

Contributions to  
practical gynaecology

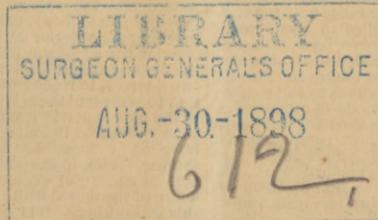
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CONTRIBUTIONS  
TO  
PRACTICAL GYNÆCOLOGY.

DONALDSON.



# CONTRIBUTIONS TO PRACTICAL GYNÆCOLOGY.\*

ILLUSTRATED WITH SIXTEEN WOOD ENGRAVINGS.

By S. JAMES DONALDSON, M.D.,

*Fellow of the New York Medico-Chirurgical Society, Surgeon to Gynecological Wards, Ward's Island Hospital.*

*PART I.—Practical Observations Upon Uterine Deflexions.*

*PART II.—Practical Observations Upon Dysmenorrhœa.*

*Read before the New York Medico-Chirurgical Society.*

J. H. VAIL & CO., 21 Astor Place, N. Y.

We have before us an interesting work of one hundred and thirty-six octavo pages, with the above title. The text is bold and vigorous in style, and evidently the work of much careful study. While departing somewhat from stereotyped views as to the etiology and mechanical treatment of uterine displacements, the author manifestly holds the most practical opinions regarding the subject of which he treats.

Dr. Donaldson begins his discussion by a consideration of the growth and present standing of gynæcology. He questions if there has been such remarkable progress made as is generally believed, in the ordinary anomalies, such as dislocations, dysmenorrhœa, and kindred affections. He is inclined to the opinion that more harm than benefit has resulted from the treatment of these abnormalities by unskillful manipulation and ill-constructed appliances, as well as the innate tendency of the majority to run tandem after certain leaders, following stereotyped ideas instead of adhering more closely to the common sense views always to be found in the teachings of nature. He maintains that for years we have been attempting to accomplish results which the use of the absurd instruments usually adopted has almost invariably defeated, and says:

"The parties who are really culpable in this matter are the teachers who, through ignorance or indifference, have inculcated erroneous ideas by incorrect assertions or through the use of ridiculous diagrams. These have done more to embarrass and perplex the after lives of students than can be expressed. Better far that intelligent minds be left free to practice in accordance with the suggestions of independent reason, than be compelled to spend years in perplexity trying to unlearn these college-received fallacies. Look, for example, at any of the numerous absurdities that disgrace our most popular text-books. In many of these diagrams it would appear that the design was to adapt the pelvic organs to the conformation of some instrument, and to display its mode of adjustment, which by the illustration is made to look quite feasible; but when we put it to the actual test, we soon learn how completely we have been misguided and discover its entire impracticability. If we found these caricatures in some ancient medical work, we would pity the ignorance of the past; but to encounter them repeatedly in our most modern standard works, is an annoyance most difficult to tolerate.

Then follows a number of familiar diagrams copied from the text books, and usually employed by them when dealing with the subject of the female pelvis, and their misrepresentations, as well as peculiarities, criticised.

We agree with Dr. Donaldson that the illustrations should harmonize with the text, and that many of the text book diagrams are "pictorial stumbling blocks." This part of the discussion he closes with a sketch of the female pelvis and trunk.

"We take for our fixed point the pubic bone, and measure, at an angle of sixty-two degrees with the horizon, four and one-fourth inches, and there fix the sacral prominence. Next we measure

