with the course of labour, now become normal. Hæmorrhage rarely persists after full canalisation of the passage.

8. At the critical period, when the total detachment of the placenta or forcible delivery is dangerous or impracticable, the introduction of the index finger through the os, and the artificial separation of that portion of the placenta which adheres within the lower zone, is a practicable and safe operation. This proceeding is illustrated in Diagram 2, which represents the foetal surface of a placenta drawn from Nature. The flap at the lower part was præval placenta. The shaded line exactly corresponds to the uterine boundary line. The flap itself corresponds to the lower zone of the uterus. It shows the compression of the foetal head. I have introduced the index finger to show how it is made to sweep behind the præval flap to detach it as far as the boundary line.

9. The artificial detachment of that portion of the placenta which adheres within the lower zone will at once liberate the os internum from those attachments which impede its equable dilatation; and, by facilitating the regular contraction of this segment of the uterus, favour the arrest of hæmorrhage, and convert a labour complicated with placenta prævia into a natural labour.

10. The immature uterus, partly paralysed by loss of blood, cannot always be trusted to assume the vigorous action necessary to effect delivery; it is, therefore, necessary to aid canalisation by dilating the cervix artificially; this can be done safely and quickly by my caoutchouc water dilator. This has come into general use, and the testimony in its favour is conclusive. But one or two German teachers say it is not effective. The bags they have tried must be bad specimens, or skill in using them was wanting.

11. Sufficient dilatation being obtained, delivery may, if necessary, be accelerated by forceps, by turning, or by embryotomy, according to the special indications dictated by the condition of the child. If turning be resorted to, I insist strenuously upon the importance of delivering the after-coming head by the forceps, if there be any difficulty or delay in the passage of the head under manual traction. The forceps so applied takes off the constriction of the imperfectly dilated cervix from the child's neck; and traction bearing upon the head, facilitates moulding, and takes off all strain from the neck; axis-traction also is to be observed. In my hands, this proceeding has contributed materially to the saving of the child.

The measures that come into successive use are:—

1. Rupture of the membranes.
2. Apply a firm binder over the uterus.
3. A plug may be used to gain time, but it must not be trusted; watch closely.
4. Separate all the placenta that adheres within the lower zone, and observe closely. If no hæmorrhage, wait awhile. The uterus may do its own work; if not, dilate the cervix by the water bags. Again pause and observe. If Nature fail to deliver, we resort to the forceps, which gives the best chance to the child, or turn.

In following this order of procedure, we strictly follow the law of physiology. We do not force Nature, but obey her. Current medical literature is full of examples proving the value of these precepts, and not a few cases published as illustrations of the success of other methods, especially of turning, are more correctly explained by the fact, probable in many, certain in some, that in carrying out the operation of turning, the placenta had been detached from the lower zone. Where the principles enunciated by me have been thoroughly and intelligently observed, as has been done on a considerable scale, as by Dr. Murphy, the success has been unexampled.

An emphatic illustration of the treatment advocated by me is found in the following summary of the experience in placenta prævia in the practice of St. Thomas's Hospital for 1887 (*St. Thomas's Hospital Reports*) by Dr. Cory:—"Five cases occurred during the year. In one case there are no particulars; in two the placenta was partially separated, and delivery effected by forceps; both children were saved. In two the placenta was partially separated; version was performed, and the children were lost; all the mothers recovered." Dr. Cory adds:—"The lesson to be learned in these cases is well shown, namely, never attempt version if the head is presenting, and hæmorrhage has been stopped by the partial separation of the placenta."

LONGEVITY IN IRELAND.—Among the deaths registered in Ireland for the December quarter were the following:—Two at 100 years, two at 103, two at 104, one at 110, and one at 111 years respectively.

PATENCY OF THE UTERINE CANAL AS AFFECTED BY FLEXION OF THE UTERUS.

