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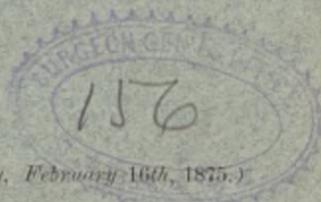
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THE VESICO-VAGINAL AND
VESICO-RECTAL TOUCH.

A NEW METHOD OF EXAMINING THE UTERUS
AND APPENDAGES.

BY

E. NOEGGERATH, M.D.



(A Paper read before the New York Obstetrical Society, February 16th, 1875.)

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THE VESICO-VAGINAL AND VESICO-RECTAL TOUCH.

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THE last steps made towards extending the sphere of physical examination relating to the organs hidden inside the pelvic cavity and beyond the roof of the vagina, were: the introduction of the uterine sound, the examination through the rectum, the use of sponge-tents, the introduction of a catheter into the bladder, while one finger explored through the rectum. Although a very large amount of pathological conditions is thus brought within the limits of physical diagnosis and within the scope of treatment, there remains a great deal to be accomplished, especially with regard to our means of diagnosis of alterations occurring in the uterine appendages. But even when exploring the uterus itself, the size of all its diameters, the density of its tissue, its true shape, the exact seat of painful affections, the extent to which a benign or a malignant deposit in the neck involves the parts above, escapes our appreciation in the ordinary run of cases, and this is accounted for partly by the thickness of the abdominal walls, partly by the rigidity permanent or excited in consequence of the examination itself, of the lower section of the rectus muscles, and finally by the position and manner of suspension of the uterus in the pelvic cavity. In most instances, where we are called upon to examine a woman suffering from a uterine or a peri-uterine affection, we find the uterus slightly anteverted or anteflexed, and in attempting to move it forwards towards the hand resting on the abdominal walls, by pressing upon the infravaginal portion, we only succeed in elevating it, leaving its axis in the same relation to that of the pelvis in which it was before the taxis, and although we are thus enabled very often to grasp the fundus and part of the upper

2 *The Vesico-vaginal and Vesico-rectal Touch.*

section of the uterus adjacent to it, most of the anterior wall remains distant from the fingers examining outside. Alterations in or near the broad ligaments and in the tissues of the ovaries, if not of considerable size and density, are beyond our means of appreciation. If a method were at our disposal which permitted to touch the uterus and its surroundings without the interposition of the abdominal walls, a host of alterations would be cleared up during life which were out of our reach heretofore. By a lucky accident I have found, and now propose to your consideration and trial, a method for which I claim that it accomplishes the object in question. It consists in the palpation of the uterus and its lateral appendages by the finger introduced through the urethra into the bladder. This proceeding, although apparently very simple, has, as far as I am aware, hitherto escaped the notice of gynæcologists. I have looked over all the more recent text-books of gynæcology and gynæcological operations, but I was unable to find even an allusion to it in any shape whatever. When I had succeeded for the first time to complete the examination in the manner I am going to describe to you, I became greatly impressed with the new revelations which were imparted to the sense of touch. I had the sensation that I could feel the uterus as distinctly as we do it during an autopsy. The first case which offered an opportunity for the vesico-vaginal touch was the following:

Mrs. L—n, 53 years old, sterile, menstruated for the last time three years ago. She called to consult me in the spring of 1873, about a very troublesome affection of the bladder. I had treated her before for varicose veins in both the lower limbs. I learned from her now, that for several years she had to pass water frequently during the day, and that for the last six months the evil had much increased; she was forced to get up several times during the night.

On making a digital examination, I detected a tumor of the size of a small walnut close to the left side of the fundus uteri. I could grasp it between two fingers, one in the vagina, and one above the symphysis pubis, and when doing so, the patient remarked that this manœuvre gave her a desire to urinate. Thinking that I had to deal with a tumor in the bladder, I began to dilate the urethra with steel bougies of gradually increasing calibre. It was done in my office, and gave very little pain, so

that I was soon enabled to introduce, first the fifth, and immediately afterwards the second finger of my left hand into the bladder. I now detected a small tumor, somewhat flattened from above downwards, protruding into the cavity of the bladder, to the left of its apex. It appeared to be attached to it with a base about one-third smaller than its largest circumference.