from the centre of the pubic bone, at an angle of forty degrees, four and one-half inches, and fix the hollow of the sacrum. From the inferior border of the pubic bone, at an angle of twelve degrees, we measure four and a half inches, and place the point of the coccyx. Guided by these points, we represent the sacral, coccygeal, and pubic bones. We have now the frame work of the pelvic walls. After outlining the trunk walls with proper curves, we proceed to place the pelvic organs. We make the measurements of the vaginal walls—anteriorly three inches, posteriorly four inches, as an average—and fix the entrance to the vagina three-fourths of an inch below the pubic bone. Now come reminiscences of our early speculum and pessary experiences. Fresh from college training, we possessed the stereotyped ideas, and expected to find a vagina following the pelvic curve, leading into the abdominal cavity, with the os uteri looking directly into the tube. How great was our perplexity to find the vagina dipping backward toward the hollow of the sacrum, with the uterus at right angles. What strenuous efforts we made to induce our pessaries to occupy what we then regarded as their proper place! But strive as we might, they persisted in lying in the axis of the vagina, which pointed directly into the hollow of the sacrum, while the poor uterus, as if conscious of the mischief which had befallen it, seemed striving to evade our inspection. Anteriorsions were rife in those days, and we blush to contemplate the curious instruments left upon our hands, with which we then strove to prop up the uterus and teach it a new position. Fortunately for our patients, we became discouraged with our useless efforts, and desisted, when, much to our chagrin, the sufferers usually improved. So we began to question if it might not be ourselves who were at fault instead of the much abused uterus.

"From careful anatomical observation, we find that the uterus naturally looks backward and downward to the second coccygeal bone. At right angles with it the vaginal axis points into the hollow of the sacrum, in the direction of the third sacral bone. Keeping these facts in mind we proceed in our delineation, and draught the uterus and vagina with proportionate dimensions, and find we have the uterus safely ensconced beneath the overhanging arch of the sacrum. After representing the bladder and soft structures, we next define the axis of the body. This imaginary line, A A, in a properly poised body, extends from the vertex, through the trunk, touching the anterior surface of the second lumbar vertebra and the inferior border of the pubic bone downward to the point between the plantar arches. Having drawn a line, B B, at an angle of sixty-two degrees, to represent the plane of the pelvis, we draw another, C C, to represent the pelvic axis. And now the beautiful mechanism of the female pelvis reveals itself. Notice how these lines intersect each other at a definite point. Observe the home of the uterus bounded by these lines and sheltered by the protecting arch of the sacrum, while, in the angle below, the bladder, admirably situated, acts as a grateful cushion. Look also at the graceful, receding curve of the dorsal wall; conceive how an impulse, glancing down this incline, must be projected downward and forward to expend its force upon the resilient concave abdominal walls, while the reflex current will move in such a direction as to really lift the pear-shaped uterine body toward the arch. Consider the position of the os pubis, how it is the centre of gravitation for the abdominal viscera, while not an ounce of weight is allowed to rest upon the womb."

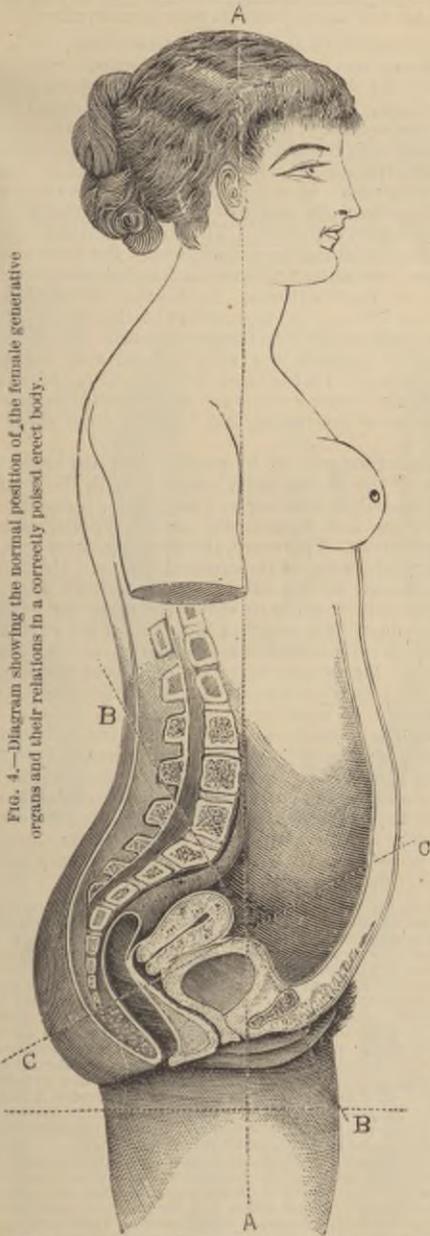
Concerning the etiology and treatment of displacements, the author attaches great importance to the posture of the body, and states that:

