foetus through a minimum diameter.

Upon the skill of the medical man who first sees and examines such a case will always rest the fate of the patient, as a surgeon, however well qualified to perform a Cæsarean or Porro operation, will not assume the responsibility of deciding whether the case could be terminated by forceps or that abdominal section should absolutely be performed. For instance, only recently I had two cases within a few days of each other, both with a conjugate diameter of about 3 inches; but in the one case the child weighed nearly 9 lbs., whereas the other was, if anything, smaller than normal. This shows clearly that much depends on the size of the foetus, as with the smaller and more compressible head there is less danger of impaction, and frequently these conditions allow spontaneous termination, even where the measurements of the pelvis indicate instrumental aid. Such conditions call for our best attention, for, with a diameter of from one to two inches, where engagement of the head is impossible, no one would hesitate to advise abdominal section, although there will always remain cases—such as where the child is dead or

from the operation as from previous operative abuse. Success depends on prompt interference before the patient is exhausted, as then there is less danger from hæmorrhage, delayed shock, or peritonitis.

When section has been resolved upon another question presents itself, namely, whether Cæsarean section or Porro's operation is preferable. If the former, there still remains to be decided whether the operation will be accompanied or followed by the removal of the ovaries, or the patient be sterilised by the simple expedient of tying both Fallopian tubes. In my last two cases this was done and no harm has resulted, although textbooks would lead us to believe that such a procedure would be surely followed by retro-uterine hæmatocele, resulting from the effusion of blood from the Graafian follicles.

Personally, I am in favour of Cæsarean section where the patient is seen early, and where, I might say, there is a choice of operation. Under such circumstances section is safer for the patient, and offers very little difficulty to the

FIG. 3.—Case VIII. Height, 57½ inches; diameter of conjugate, 2½ inches.

a subject of hydrocephalus—in which craniotomy will be resorted to.

It is only the skilled practitioner or obstetrician who, influenced by principles and principle, can under such circumstances give an opinion worth having, as such men do not allow a love of novelty, a thirst for notoriety, or a fit of heroics to interfere with their better judgment. Experience alone will enable one to avoid extreme measures in cases with a conjugate measuring more than three inches, and where, by inducing labour near the eighth month, it may be possible to extract a living child through the natural passage. Where the diameter is much under three inches, the child can only be saved by section.

There can be no questioning that abdominal section is a highly dangerous operation, but the danger in most part depends on delay, and death frequently results not so much

FIG. 4.—Case X. Height, 49 inches; diameter of conjugate, 2 inches.

operator, who can readily combat any complication such as hæmorrhage.

Upon opening the uterus, the operator and his assistant can prevent loss of blood by simply placing each a finger along the cut surface. When the membranes are exposed the utmost care should be taken to prevent rupture of them, as they keep the uterus fully distended. By so doing the wound is smaller after the removal of the child when the uterus has contracted, than if the child had been extracted through a partially contracted uterus from which the liquor amnii had previously escaped.

I can quite understand how one could be driven to any extreme in the case of profuse bleeding if the precaution was not taken immediately after the child was extracted to place the cut surfaces in apposition, and to press them tightly together till you are ready to extract the placenta, and imme-

TABLE OF DR. M. CAMERON'S

No.	Date.	Age.	Number of Pregnancy.	Height	Diameter of Conjugate.	Duration of Labour.	Results.		Remarks.
							Mother.	Child.	
1	Apr. 10th, 1888	27	Prim.	Inches. 49	Inches. 1½	Hours. 16	Recovered	Male, lived	BRITISH MEDICAL JOURNAL, January 26th, 1889.
2	May 8th, 1889	18	Prim.	48	1	6	Recovered	Male, lived	BRITISH MEDICAL JOURNAL, March 15th, 1890, Fallopian tubes tied.
3	Oct. 8th, 1889	23	Prim.	48	2	48	Recovered	Female, lived	Fallopian tubes tied.
4	Sept. 11th, 1890	24	Prim.	57½	2	15	Recovered	Male, lived	Fallopian tubes tied.
5	Oct. 28th, 1890	19	Prim.	48	1½	14	Recovered	Male, dead for several hours before operation	Fallopian tubes tied.
6	Dec. 10th, 1890	28	Prim.	56	1½	22	Recovered	Male, lived	Fallopian tubes tied.
7	Dec. 13th, 1890	24	Prim.	50	1½	12	Recovered	Female, lived	Fallopian tubes tied.
8	Dec. 16th, 1890	24	3rd	57½	2½	7	Recovered	Female, lived	Embryotomy was done on 2 previous pregnancies. Section by request in this case. Fallopian tubes tied
9	Jan. 3rd, 1891	28	4th	50	2	24	Lived 42 hours	Twin females, lived	Embryotomy was done on 3 previous pregnancies. Section by request. Labour in 8th month due to a fall of about 10 feet down a stair with loss of blood.
10	Feb. 16th, 1891	28	Prim.	49	2	9	Recovered	Female, lived	Fallopian tubes tied.