Not being thoroughly satisfied with the results of this first examination, I requested Mrs. L. to call again in a fortnight. On this second occasion the patient expressed her satisfaction about the result of the foregoing manipulation, because she had now been enabled to retain her urine much longer, and could rest through the greater part of the night. On examining the urethra I found that it had not contracted to its former size, but I could without any further preparation introduce the fifth, and immediately after, the second finger of the right hand. I now recognized that the membrane lining the tumor felt exactly like the mucous membrane of the bladder itself. I could easily move it over its body. I began at once to displace the uterus by pressing upon the vaginal neck, and with it I felt the tumor in the bladder move from side to side.

The patient called again and again, in intervals of from two to six weeks, to have the benefit of urethral dilatation. I repeatedly introduced the sound into the uterus, and moved it far into the sides of the pelvic cavity, the tumor following all the movements. On one occasion I pulled it downwards, and I was now able to so far displace the tumor from the bladder that I touched only a very small section of its surface. I could on several occasions feel a pedicle connecting the tumor with the left horn of the uterus, and I came at last to the conclusion that I had to deal with a diseased and misplaced left ovary. The fact that it protruded far enough into the bladder to convey the impression of an intravesical tumor is no longer surprising to me, and I will have occasion to mention a similar observation in the course of this paper.

Mrs. R. B—, 36 years old, a German widow, had been always healthy in her youth, menses always regular, two normal confinements. She began to suffer in the month of April, 1874, when she was seized with a dull pain in the sternal and epigastric region, palpitation, headache, singing in the ears,

4 *The Vesico-vaginal and Vesico-rectal Touch.*

general weakness. About five weeks before I saw her, she remarked a profuse white discharge from the vagina, and a fortnight later she had a pretty severe attack of hemorrhage from the womb, which lasted for six days, when it was arrested by the use of cold applications to the abdomen. The hemorrhage did not coincide with her menstrual periods. As long as the bleeding lasted, all those symptoms described above disappeared, but returned when the hemorrhage had ceased.

Mrs. B. called at my office on the 15th day of November, 1874. On making a digital examination, I found the uterus enlarged, the neck painful to the touch, hardened, with a partly everted, granulating membrane lining the os. By external manipulation an oblong tumor, situated in front and towards the left side of the uterus, of rather indistinct outlines and not very solid consistency, could be perceived. It was of the size of a hen's egg, and painful to the touch. Mrs. B. mentioned the fact that she had been seen by Dr. Byrne and Dr. Hesse, of Brooklyn, who had discussed the advisability of an operation, deferring, however, its execution until there was a more urgent call for interference. As the patient appeared to be very anxious to have this question decided, and since the result of this examination was neither satisfactory in regard to the exact location or the nature of the swelling, I proceeded to dilate the urethra in my office with Ellinger's uterine dilator, and was soon able to pass the little finger of my left hand into the bladder without giving much pain.

On sweeping it over its surface I felt that a mass, corresponding very much in size, shape, and position with the tumor described above, protruded from the left and upper section of the bladder into its cavity, in such a manner that I thought I could feel the broad base with which it was attached to it.

The sense of touch in the fifth finger not being educated sufficiently to rely on the impressions received by it, I asked the patient to enter the German hospital for a couple of days, in order to decide the question as to surgical interference by undergoing a more thorough examination under chloroform. She was admitted on the 26th of November. Mrs. B. told me that the pain from the first examination had left her immediately, and that she made the journey to her home in Brooklyn without any inconvenience.

On the day following she was put under the influence of chloroform and ether, and examined again. I found by the ordinary double-touch that the tumor was not quite as perceptible as on the first occasion. I now passed first the little and then, without the least difficulty, the index finger of my left hand into the bladder and touched again the protruding mass, found during the first exploration, but I was now able to ascertain that the tumor was not growing from, but simply crowding into, the bladder from outside, and covered with its tissues. I could roll it between my finger in the bladder and the hand placed upon the abdomen. I became convinced that it was an oblong membranous sac, with semi-solid contents, and was inclined to take it for a hydrops of the left Fallopian tube.