"A firmly poised body is a necessity to the maintenance of that harmonious antagonism of all the muscular support and balance of the various members of the body. But where one part of the active fibre is unduly tense, with a corresponding portion lax, we need not expect to find the organs sustaining their normal position. Moreover, with a truncal deviation the resistant structures, such as the pubic bone and sacral prominence, are diverged from their full and

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proper functions, and no longer afford sufficient support and protection. With the shoulders advanced and the dorsal region retracted the body loses its graceful contour by the straightening of its curves, and the truncal tube becomes, to a certain degree, straightened. The centre of the visceral gravitation is no longer through the powerful pubic bone, but through the pelvic curve; consequently every

FIG. 4.—Diagram showing the normal position of the female generative organs and their relations in a correctly poised erect body.



concussion and pressure from above is received through the soft and yielding pelvic tissues, and these gradually yield under the superimposed influences until dislocations and prolapsus become established. It must be understood, when we speak of the erect position, we include the sitting as well as the standing posture. Assuming an incorrect poise while sitting is a more universal habit, and demands more attention than any other, from the fact that so much more time is spent in sitting than standing."

After criticising the positions usually assumed, and condemning the faulty construction of the modern chair, for producing much mischief, the horizontal position is considered and reasons given why the semi-prone position should be observed. He discusses at length the

importance of exercise as influencing the condition of the female generative organs, after the following manner:

"We are aware that the body is composed almost entirely of capillaries, and upon capillary tonicity depends the health of the body; for instance, inflammation is simply an increased determination of arterial blood to a part whose capillaries have lost their contractile power and become dilated, while passive congestion is simply an expression of relaxed vital resistance of the capillary walls. Now the lack of exercise produces this degenerate, dilated condition of the capillaries, thereby creating general blood-stasis, which is a form of death. By exercise we secure the constricting of these minute blood-carriers through the stimulus of alternate contraction and relaxation of the muscles. Some pathologists maintain that there is but one essential proximate cause of disease, viz., the loss of vital resistance and the enlargement of the capillary vessels. The indication then would be, that the cure of disease must necessarily be preceded by the constricting of the capillaries and a restoration of their contractile power."

Forcible defecation is also cited as one of the chief factors in producing prolapsus, regarding the treatment of which he makes these pertinent observations:

"It is safe to state that there is no disease more readily cured or more universally maltreated, than constipation. Physicians, as well as laymen, from time immemorial, have run foolishly after cathartics. They have seemed possessed with the idea that the disease lay materialized somewhere along the alimentary canal, waiting to be dislodged by some brisk purgative. So firmly established is this pernicious practice that it is combated at the risk of losing caste. The child no sooner breathes than it must swallow a portion of phystic, and from that moment until the hour of death the intestinal tract must be tortured by the use of drugs. It is by this injurious practice that constipation is greatly augmented, for I challenge the world to produce a single cathartic drug, given in small or large quantities, which will not, by its secondary effect, induce constipation. Laxatives are our sheet-anchor in diarrhoeas, but in the opposite condition they only enhance the difficulty; indeed, costiveness can be created at will by an occasional administering of a purgative."

After a due consideration of practical hygienic laws, the subject of mechanical appliances is next taken up, concerning which Dr. Donaldson remarks:

"The ingenuity of medical men has been exhausted in the search for some effective invention. So earnest and active has been the labor in this matter that, judging from the numerous strange productions, we feel persuaded that not a few have gone daft on the subject, for surely none but men of distorted imaginations could invent and recommend such twisted absurdities as we find in the catalogue of pessaries. Place before an intelligent layman the heaps of abominations which have been invented, advocated and adopted for suffering women, and after examining one by one the unseemly, contrivances, of every conceivable shape and material, imagine his confusion as to what manner of organ the vagina might be. The probable design of many of these inventions would perplex even an anatomist. Now then, there is no reason why the vagina (simply because it is elastic and will accommodate itself to any shape or size, from a pledget of cotton to a child's head) should be converted into a curiosity shop. These vile contrivances are a disgrace and dark stain upon the history of gynaecology, and we hope the most of them will soon receive their merited condemnation, and will only be found in their proper place—in the chamber of horrors."

