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FORCIBLE AND RAPID DILATATION

OF THE

CERVIX UTERI,

FOR THE RELIEF OF

STRICTURE, CHRONIC ENDO-CERVICITIS,
CONICAL CERVIX, FLEXIONS,
STERILITY, ETC.

BY

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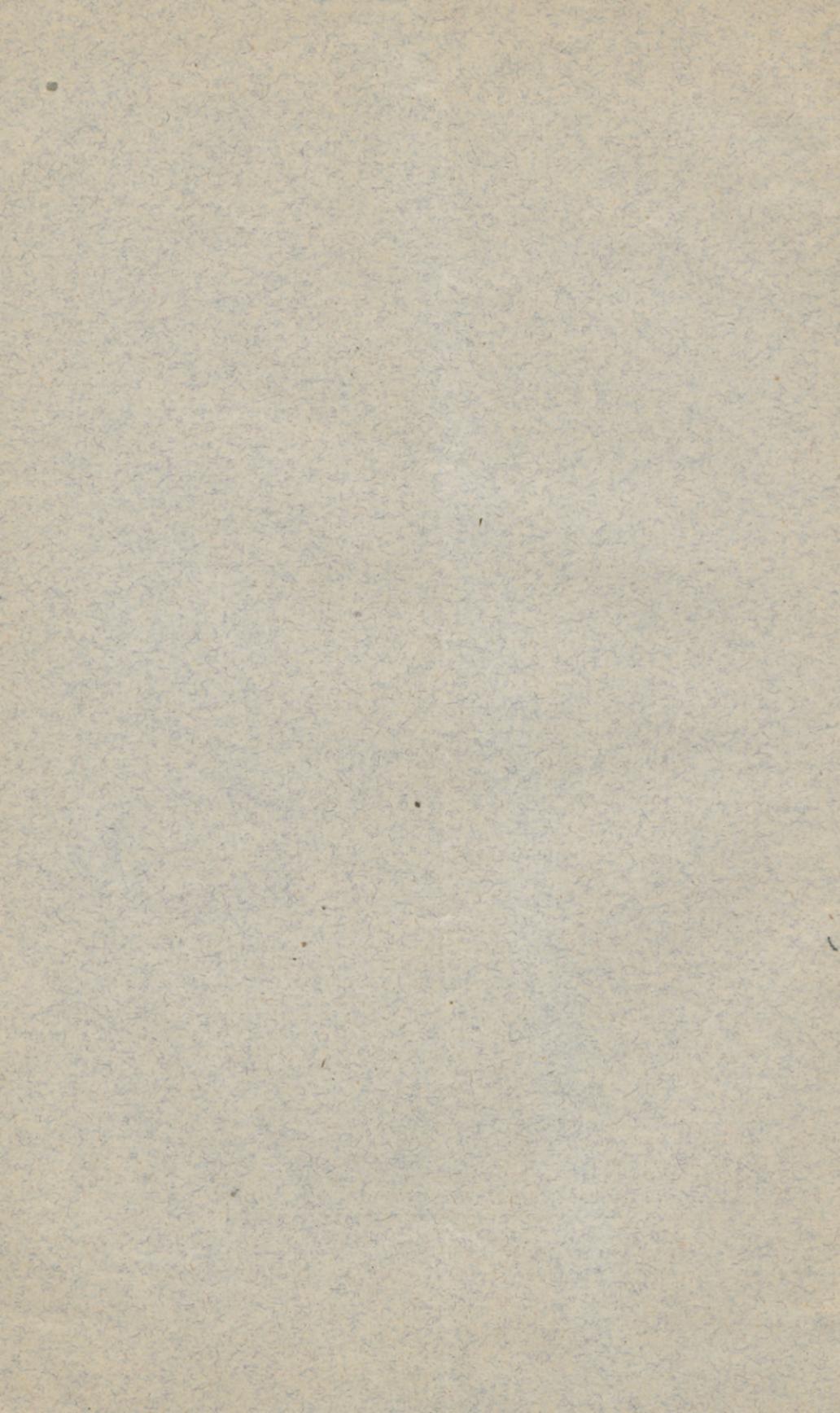


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FORCIBLE AND RAPID DILATATION OF THE CERVIX UTERI,
FOR THE RELIEF OF STRICTURE, CHRONIC ENDO-CERVI-
CITIS, CONICAL CERVIX, FLEXIONS, STERILITY, Etc.

