increased weight is put upon a larger body, that is, upon a longer lever, it easily falls over, bending at the junction of body and neck, below which point the neck is fixed and supported by its attachment to the bladder. In some cases there is a predisposition to retroflexion from this condition having existed before the pregnancy. But in many cases it takes place where no predisposing cause can be traced. It is produced by pressure acting upon the enlarged heavy flaccid uterus. If undue pressure is exerted within the first few days after labor, before the uterine walls have undergone marked shrinking and have recovered a fair degree of firmness from contraction and involution, retroversion or retroflexion is almost sure to follow. If involution have advanced a little, so that the bulk of the uterus is sensibly diminished and the rigidity of its walls is increased, prolapsus is more likely to occur than flexion. I have said that flooding disposes to retroflexion by weakening tissue. It does so in still another way. A little blood or a clot is often retained in the uterine cavity; this keeps up excessive bulk of the organ, and retards involution; the expulsive efforts excited by the presence of clots bring the pressure of the abdominal muscles to bear upon the body of the uterus, and this is rolled over. This bearing of expulsive action upon the anterior surface of the uterine body is further promoted by the squatting of the uterus in the lax vagina, a condition of prolapsus which already implies a minor degree of retroversion. Retroflexion, in its turn, keeps up secondary puerperal hemorrhage, and thus each evil aggravates the other.

Professor Martin's explanation of the influence of defective involution of the placental site already cited (see p. 588) applies to retroflexion. Defective involution of the anterior wall leads to retroflexion.

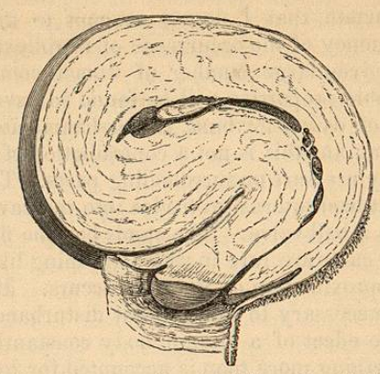
Flexions are also caused by tumors in the fundus uteri, by pressure of tumors external to it—as ovarian, by pseudo-membranous adhesions.

Retroflexion may long persist as simple bending or arching; but gradually, although seldom, it proceeds to angulation, assuming the form of a retort.

The angulation occurs at the point of extreme arching, and this corresponds more or less closely to the os internum uteri. Occasionally it occurs in the cervix itself, about the middle, between the os internum and os externum.

Sometimes, says Rokitansky, retroflexion passes into retroversion. The cervix follows the bending back of the body, whilst it is drawn upwards. In moderate retroflexions, there is observed an inclination of the vaginal-portion forwards and upwards, so that the anterior lip seems flattened; and as the flexion increased, the duplicature which constitutes it vanishes. I do not know how far this description is drawn from clinical observations on the living. I am not myself in a position to affirm its accuracy. Sometimes the bending is so great that the fundus comes down to the level of the os, as in Fig. 136. (This preparation is, I think, erroneously described as an anteflexion in the catalogue). It also demonstrates a very important point in the pathology of retroflexion. It shows that atrophy, or wasting of tissue at the seat of flexion, is not a necessary condition. In this preparation the inferior wall is everywhere as thick as in the natural state. I am convinced that this is very frequently, if not, indeed, most commonly, the case. Clinical observation satisfies me that on rectification of the position by the sound or a Hodge's pessary, the walls of the uterus commonly present their normal thickness.

FIG. 136.



(From Nature, from a specimen in Middlesex Hospital Museum.)
Extreme retroflexion of the uterus (R. B.).
A section is made through the centre, showing atresia in places of the canal of the uterus.

Still another point in the history of retroflexion is exhibited in this preparation. It shows that the walls of the uterine canal have grown together, producing atresia in the neighborhood of the os uteri internum.

Rokitansky and Virchow both describe this atrophy and narrowing at the point of extreme flexion, but interpret it differently. Rokitansky says the mucous membrane of the cervix is normally thick and strong, becoming gradually thinner towards the body of the uterus. The seat of inflexion, he says, is always the neighborhood of the internal os. He finds the connective tissue at this spot thinner and looser, and says this is the result of catarrh of the uterus after labor. Virchow points out that the whole cervix, excepting the portio-vaginalis, is united by connective tissue to surrounding parts, especially to the hinder and under surface of the bladder. The cervix thus fixed, inflexions are produced by inflammatory adhesions dragging upon the body of the uterus. Thus, Rokitansky thinks the atrophy of the internal orifice primary; Virchow thinks it secondary. Clinical observation proves that in the majority of instances, at any rate, there are no adhesions. The fundus can generally be lifted up to its normal position. Again the frequency of cure under the use of Hodge's pessary proves the same thing. Nor can it be admitted that Rokitansky's theory is more than occasionally true. Retroflexion is undoubtedly frequently first observed to follow labor immediately, that is, before uterine catarrh can have set in. The mechanism in these cases is simply this: the heavy fundus, being in a flaccid state, falls back, partly by its gravity, partly by being forced down under the pressure of the intestines. In such cases, involution becoming impeded, catarrh will almost always ensue, and from long-continued angulation, the tissues at the seat of flexion will undergo some amount of atrophy. It is this altered state of the tissues of the cervix,

combined with the increased weight and bulk of the fundus, that makes restoration to the normal position so difficult and tedious in some cases.