Dr. Donaldson regards prolapsus as simply a disintegration of the vaginal walls, which permits the uterine cervix to advance from its position underneath the sacral arch. Its cure, therefore, consists in restoring these weakened walls to their original length in as non-irritating a manner as possible. His idea of a properly constructed pessary is given as follows:

"Every foreign body acts more or less as an irritant, and therefore should be no larger than is absolutely required, and should be so constructed, whenever feasible, as to be under the control of the patient, who should be instructed regarding its removal and replacement, as she should wear it only when *actually* needed. It is absolutely necessary that it be so constructed as to allow the vaginal walls to sustain their natural relations; therefore we will make it flat, wider above than below, but never so wide as to stretch the walls of the vagina, bearing in mind the fact that in a prolapsed state the vagina is wider than after reduction. Its length should be sufficient to carry the uterine portion of the vagina so far back as to cause the os to look toward the sacro-coccygeal joint, but it should not be so long as to produce any undue traction on this portion of the vagina, for by so doing we will defeat our object by producing laxity of posterior vaginal wall and may induce areolar hyperplasia at its point of pressure. Add to the foregoing considerations a correct understanding of the vaginal axis, and we possess all the important features of a pessary. Viewed in the light of these principles, what a harrowing study the vast array of these inventions becomes, many of them being a stain upon the good name which alone ever secured for them a recognition."

He maintains that every form of stem-cup pessary is faulty, inasmuch as the uterus must be dislocated forward and retroverted, before the cervix will look into

the cup; while if this style of pessary is introduced, with the uterus in its normal position, the edge of the cup is impinged against the anterior surface of the cervix uteri. All forms of vaginal appliances for ante-flexion and anteversion he dismisses as unworthy of consideration.

The following is a description of the author's pessary, with a design illustrating its mode of application:

A copper wire loop bent so as to conform to the vaginal curves, and its approximated ends bent to conform with the perineal angle; this wire loop is covered with soft rubber, which is continuous with a tube of the same material, thereby securing smoothness and softness at the point of exit from the body, a seat of great annoyance with the use of the hard material, this being the experience of all who have used them. We also do away with the unevenness which cannot be avoided where the rubber tube is attached to the hard rubber loop, another important feature. The rubber tube we construct quite light, so as to avoid unnecessary traction upon the instrument. This tube is attached behind to an elastic belt surrounding the body (see Fig. 5). The vaginal portion being

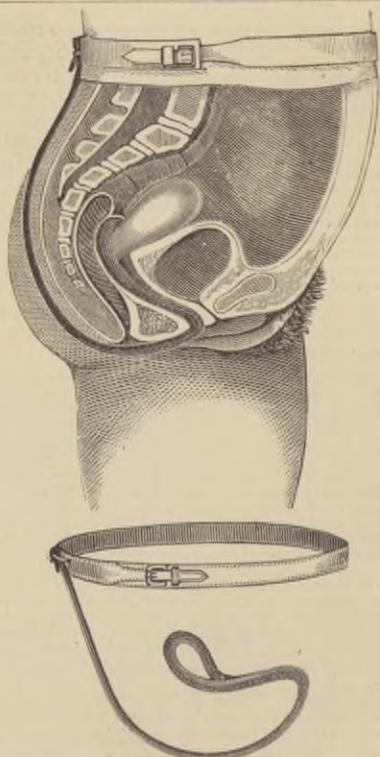


FIG. 5.—Diagram illustrating Dr. Donaldson's retroversion and prolapsus pessary with the same adjusted.

of yielding material, is more grateful to the sensitive vaginal tissues. One of the chief ends to be sought for in a pessary (the unconsciousness of the foreign body) is thereby secured. The instrument which constantly directs the mind of the patient to her complaint will certainly fail, in proportion to its irritating qualities. This pessary, besides being made in three sizes—three, three and a half and four inches—is susceptible of modification through the adaptability of the copper wire, and can be moulded to fit accurately the angle of the perineal body. Another recommendation is that it can be easily managed by the patient. The instrument should always be removed at night or while the patient is in the recumbent position, and can be removed and inserted as the symptoms of the patient will readily suggest, and in this way the weakened tissues may be gradually coaxed and trained back to their former tone, while the use of the support is gradually discontinued. Every physician is well aware of the uselessness of expecting any restorative benefits from an internal pessary worn constantly. In fact, we know that the atrophy of the vaginal walls is only increased by this pressure, just as a splint worn for a long time on a limb produces atrophy.