DYSMENORRŒEA, from whatever cause it may arise, is allowed to be one of the most distressing maladies that afflict the female sex. Gynæcologists have long put forth their best efforts to discover means for its relief, which, to a certain extent, have been successful, and the improvement in this direction has, perhaps, been as great as in any other department of scientific research. Yet, the modes of treatment hitherto adopted by the profession have not been altogether satisfactory, and, in a great many cases, have proved quite inadequate. It is not necessary to my purpose, and I shall not attempt, on this occasion, to discuss the different causes that produce this disease, but shall confine my remarks to the treatment of those cases arising from constriction of the os and cervix uteri, with their frequent attendants of version and flexion; and, after referring very briefly to the different remedies which have been used by the profession, will speak of my own plan of treatment, and endeavor to draw an honest comparison as to the merits of each.

Dr. Mackintosh, of Edinburgh, was the first to call the attention of the profession to the mechanical cause of this disease, and the first to adopt mechanical means for its relief. He commenced his treatment by the introduction of a small metal bougie, followed by others of larger size—advancing gradually and cautiously until his purpose was accomplished. According to his own account, he was quite successful. Many others have adopted this mode of treatment with comparatively good results. This operation, however, seems to be applicable only to cases of simple constriction of the os and cervix, and the cause of failure in many of these is owing to the fact that the parts will contract again soon after the instrument is removed. One objection to it is the length of time required to complete the cure: and (by-the-way) the same objections hold good in regard to the use of tents. Dr. Simpson after giving bougies a fair trial, laid them aside and used a series of permanent stem-pessaries—leaving one in until he could introduce a larger one. But with the use of these he found the same results as from the bougies. He, therefore, discarded them, and recommended incisions within the cervix uteri. This is done by the introduction of an instrument through the cervix uteri, armed with a concealed cutting-blade, and then set by a screw, to the distance required, when it is withdrawn, cutting its way out. The instrument is then turned, and a like incision



is made on the opposite side. Dr. Greenhalgh has somewhat modified the operation by the use of an instrument with a double blade, cutting each way at the same time, which saves the necessity of repetition.

The success of this operation depends, I think, upon two causes : 1. The depletion, thereby relieving the congestion ; and, 2. Owing to the peculiar arrangement of the muscular structure of the cervix, the parts, after division, will divaricate, and by that means the canal is enlarged. But here, setting aside the danger of hæmorrhage, unless the operation is very skillfully performed, arises the question : "May not the walls of the cervix be weakened to such an extent, in some cases, as to interfere with gestation ?" It seems to me that this condition must follow in cases, especially where the cervix is completely divided up to the os internum, as is sometimes done. This operation has been practised by many surgeons, both in Europe and in our own country, and has done much for the relief of dysmenorrhœa. Yet, if the same object can be accomplished without any sacrifice to the parts, I think it becomes us to lay aside the knife, and choose the better way.

There is still another method of treatment adopted by some surgeons with very good results, which consists in the supplementing of Dr. Mackintosh's plan with the use of dilators of different kinds, where dilatation is carried to a much greater extent than could be done with simply the use of bougies.

In the July number, 1872, of "Braithwaite's Retrospect"—taken from the *British Medical Journal*, of December 16, 1871—there is an account given by Dr. J. Protheroe Smith, of London, of his plan of treating certain cases of dysmenorrhœa and sterility. He says that, after giving Dr. Simpson's plan a fair trial, he gave up the use of the hysterotomy, and adopted this latter mode, using a dilator made after the model of Heurteloup's lithotrite, by which he conceived it practicable to dilate permanently the constricted os internum, and afterward, when necessary, to give the normal shape to the os tincæ by dividing it laterally at the commissures of the labia uteri. His cases, however, were confined to those of simple stricture of the os internum, and narrowing of the cervical canal and mouth, and he never, under any circumstances, applied extension until all the morbid conditions of the parts were entirely relieved. After accustoming the uterine canal to bear a metal bougie, which he introduced daily, and increased in size until a No. 10 could be borne without any pain, he then employs the dilator. This is used, at first cautiously, about every second day, always desisting as soon as pain is experienced. It will be found, he says, in a short time, that the uterus becomes accustomed to the dilatation, when it may be employed to a greater extent, and in a few days or weeks, as the case may be, a forced dilatation to the extent of an inch, or an inch and a half, may be used with impunity. After this it will only be necessary to use the dilator daily for two or three days, and afterward at longer intervals, to keep the parts open till they permanently heal in the state of distention effected by the operation.