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THE effect of flexion of the uterus in interfering with the patency of the uterine canal is a subject on which a diversity of opinion exists. In the healthy normal uterus the tissues surrounding the uterine canal are of considerable strength and thickness, and under such circumstances a great degree of bending of the uterus does not occur; but when circumstances are otherwise, and the tissues are soft and non-resistant, possibility of severe bending is greater. When flexion is present, the thickness of the walls of the canal tend to preserve the patency of the canal, but it is evident that the calibre of the tube will be more likely to be diminished if at the same time the walls of the canal are relaxed, soft, and wanting in tonic.

From the various conflicting descriptions of the state of the os uteri internum in cases of flexion, it is difficult to arrive at decisive conclusions, observations by means of the sound being difficult to make in a sufficiently uniform manner, and the sound itself being liable to alter the conditions actually present.

The following, as a piece of pathological evidence as to the condition in regard to patency of the canal in a case of antelexion, may be considered worthy of attention.

In the Museum of University College there is one of the few existing preserved specimens of acute antelexion of the uterus. This specimen I had before described. Five years ago the speci-

men in question again attracted my attention, it having been meanwhile bisected antero-posteriorly so as to show the canal. Mr. Silcock kindly had photographs of the specimen taken for me so as to exhibit the condition of the canal more completely. The accompanying drawings are the result.

Fig. 1 exhibits the bisected ante-flexed uterus as it hangs suspended, the cavity of the uterine body being very evident, so, also, the cavity of the lower part of the cervix. But the upper part of the cervical canal for a length of three-quarters of an inch is hardly visible, and it looks as if obliterated at this situation. In Fig. 2 is shown the same specimen, but cords have been attached to the two sides of the apparently closed part of the cervical canal, and it is now seen that the cervical canal is only potentially, but not actually, closed. In point of fact the canal is really excessively compressed in the antero-posterior direction, the anterior closely in contact with the posterior wall (as shown in Fig. 1), and until opened out by the stretched cords, was virtually much blocked. It must further be noted that the section of the canal, which no doubt was intended to be made exactly in the middle line, was really made a little to the left of the middle line. The view of the interior of the canal of the cervix in Fig. 2, therefore, shows considerably more than half of the width of the canal. The shape of the canal at the virtually occluded part is not circular, but very much flattened from before backwards; in this case the shape of the canal, indeed, resembles very much the shape of a small, thin, india-rubber tube, compressed at a particular spot between the thumb and finger, and the result is that there is very great narrowing in one direction, but a widening in the opposite direction. Comparing, again, the uterine tube with one of india-rubber under compression, it is evident that the increased width of the tube is of no service so far as patency is concerned, so long as the compression in the opposite diameter continues to be exercised. It will be further obvious that, so long as the cervix continued flexed, as in Fig. 1, there would be an impairment of patency, which would be relieved or diminished by taking off the compression in the antero-posterior direction. This might be done in the way shown after death; during life the straightening of the canal by a sound, or a dilator or a tent, would be effectual in procuring a free passage out of the uterus. It is also evident from inspection of the drawings that a forcible expulsive force, that is, uterine contraction, acting on fluid contained in the uterine cavity, would or might be sufficient to open out the canal at the compression-narrowing spot, and thus to secure an outlet for the retained fluid. It is also evident that any increase in the degree of flexion present would tend to still further close the canal.

Nothing is known of the history of the above specimen, but it evidently belonged to a rather young woman. The slight indentations in the body of the uterus are accidental, and due to pressure of a piece of glass placed so as to expose the interior of the body of the uterus.

The specimen undoubtedly favours the opinion previously expressed on the subject, that the patency of the uterine canal is liable to be greatly affected by presence of marked flexion of the uterus.