diately after it has been extracted, again to press the cut surfaces together and hold them so, whilst the uterus is everted and stimulated to contract by gentle kneading. Only after this has been done is it safe to introduce the stitches. The uterus answers readily to friction, and then deep sutures can be easily inserted without fear of further bleeding. I am of opinion that the use of an elastic band induces inertia, and so gives rise to hæmorrhage on its removal; besides, it induces asphyxia in the child. If treated as I have indicated, there should be no more danger from bleeding than in a normal delivery.

Unless the child had been dead for some time, I should be opposed to any interference with the uterine cavity by medication, the application of tampons, vaginal drainage tubes, etc., as such are needless and a source of danger. There is great difference of opinion regarding the method of closing the uterine wound. Some, following Säger, apply from

twenty to thirty or even more deep and superficial stitches, whilst others—myself among the number—simply insert from seven to twelve deep stitches, and reserve superficial sutures for any points where it might be thought advisable to use them. In both instances antiseptic silk could be used, although I prefer gut for the superficial ones.¹

Concerning the time for operation, I am opposed to interference before labour has commenced, as there would certainly be a greater chance of *post-partum* hæmorrhage than if performed after labour had commenced, when the uterus contracts more readily upon being emptied. Speed in operating is an important factor, as a long exposure is likely to induce death from shock.

Porro's modification I am inclined to reserve for cases where the uterus has been injured or ruptured by violent and vain attempts to extract the foetus by the natural passage.

In prolonged labour where no injury has been inflicted, I would still prefer Cæsarean section, as done in my third case, in which the liquor amnii had escaped two days before operation.

I noticed that Porro had been recommended in cases of placenta prævia, but feel inclined to look upon this more in the light of a surgical joke than as a serious suggestion. Placenta prævia is, indeed, a dangerous complication in pregnancy or labour, but it is not necessarily fatal. During the past two years I have had over twenty cases in public and private which have all been successfully treated by ordinary measures.

Further, it is satisfactory to have the assurance that the author of such a proposal has not practised midwifery for nearly a quarter of a century, otherwise his suggestion might call for severe comment.

On two previous occasions I had the good fortune to be able to set before the members of this Association the satisfactory results following the treatment of obstructed labour by Cæsarean section. This year I am happy to record the equally successful result in a third case.² The particulars of the first two cases are detailed in the BRITISH MEDICAL JOURNAL of January 26th, 1889, and of March 15th, 1890; and it will therefore suffice that I should simply for reference in-

¹ In several instances these uterine sutures have been expelled months after the operation through a small sinus which soon healed, and gave no further trouble.

² Since the meeting other seven cases have been operated upon, particulars of which are appended.

CASES OF CÆSAREAN SECTION.