All this I consider a step in the right direction, but has not been carried far enough to command a complete triumph.

The method adopted by myself, for several years past, is, I confess, much more *heroic* ; but I hope the cases which I shall present to you will serve to demonstrate its *safety* as well as its *utility*. The operation is not only applicable to all cases of constriction of the cervix uteri, but its *crowning glory* consists in the complete and radical cure of *flexion*, for which there had previously been no really satisfactory treatment.

Cases of flexion attendant upon anteversion can be relieved by division of the posterior labia uteri, as practised by Drs. Sims, Emmet, and others ; I have had very good success with it myself. But cases of retro-

version complicated with flexion have proved very troublesome. With the use of my dilator and uterine pessary, I find no difficulty in relieving them very promptly.

My method of procedure is first to evacuate the bowels pretty thoroughly beforehand, so as to prevent all effort in that direction for two or three days; I then place the patient upon her back, with her hips near the edge of the bed, and, when she is profoundly under the influence of an anæsthetic, I commence by introducing a three-bladed, self-retaining speculum, which brings in view the os uteri, which I seize with a double-hooked tenaculum and draw down towards the vulva, when I first introduce a metal bougie as large as the canal will admit, followed in rapid succession by others of larger size until I reach No. 7, which represents the size of my dilator. I then introduce the dilator and stretch the cervix in every direction, until it is enlarged sufficiently to admit a No. 20 bougie, which is all that is generally necessary. Then I introduce a gum-elastic uterine pessary, of about that size, and retain it in position by a stem, secured outside of the vulva for about a week, in which time it has done its work, and is ready to be removed.

During this time I keep the patient perfectly quiet, and usually upon her back, which is generally found to be the most comfortable position.

The effects of this operation seem to be threefold: First, by breaking up all the adhesions, which are often very firm and unyielding, it relieves the constriction entirely, and, acting as a derivative, it cures the hyperæmia of the cervix; and, further, it establishes a radical change in the nutrition of the whole organ. For instance, I have operated upon patients who had suffered for years from chronic endocervicitis, and when the most gentle touch of the finger would cause excessive pain, when in a few days the sensibility would all be gone, sometimes even before the pessary was removed.

In cases of flexion the relief is obtained by the straightening of the canal, which is produced by a change of the muscular tissues of the cervix from an abnormal to a normal condition. In the rapid dilatation of the parts, the constricting fibres are, of course, lacerated to some extent; and, in healing up around the pessary, must necessarily conform to their new relation. It was in seeking a remedy for this condition that my mind was first directed to this mode of operation; and, finding the relief so prompt and so effectual, and so safe also, I have been led to adopt the same treatment in all troublesome cases of constriction of the cervix uteri, whether complicated with version, or otherwise; and the results have been so gratifying that I take great pleasure in laying them before my professional brethren.

It would be unreasonable to expect success in every case, and under all circumstances, yet I do claim for it a certainty hitherto unattained; and it has this one great advantage, viz.: the saving of time, as in my hands it will accomplish more in a less number of weeks than it would take months to do by the ordinary methods. And, according to my own experience, it causes much less constitutional disturbance than the use of tents; and I think it safer even than the metrotome, and free from some serious objections to the use of the latter; as, for instance, when incisions are made through the tissues of the cervix, unless carried deep enough to prevent reunion, they must of necessity form a cicatrix, which will interfere, more or less, with the dilatation of the parts. And, when the operation does not succeed, the patient is left in a worse condition than before; while, in the rapid and forcible dilatation of the cervix, there is no sacrifice of the integrity of the parts, and being done under the influence of an anæsthetic, there is no shock of the nervous system, and generally but little subsequent suffering.

While conscious of running counter to the preconceived theories

and practice of the profession, I feel quite confident that future experience will sustain me in the position I have taken. I will now present a few typical cases, one of a kind out of many that have come under my observation.

My first case was one of anteversion, attended with a great amount of flexion.

Miss P., aged nineteen. Commenced her menstrual functions at the age of fourteen, which soon became very painful, and at length her suffering became so intense that life was really a burden to her. She was unable to walk a single block without great pain; and, during her catamenial periods, she would become unconscious, and remain so for several days together, requiring a great deal of care from her friends. Between her periods she suffered almost constantly with pain in her back and head, so severe as to disqualify her for anything useful.