A slight hemorrhage followed this examination. When the patient had recovered from the effects of the anæsthetic, she suffered for a little while from pain about the orifice of the urethra, but slept well during the night and was perfectly comfortable on the following day.

On the 8th of December I proceeded to repeat the examination. The urethra had remained distended, so that I could at once introduce the index finger of my right hand. I felt the same oblong, soft mass as on the first occasion. In order now to ascertain the connections of the tumor in question with the uterus or appendages, I passed my double hook into the cervical canal, and had the uterus drawn by an assistant as far down into the vagina as could be done safely, without exerting an undue amount of traction. Now the second finger of the right hand was introduced into the rectum, and that of the left into the bladder. I could in this manner touch and examine the fundus of the uterus just as distinctly as if I had it between my fingers, without any tissue intervening, very much as when the organ is examined after the operation for ovariectomy. I could distinctly feel two fibroids, one on each side near each cornu, just protruding from its tissue, both not larger than a lentil, which were quite imperceptible with the ordinary mode of examination. I could further roll between the finger in the bladder and my right hand, now placed above the pubes, a number of sections of the small intestines. As to the tumor in question, I was unable to trace any connection between it and the uterus, and I became

6 *The Vesico-vaginal and Vesico-rectal Touch.*

convinced now, by the peculiarly smooth and slippery surface of the swelling in question, that I had to deal with a portion of an intestine, probably the S. Romanum, contracted around its natural or some abnormal contents, probably adherent to the bladder, the more so, as I thought to feel distinctly a membrane connected with it in the manner the mesenterium is with the intestinal tube.

I will here remark a circumstance which happened during the examination, namely, that I withdrew my finger from the vagina and passed it directly into the bladder again.

The examination was not followed by hemorrhage as on the first occasion. On the following day Mrs. B. complained of headache, and a burning sensation about the urethral orifice. Ordered one-half of a grain of morphia.

December 10th. Patient had a restless night, complained of burning about the external genitals. Slight chill in the night, with increased pain in the region of the bladder. Acid urine of dark color.

December 11th. Pains in the bladder not quite so severe.

On the following day Mrs. B. left the hospital in a carriage. I ordered her to take a dose of sulphate of magnesia every night for a week, and to call at my office after that time. I saw her again at the end of the month, when she told me that the pain in the bladder and during micturition had not left her for some days, but that she was quite free from it now. The laxative had acted freely. I passed again my finger into the bladder without previous dilatation and without giving any pain. No trace of the tumor could be found any more. On my request the patient presented herself to Drs. Byrne and Hesse, and the former told me at one of our meetings that he also was unable now to find the tumor.

Mrs. Bertha B—, 26 years old, born in New York, of an apparently healthy constitution, had always been well during her early youth. She married a sculptor about twelve years ago who had had gonorrhœa for six weeks—three years before his marriage. The patient became pregnant during the first year and was delivered of a healthy child; the labor had been normal. Soon after delivery she had an acute attack of what appeared to be pelvic peritonitis, from which she recovered very slowly, and she has been ailing ever since. A white dis-

charge was first remarked soon after marriage, which has never left her. The principal pains are in the left side of the abdomen, extending towards the back. They are increased before and during the scanty menstruation. She suffers also from pain in the occipital region of the head and from infra mammary pain.

On examining the sexual organs in September, 1874, I found the vulva reddened and slightly excoriated. The uterus was in right latero-version, the neck slightly hypertrophied and indurated. The womb, as well as all of the lateral appendages, as far as they could be touched through the rather rigid vaginal roof, both laterally and behind the uterus, were extremely tender, the greatest amount of pain being excited by producing even a slight concussion of the womb in lifting it suddenly upwards.

By the speculum the neck appeared almost normal; very little congestion, a small superficial erosion on both lips, a slightropy discharge issued from its orifice.

The sound passed into the body without difficulty, but the canal appeared very sensitive to the most careful touch of the instrument.