After months and years of continuous wearing of perfect-fitting pessaries we have removed them only to learn that the tendency to prolapsus is augmented, while frequently the persistent irritation caused by the foreign body develops a chronic hyperplasia of the uterus, with disintegration of the cellular tissues; and thus matters go on from bad to worse with the patient. Again, it is not an unusual occurrence to find that the hard substance produces very

troublesome ulcerations, and frequently the patient is forgotten or lost sight of while wearing a pessary, when the instrument may burrow itself into the parts, and fistulae and other distressing accidents occur. From all these objections this pessary is free, and it is the only pessary with which I am acquainted that combines simplicity, practicability, comfort, and a promise of final restoration of the parts affected. While it is free from the objectionable features of other vaginal pessaries, it achieves everything that can be accomplished by any vaginal pessary in every form of prolapsus.

The subject of flexions is next taken up.

First on the list come those distortions which are the sequelæ of versions following degeneration of vaginal structures. The os uteri deprived of its normal bearings, the uterine body first totters under its own and superimposed weight, and then proceeds to bend upon itself. Second, those cases which are the product of inflammatory processes; some portion of the uterus or its appendages has been the centre of hyperemia which has caused an exudation of lymph. This circumscribed interstitial deposit, becoming organized, welds the tissue fibres together, producing fixedness and subsequent contraction of the involved textures. In this way the freedom of circulation and normal movements of the uterus are interfered with, while the fundus through this local shortening, is induced to gradually bend over the point of disturbance. Third, there is a condition of atony, in which the uterine walls are flaccid and thin, possessing no power of resistance, and bending from sheer flabbiness.

The author goes on to explain that the cramped condition of the uterine body, together with the twisting of the broad ligaments upon themselves, prevents normal circulation and favors new plastic deposit, and tissue degeneration. Therefore, the first object towards cure is the straightening of the crooked uterus. He states, "If straightened by the use of the sound, we find that it immediately resumes its distortion upon the withdrawal of the sound; any attempt to replace it per vaginam only causes it to oscillate as if pivoted at the point of flexure. He demonstrates by argument and diagrams, that the stereotyped mode of treating flexures by vaginal appliances is reprehensible, inasmuch as the foreign substance is made to press upon the diseased parts, inducing further development of interstitial deposit. He claims also that by these appliances, the uterine body is not straightened, but merely crowded out of the reach of the finger, while it still maintains its bent condition. To prove this fact he recommends the introduction of a fine probe into the uterus after the pessary is *in situ*. Further on the question is broached.

"How, then, can we deal with these chronic flexions? Here we have an elastic, bent organ, presenting no possible opportunity of being straightened by any external treatment. There is but one rational plan to pursue, that is, the introduction of a splint within the cavity of the bent uterus, whereby it can be placed in its normal position and retained there a sufficient length of time, until Nature has, by absorption and new deposit, established the parts in proper condition. There are absolutely but two alternatives: Either to devise and adopt some such mechanical measure, or to abandon the patient to her misfortune, fated to a life of progressive wretchedness. For a long time the necessity of an intra-uterine splint has been felt by the profession, and its merits and demerits freely discussed. Why the stem pessary has so long occupied this debatable position is readily explained. Its indispensability has provided its own advocates, while the crude and evil-looking instruments presented, naturally stimulated an opposition. Surely, the inventors of many of these instruments must have had a very imperfect appreciation of the nature of the highly organized structures under consideration. Fortunately for all concerned, while the uterus is delicately organized and is entitled to the gentlest manipulation, it is also astonishingly tolerant of rough usage. Those conversant with uterine pathology must have been impressed with the oft-witnessed freakishness of the uterus. A womb which will resent the introduction of a sound or even a delicate probe, developing alarming symptoms therefrom, will undergo the ordeal of gradual dilation and gentle deviation to a remarkable extent without evincing any annoyance. Indeed, the uterus is in complete harmony with its whimsical owner. Either is disposed to resent sudden encroachment and rude shocks, and rebel if undue force is applied; while by gentle measures and gradual approaching tactics, the crotchets of either may be avoided. This principle cannot be over-estimated; and it demands earnest application in the treatment of these cases, if we would avoid discomfiture."