When she first came under my observation, some months before the operation, I made a digital examination, which was attended with great pain, when I found the walls of the vagina considerably corrugated, and vaginismus so severe that it was almost impossible to reach the os uteri. After treating the vagina topically for a while, the sensibility of the passage was sufficiently relieved to enable me to examine the uterus, when I found the condition referred to above.

In seeking a remedy, my first intention was to divide the posterior lip, according to former custom, when the idea suggested itself to me that laceration might answer the purpose without sacrificing the os externum, as is the case when the knife is used.

Consequently, I provided myself with an instrument, made by Tiemann & Co., on the principle of Thebot's urethral dilator; and on December 9, 1868, assisted by Drs. Enos and Landon, I operated by dilating the cervix uteri, backward and forward, to the extent of about seven-eighths of an inch. My hope was that, in divulging the parts so freely, they would, in healing, assume their more natural relation, which, to a considerable degree, I found was the case.

After the operation I kept the patient quiet for about a fortnight, when I was greatly pleased to find that the lacerated parts had healed most kindly, and all tenderness of the cervix and fundus disappeared. From that time her general health improved very rapidly; her headaches were relieved, and she menstruated regularly without pain or inconvenience for nearly a year; when, as the curvature of the canal was not altogether relieved, her difficulties returned and increased upon her gradually, although not so severe as formerly, yet enough so to cause her considerable pain and inconvenience. I then resolved to repeat the operation, with the addition of the uterine pessary, that had suggested itself in the treatment of some other cases—which I did on May 25, 1870, assisted by Dr. Chapman.

In this operation I divulged the cervix in every direction before introducing the pessary, let the pessary remain about a week, and when removed the whole organ was found in its normal position, and with a cervix straight enough for all practical purposes; for, after enjoying very good health for over nine months, she married on February 19, 1871, conceived the first month, had a pleasant gestation, and on the following December 7th she was delivered of a fine boy, which is still living.

Stricture of Cervix and Os Uteri.—Mrs. N., aged thirty-three; married about eleven years. Health always delicate. Had suffered for many years with dysmenorrhœa and leucorrhœa: had also ulcerations of the os at different times. No conception; sexual intercourse painful;

os uteri and cervix considerably tumefied and very sensitive. Operated upon her February 23, 1869, assisted by Dr. George K. Smith.

She had a pleasant recovery, and her health since then has been steadily improving, and she is now expecting her confinement within a month or two.

Retroversion with Flexion.—Mrs. B., aged about twenty-eight years; married, and had one child, eight years of age. She had suffered much from dysmenorrhœa and leucorrhœa from the date of her confinement, probably the result of displacement of the uterus, which, no doubt, was aggravated by the complete laceration of the perinæum during her confinement. Her health finally became so enfeebled that she was unable to leave her room for nine or ten months previous to the operation, and during her catamenial periods was obliged to keep her bed for several days together. There was a well-marked hyperæmic condition of the os and cervix, attended with great sensibility to the touch.

After trying topical applications and pessaries of different kinds with only partial success, I concluded to adopt the same treatment that had proved so satisfactory in my previous cases, and on September 2, 1869, I performed the operation, assisted by Drs. Conkling and Segur.

The patient was soon after able to leave her room, and since that time has enjoyed most excellent health. She was left a widow soon after the operation; otherwise, judging from her present robust condition, I should expect some well-marked results. I would say, in concluding this case, that I repaired the damage to the perinæum a while after the other operation.

Stricture of Cervix Uteri, with Vaginismus.—Miss M., aged about twenty-seven years. Had been troubled nearly all her menstrual life with dysmenorrhœa, etc. Health very delicate. I found it difficult to make a satisfactory examination until I had first subdued the vaginismus by topical applications, when the cervix uteri was found to be exceedingly sensitive to the touch, but not accompanied, as in some of the other cases, with much engorgement of the surrounding parts. The principal difficulty proved to be at the os internum, which was very much constricted. Operated upon her November 2, 1869, assisted by Dr. Conkling. Soon after the operation the soreness was all gone, and she has menstruated regularly and with perfect ease since that time. Her general health also improved rapidly. She is now married, and has three children.

Anteversion with Flexion, complicated with Serious Disease of the Urinary Organs and Rectum.—I mention this case, more particularly to demonstrate the safety of this operation under peculiar circumstances.

Miss R., aged twenty-one years. Had been troubled, more or less, with dysmenorrhœa for two or three years past, the result of displacement of the uterus, which, I think, was caused by an attack of metritis, brought on by her own imprudence.