Diagnosis: Chronic endometritis, chronic perimetritis.

The patient was subjected to a treatment, consisting of small doses of the bichloride of mercury and the application of iodocform to the neck, with occasional local depletions by means of Buttle's lance.

After she had undergone this treatment for about three months, she began to feel somewhat better, but lately the severe pains before, during, and after menstruation occurred again in a severe form. I therefore proposed to her to make a more careful investigation under chloroform. This was called for, as well by the unusual thickness and tenderness of the abdominal walls, as by the rigidity of the vaginal cul-de-sac, in consequence of which it was impossible to feel anything beyond the cervical portion of the womb.

Mrs. B. was put under the influence of ether by Dr. Mackenzie on the 12th of January of this year. The urethra was dilated rapidly by bougies, and an instrument, which I shall exhibit to you, introduced into the uterus. I now passed the forefinger of my left hand into the bladder and that of the right into the rectum, while the doctor pulled the uterus down-

wards and turned it alternately into the right and again into the left half of the pelvis, according to my directions.

By this manœuvre I was enabled, first, to touch the whole of the uterus, which appeared in its supravaginal portion not enlarged in either sense, but somewhat softer than usual. When the womb was turned far towards the right, I could distinctly feel and roll between my fingers the left Fallopian tube to quite a considerable distance from its uterine insertion. It was enlarged, and irregularly so, to the size of an ordinary goose-quill, and so painful under palpation that the patient moaned even under the influence of the anæsthetic when I touched it. In pushing the right latero-version, thus artificially produced, to its fullest extent, I could just touch the left ovary, which appeared to be rounded off and softened. The touch of the right tube was equally distinct; it was normal, as far as I could judge. The right ovary was out of reach.

My diagnosis was thus completed: chronic pelvic peritonitis from catarrh of the left Fallopian tube.

The reaction, after this necessarily rude examination of parts already very sensitive, was pretty severe. The patient was confined to bed for four days from subacute perimetritis and cystic catarrh. The symptoms from the former yielded pretty rapidly under the use of morphia and quinine. Remains of the latter lasted for several weeks, and were at last entirely removed by the use of ethereal extract of cubebs.

Mrs. A. G—g, 38 years old, born in New York City, has been a patient of mine for the last fifteen years. Was married to her first husband about twenty years ago, and to her second husband four years ago. Had three healthy children from the first and one from the second husband. During the first years of her marriage I treated her for anteversion of the womb and various ailments resulting from this cause. I have seen her every year since that time, and although there was a considerable diminution of all the rational symptoms referred to the dislocation, the womb was always found to be slightly anteverted.

After a long interval she called on me again on the 10th of December, 1874, complaining of abdominal pain, a sensation of pressure and bearing down in the lower part of the abdomen. Her menses had been regular. On examination I found

that there existed now a decided right latero-flexion of the womb, the body of which appeared to be somewhat enlarged.

On the 23d of that month she called again, complaining of more intense suffering, and especially of severe backache. On examining the uterus I found it now in a state of retroversion and retroflexion. To relieve her pains I introduced a double-lever pessary, which replaced the uterus entirely.

I saw her again on the 23d of January, and, on examining, I thought I could feel by the ordinary double touch that the fundus uteri was in its normal position, while that what had at first appeared to be a retroflected uterus was a soft tumor protruding from the posterior wall, which part of the uterus appeared to be softer and larger than when I first detected it. I now began to think that I might have to deal with an extra-uterine pregnancy. Although the menses had appeared at their regular time (which had never occurred in one of the four previous gestations) there was now morning sickness and stitches in the breasts.

I began to carefully dilate the urethra with my bougies, and succeeded to introduce them up to No. 18 without giving much pain. The patient returned to her house in Williamsburgh without much inconvenience.

She called again on the 26th of January, when I began dilatation with No. 16, and succeeded to pass No. 24, and after that the fifth finger of my left hand. This latter proceeding was painful, and was followed by a slight hemorrhage from a small rent in the upper wall of the urethra.