Days.	1		2		3		4		5		6		7		8		9		10		11		12	
	M.	E.	M.	E.	M.	E.	M.	E.	M.	E.	M.	E.	M.	E.	M.	E.	M.	E.	M.	E.	M.	E.	M.	E.
Temp.	98.6	97.8	99.8	98.3	97.8	98.0	98.4	99.2	99.6	97.2	97.2	98.4	98.0	99.8	97.8	99.8	97.8	97.8	97.2	97.4	98.6	98.0	98.0	98.0
Pulse	106	100	114	112	108	100	102	104	112	84	88	80	92	102	104	118	108	100.6	124	108	100	96	96	80
Temp.	98.2	100.2	100.8	99.2	102.0	100.0	100.4	100.2	100.4	100.4	99.6	100.0	100.0	101.0	102.0	101.2	101.4	101.0	100.0	100.4	100.4	101.0	98.0	99.6
Pulse	124	115	100	96	102	108	100	110	120	104	102	102	118	120	120	118	120	118	112	112	112	104	108	96
Temp.		100.4	99.8	100.2	99.8	101.2	99.6	101.2	99.8	101.6	99.8	101.4	100.4	101.8	101.4	100.2	97.4	100.4	100.6	99.8	98.2	99.2	98.6	98.6
Pulse		120	118	110	100	106	90	94	92	100	94	98	96	104	106	106	84	94	96	90	81	86	74	82
Temp.		98.4	98.8	99.4	98.2	100.0	98.6	98.0	98.2	98.0	99.2	98.4	98.6	98.0	98.6	98.0	98.6	98.4	98.6	98.4	98.6	98.4	98.6	98.4
Pulse		80	82	100	84	94	87	80	89	80	93	87	86	89	84	86	79	80	79	80	79	78	79	80
Temp.		100.4	99.4	101.2	101.0	102.0	101.4	101.8	101.4	100.0	99.6	99.0	100.4	101.6	99.2	98.2	98.6	98.2	98.8	99.2	98.6	98.2	98.6	98.6
Pulse		85	108	122	116	118	112	116	104	90	94	92	90	102	80	80	80	89	80	86	78	72	80	73
Temp.		98.4	100.0	98.6	100.2	98.4	99.0	98.2	101.0	98.4	100.0	99.2	98.2	98.4	98.4	98.4	98.1	99.4	98.4	99.2	98.4	98.4	98.4	99.2
Pulse		132	128	116	122	120	112	112	122	112	100	100	116	100	102	100	96	102	102	100	90	96	100	96
Temp.	99.0	99.6	100.2	100.2	99.4	100.4	99.6	98.4	98.4	98.4	98.4	99.4	98.8	99.2	99.0	100.2	98.4	99.4	100.0	100.2	98.2	101.0	100.4	100.6
Pulse	94	104	100	118	110	120	106	100	100	100	104	100	98	96	94	100	102	102	100	100	90	102	98	100
Temp.	98.4	98.4	98.6	98.4	98.8	99.2	98.4	99.2	99.0	99.8	99.8	99.6	99.0	99.6	98.6	100.2	99.0	99.0	98.8	98.2	98.2	98.4	98.4	98.4
Pulse	96	100	112	102	100	100	100	96	94	98	100	96	92	96	90	96	80	92	96	90	90	86	90	84
Temp.		98.6	98.4	100.2	101.0	died																		
Pulse		82	70	104	136																			
Temp.		98.4	100	99.2	99	98.4	99	98.6	98.4	99.2	98.4	98.4	98.4	98.4	98.6	98.6	98.6	98.6						
Pulse		94	104	115	102	106	104	90	76	98	80	73	80	74	76	76	76	76						

clude them in a tabular statement along with the third case, which is of more interest than the previous ones, seeing the subject of the operation had been a long time in labour.

CASE III.—On the morning of Tuesday, October 8th, 1889, I was waited upon by a practitioner from a neighbouring town, who desired my advice upon the case of a young unmarried woman who had been in labour since the previous Sunday, when the membranes had ruptured. He stated that the case was one of contracted pelvis, and that the conjugate was not more than 2 inches. She had been attended by a handy woman, and he had only been called in owing to the tedious labour. The os was dilated, but the uterus was in a state of complete inertia. Another practitioner had seen the case, and they both agreed that it was one for abdominal section. As the house was unsuitable and there was no hospital in the town, I was of opinion, after considering all the circumstances, that the best plan was to send her right into the city by train, which I thought was safer and quicker, as the journey would not exceed half an hour. This was accordingly done. Seeing there were no labour pains and the child was still alive, the patient, after her admission into the Maternity Hospital, was allowed to rest two hours before operation.