"The *résumé* of my experience might be expressed as follows: Those stem pessaries that are rigid and have an external support connected to a band encircling the body are reprehensible, as they necessarily prevent the natural play of the uterus, drag it forward, and subject it to injuries from shocks from within and without.

Those appliances which have a solid base, or are firmly connected with the vaginal portion, are dangerous, as they preclude the normal movements and vibrations of the uterus and bruise the sensitive os tince, while they are wholly impracticable in the treatment of virgins."

"The simple stem with vaginal bulb is unmanageable, as, unsupported, it will drop out into the vagina, or, when made to press against the os by the use of tampons, is liable to work into the cavity of the womb, as the os is very prone to dilate and swallow the bulb, thereby endangering the fundus, and frequently causing us no little embarrassment in the removal. Besides, the daily tamponing of the vagina, which this style of instrument necessitates, is an irritating, disgusting phase, of which the patient and physician become equally weary. The annoying and dangerous complications attending the use of those (seemingly) indispensable instruments has for a long time kept my mind engaged devising some appliance whereby these objectionable features might be done away with. The results of these researches are embodied in the form of pessary which I now present for consideration. Our first requisitions in the selection of an intra-uterine splint are non-irritation and safety. With this object in view I have selected for the intra-uterine splint a silver-plated steel-wire spiral spring, sheathed in elastic material. This coil is about two inches in length, with a diameter of one-twelfth of an inch, and is screwed into a hard rubber button five-

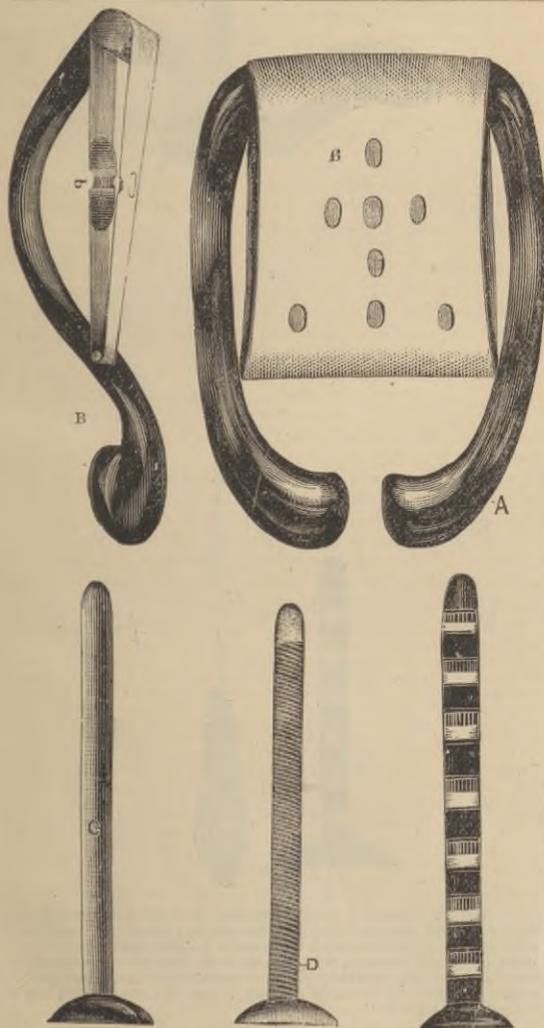


FIG. 7.—Diagram showing Dr. Donaldson's adjustable pessary for cure of flexions. A, shield; B, Section of shield showing band and socket; C, platin flexible stem; D, galvanic stem—copper and zinc wire; E, galvanic stem—copper and zinc bands insulated with vulcanite bands.