Having some engagement during her catamenial period, she thought to get rid of it by holding her feet in cold water for a while. She succeeded, but paid dearly for the experience. Her menstrual troubles after that increased upon her, yet without any particular complications, until a little over a year ago, when, as her parents were leaving home for a sojourn in the country, she rode over to the depot with them just at the time when the change was coming on. After returning to her home she was seized with a severe pain in the region of the uterus and bladder. Had retention of urine for three or four days, requiring the

use of a catheter. This same difficulty returned at each succeeding catamenial period, lasting about the same length of time. I was about proposing an operation for her relief, when on one of the coldest days of the first of last January, she, in company with some young friends, was out a long while upon the ice, at the skating-pond, listening to the music. The result was a severe inflammation of the uterus, urinary organs, and rectum, causing permanent retention of urine, requiring the use of a catheter for about five months. Her menstrual troubles increased during this time to such an extent that delirium would supervene upon each return, and last for several days, the last time continuing for about a fortnight. Her periodical returns varied from four to seven weeks, averaging about six weeks. Being convinced that the primal difficulty was in the uterus, I concluded to direct my first remedy to that organ. Owing, however, to her low condition, and to the extreme sensibility of the urethra, bladder, and rectum, which still remained, I thought it a matter of *prudence* not to use the pessary at first, lest the stem might possibly irritate those parts and cause cellulitis. I preferred to repeat the operation, if necessary, rather than to take any unnecessary risks. So I merely dilated the cervix uteri, as I had done in my first cases. If I had had the weight of the profession on my side to support me, perhaps I should not have used so much caution. My object was to reduce the congestion and change the nutrition of the parts, which was accomplished to my complete satisfaction. Assisted by Prof. Armor, I performed the operation on the 12th of May, by dilating the cervix in every direction very freely.

Within a few days after the operation all the unpleasant symptoms, from which she had suffered so long, began to subside. In less than a month after, the bladder performed its functions, and has continued to do so since. The disease in the urinary organs is entirely relieved, and only a slight sensibility of the uterus remains. Her general health is improving very rapidly, and she menstruates with very little pain or inconvenience. The flexion is not entirely relieved, and, should her difficulty return, I shall propose a repetition of the operation, with the use of the pessary.

Ante-lateral Version with Great Curvature and Stricture of the Cervix Uteri.—I was called, on the 5th of May, 1873, to visit Miss L., aged nearly seventeen years, who was suffering from severe urinary symptoms. Suspecting uterine complications, upon inquiry, I learned that she had been troubled with dysmenorrhœa, more or less, since she was twelve years of age, when her change took place, and had suffered almost constantly with severe pain in the back and head, which, distressed her very much. Although of a full habit, and apparently vigorous, the least exertion would exhaust her and intensify her sufferings. As she was anxious for relief, I made a digital examination, and found the uterus in the condition referred to above—the fundus toward the left pelvis, and the os uteri toward the right. The cervix was flexed in the form of a rainbow, and apparently of about twice the usual length. It had a hard, cartilaginous feel, and seemed to be but a little larger than a common clay-pipe stem.

The whole organ was exceedingly sensitive to the touch. After the pressing symptoms were relieved, I operated upon her on the 17th of May, assisted by Dr. Andrew Otterson. The constriction proved to be greater than in any case I had ever met with, and required great force in introducing my smallest metal bougie. I finally succeeded, however, and then followed it, in rapid succession, by others of larger size until I could use the dilator. The force used in the dilatation was great, but strange to say, after all this laceration, not one unpleasant symptom followed it.

Of course, there was considerable soreness for a day or two, but after that she was very comfortable. In a week after the operation I removed the pessary, when I found the uterus in its normal position, with the cervix shortened to about the usual length, and apparently as straight as in ordinary cases. The next day her periodical change came on without the least unpleasant premonitory symptom, and she has continued to menstruate with freedom and regularity since. Her headaches have entirely left her, and she is now enjoying perfect health.*

Stricture with Hyperæmia of the Cervix Uteri.—Mrs. N., aged twenty-six years; married several years; sterile. From her early womanhood she had suffered from dysmenorrhœa, and which, at the time of the operation, had become very distressing. On the 15th of October, 1876, I operated upon her—carrying the divulsion to the extent of about an inch, in every direction. Within a fortnight all the unnatural sensibility had disappeared. She had a pleasant convalescence, and her menstrual functions, at last accounts, continued in good condition.