Notes.—A. T., aged 23, unmarried, and a primipara, measured 48 inches in height, and was markedly rachitic. The pelvis measured between the anterior superior spines 9 inches; iliac crests, 8½ inches; external conjugate, 6½ inches; internal conjugate, 2 inches. At 3.23 P.M. the patient was put under the influence of chloroform. Dr. Reid, my colleague, assisted; Dr. Oliphant attended to the instruments; Drs. Gray and McGregor administered the chloroform; whilst Dr. Black waited in readiness to receive the child in case it should require special attention. The nurses took charge of the sponges, etc. The abdomen and genitals were shaved, washed, and disinfected, after which a mesial incision was made from the umbilicus to a little above the pubes. A few vessels were clamped with compression forceps. Upon opening the peritoneum a quantity of ascitic fluid escaped. The uterus when exposed was steadied and held forwards. An incision was then made straight down the anterior aspect for about 5 inches, care being taken to arrest the gush of blood from the sinuses by placing a finger on each side along the bleeding surface. The child, a female, was then extracted by the presenting head, and the cord divided. She weighed 6 pounds, and measured 22 inches. Immediately after the removal of

the child the cut surfaces were placed in apposition whilst the uterus was stimulated to contract by gentle kneading. The placenta was then extracted, and the cut surfaces again placed in apposition and held firmly together, whilst gentle kneading was resorted to, when the uterus contracted firmly. A subcutaneous injection of ergotin was administered. Eight silk antiseptic ligatures were passed through the outer two-thirds of the uterine wall. Afterwards three superficial sutures were inserted. Both Fallopian tubes were then ligatured near the junction of their outer and middle thirds. After the uterine wound and abdominal cavity had been carefully sponged, the external wound was closed by antiseptic silk sutures. Three strips of adhesive plaster were applied to prevent strain upon the stitches, after which the wound was dressed with boracic cotton and sublimated Gamgee. The clothing was immediately changed, and hot pans placed round her. Time occupied: 45 minutes.

On recovering from the chloroform she was as well as could be hoped for, with a temperature of 99.8° F., and a pulse of 100. She dosed a good deal, but did not sleep any length of time. Feeling thirsty she had several sips of hot water. During the night she awakened frequently, and had sips of hot water and milk. Skin moist. Passed urine.

October 9th. Passed 18 ounces of urine in twelve hours. The patient is restless, thirsty and talkative; says she would be quite well if I would just give her a good bowl of porridge and a cauf (chaff) bed. Complains of uneasiness about the abdomen. Passed flatus downwards and felt easier.

October 10th. Had passed urine freely during the night. Still pained in the back, but a small pillow under it makes her quite comfortable. A ½-grain morphine suppository was given, and shortly after she fell asleep and slept soundly for five hours. She says she is in a new world, but feels very hungry.

October 11th. Patient did not sleep so well as on the previous night; when awake she had milk and hot water frequently. Small pieces of ice given to relieve the thirst. Had a little toast and tea. Perspired freely.

October 12th. Had a comfortable night, free from pain. She seemed bright and fresh after her sleep, and quite inclined for conversation.

October 13th. "Never felt better in all her life." She was very sleepy during the afternoon. Had tea and toast with frequent sips of hot water and milk.

October 14th. Passed a comfortable night but complained

of a slight pain in the abdomen. The dressings were unfastened, and upon pressure a quantity of straw-coloured fluid escaped near one of the stitches. Wound again dressed. Had an enema of soapy water and glycerine, after which the bowels acted quickly and well, with no pain on evacuation.

October 15th. Had a $\frac{1}{2}$ -grain morphine suppository. Slept well. Quite free from pain. Dressings changed. A small quantity of pus exuded on pressure.

October 16th. Patient very quiet; wound dressed; the discharge to-day was very slight, and was taken up by a small syringe.

October 17th. Very slight discharge on dressings. The wound was quite healed, unless at the point where the discharge first appeared. Had a free motion of her bowels.

October 18th. Passed a good night. Slept well and seems bright. She cannot be kept from singing. Had arrowroot, tea and toast. Very little discharge.

October 19th. Had a $\frac{1}{2}$ -grain morphine suppository. Slept frequently and did not complain of any pain. Had porridge and milk and seemed very well pleased. Little or no discharge on the dressings.

October 20th. Diet. Porridge and milk, tea and toast, and chicken broth.

From this time the patient made a rapid recovery and was soon on full diet. The lochia had almost ceased on October 24th.

This patient had been living with the father of her child, and both having expressed the desire to be lawfully married, the marriage knot was tied before leaving the hospital, the first and second Caesarean patients acting as bridesmaids. After the ceremony I had the trio photographed in the back court, and they formed a peculiar company.

There is very little to mention regarding most of the new cases, but I might explain that Case VIII happened to be in the hospital at the time I operated on Case II, and she was so impressed with the good recovery that patient made that she declared that if ever she was pregnant again she would prefer a living child by section rather than undergo embryotomy. I append a chart, which speaks for itself, showing the temperature after embryotomy and also after Caesarean section in the same patient.