eights of an inch in diameter. In this manner we secure an elastic, light, highly polished, and non-irritating stem, which can be bent to any desirable curve, but when unrestrained is persistently and gently self-erecting. For its retention in utero, and also for its

proper guidance in balancing the uterus, I have invented an adjustable vaginal shield in the following manner: A frame of vulcanite varying in length from two to three inches, and appropriately curved. Its approximate extremity (Fig. 7, A) is open and neatly moulded so as to avoid pressure against the urethral ridge and allow the proximation of the vaginal walls. Its distal extremity is slightly bevelled, for the reception of the soft rubber band (Fig. 7, B), which passes around the end bar, and a German-silver wire that reaches from either side-bar one and one-fourth inch distant. Upon the upper surface of the inferior reflexion of the band is a socket (Fig. 7, b) for the reception of the stem's button, which it embracet effectively, owing to its shape and elasticity. This band is also perforated in its upper reflexion with a number of eyelet-holes for the various adjustments of the stem, and for the use of the introducing staff, as we shall see presently. The stem is adjusted to the shield by passing it from beneath, through the socket and upper eyelets, and finally causing the button to enter the socket. The insertion of this instrument may be described as follows: First prepare the instrument by passing the introducing staff in front of the wire brace, then back through the eyelets, and cause the staff to enter the stem, by springing the button so as to admit it from beneath the diaphragm. By this manoeuvre the instrument is made to assume a compact and flat parallelism, and is as easily inserted as a Hodge's pessary. (See Fig. 8, A.)

"After lubricating thoroughly with castile soap, pass it into the vagina and guide the point of the stem into the os by the aid of the index finger. When the stem is within the uterine canal, gently withdraw the staff and reinsert it within the stem in the same manner as we would insert the uterine sound, and by its aid complete the adjustment of the parts and instrument as the circumstances may indicate (Fig. 8, B); after which the staff is withdrawn, leaving all *in situ*. The attractive features of this instrument are apparent. It is light, compact, and safe. The stem cannot possibly become misplaced, neither can its bulb abrade the vaginal walls. It is also so pliable that it will not cause any arbitrary pressure of its point against the sensitive endometrium, thereby causing abrasion and serious irritation, so frequently produced by the rigid stem. The diaphragm of the shield is so resilient that it adds another degree of pliancy to the stem, while the uterus finds in it an elastic cushion. By the aid of this vaginal portion, not only is the disagreeable tamponading abolished, but the vaginal walls are stayed, and by it the stem is made to assume any desirable angle by changing it into a forward, backward, or lateral eyelet. The instrument in this way can be adjusted for the treatment of every form of uterine flexion. The location of the socket is also easily altered by rotating the band. As we have seen, without withdrawing the instrument, we can readily ascertain the position of the uterus by introducing a probe within the cavity of the stem. In the same manner as we introduce the uterine sound; we thereby avoid the irritation produced by the removal and re-insertion of the instrument, and the objectionable manipulation of sounding the uterus."



FIG. 8, A.—Diagram illustrating the manipulation of Donaldson's flexion pessary. Pessary in position for insertion.

Subinvolution, superinvolution, and non-development of the uterus, the author ascribes to atony of the capillaries, which is the result of an unbalanced nerve power. We will quote a part of his argument:

"We should not overlook the fact that the blood-vessels are not the only agents in distributing the food supplies to the tissues, but are more properly the canals through which this supply is conducted, being dominated by the nerve-fluid.

"To demonstrate our meaning take the phenomena of digestion. After a full meal succeeds a state of mental apathy and drowsiness; the brain is comparatively inactive. Thus we are told that the digestive organs have engaged the nerve-power, for the time, in converting the food into blood-supply. Should the rights of these organs be violated, by the withholding of the nerve-energy and diverting it to the brain or other parts, digestion is suspended or but imperfectly

performed. Should this perversion of the nerve fluid be persisted in, a diseased condition of the digestive organs becomes established.

"Now, who are the women who suffer most frequently from the results of capillary inertia of the generative organs? Nine-tenths of these patients are what may be termed "brainy" subjects.