On February the 1st I succeeded (without the least obstacle and without giving pain) to introduce the small and immediately afterwards the index finger of the right hand. The womb was again retroverted, and I only succeeded to touch part of the anterior wall through the bladder. I could feel distinctly that it was swollen and softened; and running upwards from the left supravaginal portion towards the right horn there was distinctly perceptible an enlarged vein of the size of the radial artery.

On the 6th of February I again introduced the fifth and immediately afterwards the index finger of the right hand. I then introduced the forefinger of the left hand into the vagina, and pushed the cervix backwards as far as I could manage to

10 *The Vesico-vaginal and Vesico-rectal Touch.*

do. Thus I succeeded in touching the greater part of the anterior wall of the uterus, the ridge formed by the apex of the fundus, and about one inch of the uterine part of the right Fallopian tube, while the end of the left tube was just perceptible where it joined the fundus. I now introduced the finger from the vagina into the rectum, thus pushing the body a little more forwards, when I succeeded in touching the greater section of the posterior wall with my finger in the bladder.

The impression which I received from this mode of examination was that the uterus, from the fundus down to a section of the cervix, situated somewhat above the vaginal junction, was enlarged in all its diameters, but more so in its posterior than in its anterior surface; that it was succulent and softened throughout its entire mass. I could distinctly feel a number of bundles of its muscular layer somewhat more prominent than others, and two or three enlarged vessels. The sensation was so characteristic that I became at once convinced of the existence of intra-uterine pregnancy—a pregnancy where the ovum had probably been attached to the right wall and somewhat posteriorly, in consequence of which those parts had become enlarged sooner than other portions of the womb.

Sphere of Usefulness and evil Consequences of the Operation.

—It is needless, after the foregoing communications, to bring forward new arguments in favor of the vesico-vaginal and rectal touch.

I have examined now thirteen cases in this manner, partly for affections of the bladder itself, partly for diseases of the uterus and appendages, and lastly, in a few instances, with a view of testing the efficacy, the advantages and disadvantages of the proceeding.

I have only succeeded lately to obtain all that I desired to gain from this investigation, because it requires a certain experience in the management of the parts involved in order to extend the sphere of the touch. I have thus become enabled to feel the outside of the whole of the uterus itself, one or both of the Fallopian tubes, either in part or to their full length, and in two instances I could feel the ovary.

The reaction following the operation, consisting either of retention of urine for a short while, followed by frequent

inclination to pass water, with a sensation of burning about the vulva, or more or less severe abdominal pain, amounting in one instance to a renewed attack of perimetritis,—this severe reaction took place in a more or less marked form in six cases. In one of these the examination was borne without any inconvenience the first and second time, while the third examination produced a pretty severe catarrh of the bladder. In all of these, rapid dilatation under chloroform was performed; in five of them there existed signs of chronic perimetritis; in the seven other cases there was observed very little irritation. In six of these, rapid dilatation was resorted to; in one the slow method was employed.

In none of the thirteen a permanent painfulness of the parts involved, or incontinence resulted from the examination; in a great many of these the orifice remained large enough to introduce the forefinger without previous dilatation.

Hemorrhage occurs in all cases, but ceases of itself. In one instance where I examined a patient for the second time, when she was near her menstrual period, she bled profusely, an accident which did not occur on the first examination.

Indications.—The vesico-vaginal and vesico-rectal touch is to be confined in its application to certain morbid conditions of the womb. It is not to be considered a supplement to the ordinary gynecological examination.

Its sphere of application applies, however, to all those cases where an ordinary examination, performed by an experienced and skilful specialist, has not succeeded in giving full satisfaction, on account of thickness or rigidity of the abdominal and vaginal walls.

It is indicated:

1st. For the diagnosis of obscure tumors in the tissue or in the neighborhood of the womb. I need hardly recall to your mind or specify the instances of small tumors located within the pelvis, the nature of which was never cleared up by the ordinary method. I have no doubt that in cases of this kind the new *modus examinandi* will reap its most welcome harvest.

2d. To complete the diagnosis of inversion of the womb.

From my impressions as to the distinctness of touch, I do not hesitate in stating that it will remove all doubts under the most difficult circumstances.