Chronic Endo-cervicitis attending Retro-version, with slight Flexion.—Mrs. P., aged twenty-eight; had one child, three or four years of age. Not long after the birth of her child, she began to suffer from dysmenorrhœa. Her health failed generally, and she became very much emaciated and weak. On the 5th of October, 1876, I operated upon her without the use of the pessary; as there was so little flexion I did not think it necessary. She suffered but little from the operation. Had a good recovery, and soon regained her flesh with perfect health.

Ante-flexion, complicated with Ovarian disease.—I mention this case, not because it possesses any peculiar interest in itself, but to show what good results may arise from such an unpromising outlook. Mrs. A., aged thirty-four years; married a number of years; sterile. Had suffered from dysmenorrhœa, more or less, during all her menstrual life, the difficulty increasing with her years. Upon examination I found a well marked case of ante-flexion with hyperæmia of left ovary and ligaments and very sensitive to the touch. She had been rejected from the Woman's Hospital, after a month's stay as incurable, on account of the ovarian complication. After which she went to the German Hospital, where the knife was used; but no permanent benefit followed the operation. She had, also, been treated privately, by tents, without any benefit arising from their use.

I must confess that I felt a great reluctance to operating in a case that had withstood so much, yet, as she was very anxious to obtain relief by some means, I consented, and on the 1st of March, 1876, I performed the operation—and, strange to say, within three weeks afterwards, on making an examination, I found, not only the uterus, but the ovary and ligaments in a healthy condition. I removed the pessary about the fourth day, as I had some fears that, owing to the extreme sensibility of the surrounding parts, it might create some disturbance—which precaution was perhaps unnecessary; but I wished to be on the safe side. Soon after the operation her health began to improve, and she gained rapidly in flesh. Her dysmenorrhœa was not entirely relieved, but her suffering was very slight compared with her former experience.

Conical Cervix Uteri.—The treatment of a conical cervix, which some gynecologists seem to think so formidable, and requiring the heroic

* This patient has since married, conceived soon afterward, and has a healthy offspring.

remedy of amputation, I find very simple. Indeed, about as simple as the stretching of the finger of a new glove, which it resembles; for as you increase the diameter you shorten its length—which is all that is necessary. When the length of the cervix is not very great, and unattended with flexion, I usually succeed by the dilator alone; but, where the length is extraordinary, and especially when attended with flexion. I find it important to use the pessary, in order to prevent any retraction towards its abnormal condition.

While I am not disposed to censure any one for adopting the course which he thinks best adapted to the relief of suffering—and which may have afforded relief to many—you will allow me to say, that experience has convinced me, at least, that, for mere elongation of the cervix uteri, there is no necessity whatever for resorting to amputation. And, besides, if done with the galvano cautery there is danger of producing occlusion of the remaining os; which would aggregate rather than relieve the difficulty.

Miss B., from Md.; aged about thirty-three years. Had suffered from dysmenorrhœa, more or less, from puberty, and which had increased upon her until her health was considerably impaired. In February, 1876, she came to the city to consult me in regard to her condition. Upon examination I found the cervix uteri to be a full half inch or more too long, extending low down in the vagina and quite sensitive to the touch. On the 19th of February I dilated the cervix to the extent of about seven-eighths of an inch, stretching it in every direction, which had the effect of shortening it to about its normal length. No unpleasant symptom followed the operation, and within a fortnight she was feeling perfectly well. I learn from her since that her general health is very much improved, and that she suffers very little, if any, at her monthly periods.

These are some of the cases that have come under my personal supervision, and to me, have proved abundantly satisfactory. I only hope that my experience may not provoke any rashness in others that might serve to bring reproach upon the operation.

Were I asked under what pathological conditions I would recommend this operation, my reply would be, in all cases where any other surgical or mechanical means would be considered advisable, which, of course, must be left to the judgment of the surgeon in charge. I should not interfere, however, in any case where there was acute inflammation of any part of the organ.

The following cuts represent the principal instruments used in the operation, and which will require no explanation, except the speculum, which I will describe very briefly: It is self-retaining, and I think, possesses some advantages over ordinary speculums, in giving more room and freedom to the operator, which in some cases is very important, and from the fact that it can be converted very easily into a two-bladed instrument, by removing the third blade, when it can be used for the rectum also. Letter A, represents the screw that holds the third blade C, in any position required; B, the screw that throws it downwards; D D, the side blades.