"Their entire stock of neuric energy is exhausted in literary pursuits, in painting, or more especially upon music. These delicately organized creatures have in some way acquired the belief that to respect the grosser bodily functions, is highly unbecoming, and that it is their duty to starve out all animal propensities for the fuller development of the aesthetic tastes. Against this outrage of nature's laws the nerves cry out, while, like any other neglected or starved object in nature, the abused and ill-nourished organs assume deformities, and perform their functions in a miserable, imperfect manner. In the treatment of these cases, vigorous bodily exercise is paramount; nevertheless, while we may succeed in establishing a

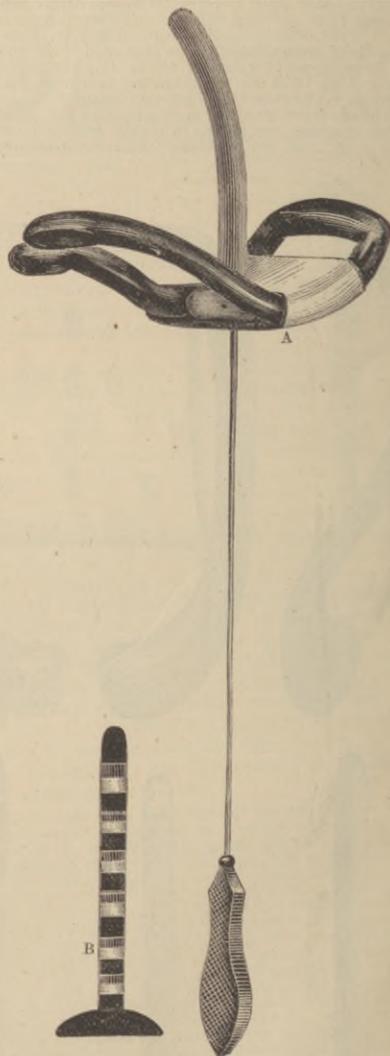
the other (which he prefers) is an ingenious construction of zinc and copper rings cemented together, and a number of these placed on a vulcanite rod, and insulated with vulcanite rings—the whole secured by a tip of vulcanite screwed on the point of the stem, B. In this manner he secures a voltaic pile, making the endometrium the connecting medium. He claims that where the metals are in successive contact the transmission of electric fluid is directly from one metal to another and comparatively slight through the tissues.



FIG. 8, B.—Shows the staff reinserted within the stem after the pessary is *in situ*.

perfect general circulation and muscular equilibrium, the long-standing local deformity usually continues."

For the induction of capillary activity, the absorption of morbid deposit, and promotion of healthy tissue formation the intra-uterine galvanic stem is recommended. Dr. Donaldson seems undecided whether the energizing effect of the galvanic stem is attributable to the mechanical and chemical stimulus of this instrument, or to the electricity evolved. The latter theory is maintained by Lawson Tait, and other eminent authorities. He is, nevertheless, convinced by experience that the galvanic stem is an efficient agent in imparting tone to the enervated tissues. There are two forms of instruments recommended, one of alternate copper and zinc wires, in the form of a spiral spring, and flexible;



"When the uterus is readily reduced and the posterior cervical portion is long, the pessary represented in the adjoining diagram is preferable. It is constructed upon the same principle as the previously described pessary, only in this form the band surrounds the side-bars, which are slightly notched beneath the band to secure its stability. This will be found the better form of shield in the use of the galvanic stem B."

The prolonged presence of the galvanic stem within the uterine cavity is forbidden, as the salts of the metals resulting from chemical decomposition are capable of seriously injuring the tissues. He therefore advises the alternation of the galvanic with the plain hard rubber stem. The use of these appliances, constructed of parallel bars of zinc and copper, is pronounced highly injurious, they being apt to cause lateral cauterization, with subsequent cicatrization and contraction.

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Part first concludes with a brief consideration of the influence of the mental over the physical condition, giving us a glimpse into a deeply interesting field of thought.

Part second is devoted to dysmenorrhœa, wherein the widely accepted theories regarding this subject are analyzed, and the usual operative procedures criticised. In this part, as in the former, the author insists throughout upon the importance of forming independent conclusions, and of taking a common sense view of the matter.

We have not the space to include an abstract of his views respecting the etiology and treatment of painful

menstruation, but regard this part of the work of equal merit, if not superior, to that already noticed. The book will be read with interest by all, and will be of profit to many.

Those hypercritically inclined may object to the direct manner in which the writer attacks the views of older and more experienced authors, but his reasons for so doing seem good, and his argument convincing though somewhat sententious in style.

The general practitioner will find in this work many valuable suggestions, while the specialist in this department cannot afford to remain unfamiliar with its contents.