12 *The Vesico-vaginal and Vesico-rectal Touch.*

3d. In cases of suspected congenital absence or malformations of the uterus we will be enabled to make both fingers meet, introduced into the bladder and rectum, with the interposition only of the thin membranes of the bladder and rectum; in cases where the uterus is absent, and where there exists an arrest of development, its shape will be recognized distinctly.

4th. For the early diagnosis of pregnancy. Under these circumstances, this mode of examination is destined to supplant the sound, the use of which is not permitted under the circumstances. By measuring beforehand both the forefingers of the right and the left hand, we will be enabled to get at an accurate measurement of the uterus itself. If we take into consideration its volume and the nature of its tissues, of which we may gain a perfect knowledge by the vesico-rectal touch, we will be enabled to exclude or to recognize an altered physiological development of this organ. In cases of extra-uterine gestation we will not only feel the peri-uterine tumor, but also the enlarged and softened uterus itself.

The 5th indication for the employment of the vesical touch I will call Huguier-Pippingsköld's indication. Both of these surgeons have succeeded to guard the bladder from injury, in removing part of the supra-vaginal neck, by introducing one finger into the bladder while the operation was performed. Prof. Pippingsköld of Helsingfors has published four cases in "Beiträge zur Geburtshülfe und Gynäkologie, vol. iii., sect. 2, Berlin, 1874, in which he employed this proceeding. In this he followed the example of Huguier, who had applied the same manœuvre in two cases.

The 6th indication comprises the diagnosis of the extent of heteroplasmic tumors of the neck.

The principal question in ventilating the chances of success in an operation for cancer, caucroid, or sarcoma of the neck, centres in the decision how far the supra-vaginal part of the neck has been involved. The new method of exploration will dissolve all doubts in this matter.

DESCRIPTION OF OPERATION.

Preparation of the Patient.—It is of importance to empty out the bowels, previous to the examination, in order not to have any encumbrance to hinder the finger, placed in the rectum, to

receive as complete an impression only from the parts, to which its sense of touch is to be applied, as can be possibly done. Before dilating the urethra, it is of the utmost importance to thoroughly wash out the vagina with carbolic acid and water. I have seen that utero-vaginal secretion was carried into the urethra by the bougies employed for dilatation. The fingers to be used in the examination through the bladder, vagina, or rectum must be anointed by a substance which contains one or the other of the disinfecting agents. All these precautions are necessary to counteract the effect of vaginal mucus on the urine, as a cause of alkaline fermentation.

After sufficient dilatation the patient must be placed in the so-called sacro-coccygeal position, the thighs being well flexed on the abdomen. This is necessary for the reason that the urethra runs parallel to the posterior surface of the symphysis pubis. If, therefore, we place the patient in the position indicated, a line drawn through the urethra and prolonged will touch the upper part of the womb. After sufficient dilatation, the forefinger of the left hand is now introduced into the bladder, previously emptied, while that of the right hand is placed into the vagina or the rectum, or alternately into the one or the other. It will then strike, when the uterus is in normal position, a point half-way between the fundus and the inner os.

In cases where the parts immediately above the neck, or morbid conditions of the regions in this neighborhood, are to be explored, it is not necessary to dislocate the uterus.

If, however, we attempt to explore the upper section of the uterus, it must be pulled down by means of a double hook, the points of which are turned outwards, introduced into the cervical canal, and it is perfectly safe to dislocate the uterus downwards about an inch and a half. When this is done, with one finger in the bladder and one in the rectum, we are enabled to thoroughly explore the whole of the uterus, from the fundus down to the external orifice.

In cases where it is desirable to push the examination beyond the uterus toward its appendages, the broad ligaments, Fallopian tubes, or even the ovaries, an instrument must be employed, by which we are enabled not only to pull down the uterus, but to turn its body either towards the right or the left side of the pelvis. For this purpose I have added to my double hook the

14 *The Vesico-vaginal and Vesico-rectal Touch.*

upper $2\frac{1}{2}$ inches of the ordinary uterine sound. By its means we cannot only explore the sides of the uterus, its posterior surface, but even its lateral appendages to a certain extent. The introduction of the sound has the further advantage, that we can crowd the uterine tissue against it, and thus judge of its thickness and density. If the posterior surface of the uterus or of the broad ligaments should become special objects of investigation, it might be well to substitute the uterine redresseur, usually applied for the replacement of a retroversion.