Chart of Case 8.—Thick line, temperature after embryotomy. Narrow line, temperature after Caesarean section.

The ninth case can scarcely be reckoned as a death from Caesarean section. The facts were not revealed until after the operation, when she informed the nurse that she had tumbled down an outside stair. On inquiry we learned that she had fallen about ten feet, and that there was a discharge of blood with labour pains immediately after. Next day, in the street, she was seized with a flooding and severe pains. She was immediately removed to the hospital. On examination, the os uteri was found dilated, but the membranes were unruptured. As the conjugate was only 2 inches, Caesarean section was at once performed. The children (twins) are still alive, but the mother, who was progressing favourably, became seriously ill on the second day and died. On examination, the uterine and abdominal wounds were found closed, but the examiner, Dr. Dewar, found that the heart was very fatty and its muscular tissue pale. For the first time the placenta was found lying in the line of incision. This would have been a more serious complication but for the precautions taken in opening the uterus.

At an earlier period I recommended that a vertical incision should be made for about five inches in the anterior wall of the uterus. It is much safer, however, to begin by making a small button-hole incision, and then gently cut deeper until the membranes are exposed, when a peritoneal director can be introduced and the excision extended from within outwards with a blunt-pointed bistoury sufficiently to admit two fingers, which, acting as a director, protect more effectually the membranes from puncture. The incision is then extended upwards and downwards, but the operator should avoid cutting downwards too far, in order to ensure proper contraction of the uterus.

In this case, when carefully cutting down upon the membranes as described, a spout of dark-coloured blood made me suspect that the placenta was immediately under the incision. With the tip of the left forefinger I arrested the bleeding, and then made a second small incision about half an inch higher up, in the hope that I might possibly reach the membranes, but a second spout of dark blood clearly indicated that the placenta lay beneath. This bleeding was easily controlled by placing the tip of the second finger on the bleeding aperture. No time was to be lost, as the bleeding was expected to be serious. Speedily the uterus was opened for about 5 inches, the placenta separated, the twin children extracted, and the double placenta removed. The uterus speedily contracted, and was firmly pressed with warm sponges. Very little blood was lost, and no bleeding took place after the uterus was emptied. No doubt exists in my mind that this patient died from the injurious effects of the fall.

The accompanying plates along with measurements in table give a very good idea of the marked deformity in all these cases.

A tenth case, Fig. 4, is at present in the hospital. She is 49 inches in height, and has a conjugate diameter of 2 inches. Operation on February 16th. Child, female. Both doing well.

A SUCCESSFUL CASE OF PORRO'S OPERATION IN INDIA.

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On the morning of November 10th I was hurriedly summoned by the hospital assistant in charge of the dispensary to "operate on a woman who had been in labour for four or five days." On reaching the dispensary, I found the woman's relations had brought her from Rajpore, a village on the Dehra-Mussoorie road, distant about five miles. On inquiry and examination, I elicited the following history:—

M. K., Mussulman, aged 22, married twelve years ago: began to menstruate six months after marriage, and remained in good health for six years after this, when she suffered from a severe attack of rheumatism, which confined her to bed for over one year. During recovery from this she could walk about only with the aid of a stick, and ever since she had not been able to stand erect or to walk in an upright position. Her husband having left her during her illness, she married another man about a year ago, and conceived for the first time about three months after marriage. In due course the pains of labour commenced; but, after "five days of extreme pain," and no delivery occurring, the relatives, believing the child to be dead, brought her to the dispensary.

On examination, I found the pelvis extremely small and undeveloped and the lower part of the spinal column distorted and projecting forwards, carrying with it the upper part of the sacrum. The outlet of the pelvis was also so contracted that I could with difficulty introduce my two fingers. The passages were dry. The os was partially dilated, the membranes, of course, ruptured, and the head of the child (which was dead) presenting; but it was so firmly jammed at the brim that even on severe pressure I could not pass a finger round it. In fact, the uterus was so firmly contracted on the dead foetus that there was no room for the passage of instruments over the head, even if the outlet had been spacious enough for their introduction. Embryotomy was, of course, out of the question. The general condition of the patient was alarming. She appeared to be moribund. Pulse 120,