ELECTRIC ILLUMINATION OF THE MALE URETHRA BY MEANS OF THE NEW INCANDESCENT-LAMP URETHROSCOPE.¹

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SINCE April, 1887,² a simple, practical, and most efficient urethroscope has been placed in the hands of the profession, by means of which the entire urethra can be brilliantly illuminated; so that those diseases of that canal grouped for convenience under the term "gleet," which sometimes prove so rebellious, and are often obscure in their causes, can now be as scientifically studied as they can be effectively treated.

I have used the instrument in over fifty cases of gleet and stricture, and believe it to be the best and the most gene-

rally useful of any endoscope yet invented, for it can be adapted to every orifice of the body, even to the cesophagus. The instrument has been invented by Leiter, of Vienna, but it is only fair to explain that it combines, in reality, those various additions to Bozzini's "light conductor" of 1805, which mark the successive epochs in the development of urethral endoscopy. Thus its general construction is somewhat similar to the now twenty-five years old endoscope of Desormaux-Cruise,³ but instead of the hot and cumbersome paraffin lamp of that period, or the still hotter and more complicated Nitze-Leiter urethroscope of 1879,⁴ Schall, of London, has substituted the incandescent lamp.⁵ Leiter has simplified the entire instrument, and has furthermore cleverly adapted a concave non-perforated reflector, which is the bone and marrow of the innovation. Although much good and sound work has been done by Oberländer by means of the Nitze-Leiter urethroscope, yet that instrument has never found favour or been in general use, because of its costliness, unwieldiness, and complication.

Leiter's Electric Endoscope for Urethral Examination.

Construction.—The incandescent-lamp urethroscope is made up of three pieces, D, B.C., and T. These pieces may be described as follows: 1. The handle D is made of caoutchouc, and carries on its upper end a small incandescent lamp, which is connected with the two binding screws which project from its lower end. A light steel spring forms the key. The handle fits into the bottom of the lantern B.C. 2. The lantern B.C. is a roofless gutter-shaped box, carrying at one end a fixed, obliquely-placed, concave mirror A for reflecting light along the urethral cannula T, and at the other the nozzle C for fitting on the urethral tubes. Two additional and important items of the lantern consist in small perforations around the lamp for ventilating off the heat, and a small movable lens B for myopic or hypermetropic observers. 3. A series of urethral cannulae T of various sizes and lengths. (Those supplied at present by Leiter are not long enough.)

A glance at the figure will show that the light from the lamp is cast directly along the tube, and that the observer's eye, which is placed at B, is shielded from the blinding light emitted by the lamp. It is worked by a small plunge battery of four cells.

Directions for Use.—Select a long cannula, and of a size suited to the meatal calibre. Use glycerine as the lubricant. Pass the cannula up to the hilt after injecting a few drops of a 4 per cent. solution of cocaine. Every part of the urethra can now be examined as the cannula is withdrawn. If the cannulae are marked in inches, a note of the exact position of the diseased mucous membrane can be made for future reference. Frequently a drop of mucus, gleet, or the lubricant will obscure the surface of the mucous membrane; a pledget of cotton-wool on a stylet removes it, hence it is wise to use as little glycerine as possible. Should the wool slip off the end of the stylet it will be passed on urination, or may be removed by a hook-ended stylet applied through the cannula.

Capabilities.—The illuminating power is very considerable.

¹ Desormaux. *De l'Endoscope*, Paris, 1865. F. R. Cruise, *The Endoscope*, *Dub. Quart. Jour.*, May, 1865.

² Die Nitze-Leiterschen Urethroscope, *Berl. Klinisch. Woch.*, 1879, No. 48.

³ Leiter, *Neue Beleuchtungs-Apparate*, Wien, 1888.

¹ Abstract of a demonstration of the instrument upon normal urethrae as well as upon patients suffering from various urethral diseases—gleet of seven years, stricture, etc.—at the Medical Society, January 23rd, 1888.

² Dr. Brenner upon Leiter's Urethroscope, *Verband der Deutschen Gesellschaft für Chirurgie*, xvi Congr., 1887, p. 82.