After the examination has been completed, the bladder should be washed out with a weak solution of carbolic acid.

Methods of dilating the Urethra.—We may divide these methods into two different classes, the rapid and the slow process.

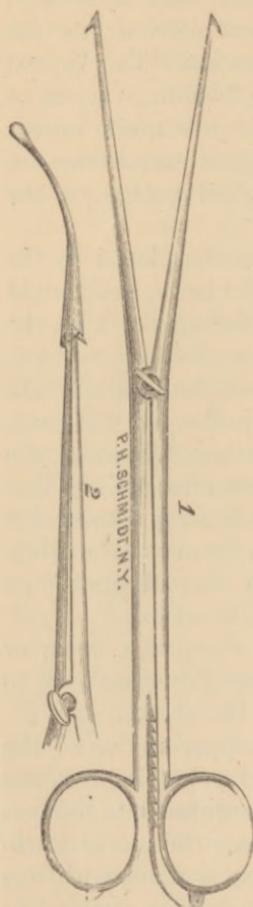
First, dilatation in one session. This may be effected in three different manners.

The quickest way of proceeding consists in introducing a Holt's stricture dilator and push the largest steel bougie at once between the two blades of the instrument, and to follow up the dilatation thus obtained, by using Busch's dilator sufficiently to permit the fifth finger to enter the urethra, after which the second passes in without difficulty.

The next, somewhat more protracted method, consists in using steel sounds of gradually increasing calibre, the last of which equals in size the forefinger.

Lastly, rapid dilatation of the urethra may be effected by Molesworth's hollow india-rubber bougies, to be expanded by forcing water into them from a syringe.

For the slow process we have two methods.



No. 1. Double book for dislocating the uterus downwards.
2. The same with intra-uterine part of sound attached for downward as well as lateral dislocation.

The first consists in the use of graduated bougies, the same as employed in rapid dilatation. They may be employed two, three, or four at a session, in intervals of two, three, or four days, according to circumstances.

The second method is that proposed by Prof. S. Pippingsköld (Helsingfors, Finland) preliminary to the amputation of the cervical portion of the uterus. He introduces three small, smooth laminaria bougies into the urethra and leaves them in place all night.

Among these several methods we have to choose in a given case.

From the as yet limited experience I have received, the impression that the reaction following dilatation of the urethra and examination of the bladder, depends not so much on the manner or rapidity of dilatation, but rather on other circumstances, such as state of general health, power of resistance of the patient, and elasticity and vulnerability of the tissues constituting urethra and bladder. In cases where the individual is very sensitive, or where the dilatation precedes an operation on the neck of the womb, it would certainly be better to perform it in one session and under chloroform. I have seen, however, two instances, where rapid dilatation could be performed to its utmost extent in one session without the use of an anæsthetic.

In cases where the examination permits ample time for preparation, and where the patient is not very sensitive, where the introduction of the smallest dilator is not followed by severe reaction, it would be better to resort to slow and gradual dilatation.

If the urethra is very sensitive, where there exist symptoms of perimetritis, and where the history reveals the existence of urethral or vesical catarrh at a former time, more or less severe reaction is pretty sure to follow, no matter whether dilatation be performed slowly or rapidly.

The reports of four cases, treated by Prof. Pippingsköld's method, are so favorable that I recommend this method for trial. We must, however, bear in mind that a proceeding which is borne very well by patients of that robust, northern physique, as we find them in Finland, is very likely to lead to very different results among our weakly, irritable New York female population.

16 *The Vesico-vaginal and Vesico-rectal Touch.*

In conclusion, I have to remark that the novelty of the proceeding presented to you is not in the dilatation of the urethra for the purpose of entering into the female bladder, but in its application for examining the female genital organs.