Retroflexion is far more frequent than retroversion, that is, than retroversion independent of prolapsus. Pathological deductions drawn from statistics are exposed to such numerous fallacies which no sacrifice of time and toil can obviate, that I do not attempt to give any numerical estimate of the frequency of the occurrence of retroflexion. It is enough to say that, in any given large number of women complaining of pelvic distress, a considerable proportion will be found to have retroflexion. It is a frequent cause of dysmenorrhœa, menorrhagia, uterine hemorrhage, leucorrhœa, abortion; and this is not a contradiction of sterility. It produces also distress by pressure on surrounding parts. The mass consisting of the enlarged bent-back uterus protrudes into the cavity of the rectum, and obstructs it like a ball-valve. The stools become flattened or ribbon-like. It is true the cases are rare in which anything like absolute closure of the rectum by approximation of its walls occurs. But a close degree of occlusion is not necessary to cause great disturbance of the function of the rectum. The effect of a foreign body constantly protruding into the intestine is something more than is accounted for by mere contraction of its calibre. The constant irritation disturbs or perverts the normal action of the muscular coat. The pain felt in defecation induces the sufferer to postpone the execution of this necessary act; hence there arise gradual accumulation of feces, and a habit of constipation; these in time induce permanent distension of the canal, and a loss of peristaltic power, which may fairly be considered as a degree of intestinal paralysis. If defecation produce these results, a retrograde obstruction and disturbance of the whole digestive functions is sure to follow. Retention of the residue of the food in the large intestines leads to decomposition; hence flatulence and absorption of some of the elements of this decomposition. The effect of this form of blood-poisoning, to which the term "copræmia" may not improperly be applied, is seen in the sallow, dirty hue of the skin, and the unpleasant exhalations from it. Ascending the course of the alimentary canal, the difficulty presented below leads to difficult and imperfect performance of the functions of the small intestine and stomach; hence fermentation, flatulence, pyrosis, nausea, and the various phenomena grouped under dyspepsia. The liver will hardly escape, especially when, as is frequently the case in women of extreme nervous susceptibility, vomiting is induced. Imperfect digestion has for its inevitable consequence imperfect nutrition and disordered secretions. And thus it happens that in time no organ is left unimpaired, no function is healthily performed.

The nervous system, often so susceptible in women, will exhibit the most marked aberrations. The nervous centres respond to the slightest impressions. Hysteria breaks out in all its manifold eccentricities; neuralgia appears in one or more of its various forms, as sciatica, lumbago, tic douleureux, rheumatism; headache and a disposition to vertigo or syncope frequently recur; emotional, moral and intellectual disturbance, as manifested in irritability, despondency, melancholy, loss of command over feeling and thought are often developed. Many of these phenomena may be thus traced to bad nutrition; but there is good reason to believe

that some, especially the nervous phenomena, are more directly induced, or are at any rate aggravated by the influence of the displaced uterus upon the nervous centres. The congested displaced organ is a constant source of nervous irritation and exhaustion; it is constantly pressing upon the sacral plexus; it is constantly sending painful impressions to the nervous centres; constantly using up in a morbid direction the nerve-force which is wanted for the performance of healthy function.

A not uncommon form of nervous disorder induced by retroflexion is severe, almost persistent pain in the lower part of the spine; sometimes most intense in one fixed spot, where it is easy to evoke the sense of tenderness on pressure. Many such cases have been treated as sufferers from spinal disease, and have been confined to the couch wearing various spinal instruments for months and years, under the erroneous belief that the spinal suffering was primary and essential; its mere symptomatic character not being suspected. With or without this marked spinal pain, a sense of numbness, of want of power, especially of inability to walk, are often complained of, and tend to confirm the belief in spinal disease. Brown-Séquard distinctly traced paraplegia to a retroflected uterus.

I can well imagine the surprise which the attribution of these formidable consequences to retroflexion of the womb will excite in the minds of those physicians who are ignorant of the pathology of the pelvic organs. Such, they will perhaps exclaim, are the extravagances of specialists. Yet, I would ask, is not the sequence of events as narrated quite in harmony with sound physiology and pathology? I am very sure they are in harmony with accurate clinical observation. If this be doubted by those who are ignorant of gynæcology, may it not be because they have thought it possible to study successfully disease in women, whilst omitting to take note of the diseases of those organs which make her what she is?

The test of treatment confirms the conclusion drawn from diagnostic exploration. In the great majority of cases the evils enumerated as found in association with retroflexion are relieved and finally removed when the retroflexion and its local consequences are cured.

The persistence of flexion induces certain changes in the uterus. Obstruction to its circulation brings congestion; this leads to hyperplasia and hypertrophy of its walls, especially of the body, the vaginal-portion often partaking only slightly in this change. The obstruction to the escape of menstrual and mucous secretions from the cavity of the uterus increases the congestion and leads to increased secretion; these being retained, uterine contractions are excited to expel them; the os internum being more or less closed, the uterus contracting as a sphere upon its contents, these tend to escape equally in all directions, and hence pressure is brought to bear upon the openings of the Fallopian tubes as well as upon the os internum. There is then, in proportion to the extent of the obstacle opposed in the os internum, dilating force applied to the mouths of the tubes; these gradually yield, and a retrograde dilatation of the tubes sometimes will follow. The dilatation of the cavity of the retroflected uterus is always attended by some amount of chronic inflammation of the mucous membrane or catarrh. Perhaps the term inflammation is ill-chosen; the condition is rather one of constant engorgement leading to rapid shedding of epithelium and mucous secretion; it is analogous to

chronic catarrh of the lungs. The occasional retention of mucus in the uterus sets up colic. A certain quantity of mucus must accumulate before the uterus becomes so distended as to excite it to contract; this quantity in many women is remarkably definite, taking in some a week, in others a fortnight to collect. Why the expulsive colic simulating dysmenorrhœa occurs midway between two periods is simply because the uterus being emptied at the menstrual epoch, the secretions begin to gather again from that time. Not seldom a little blood is mixed with the mucus. This is not to be interpreted as the result of ovulation, but is simply hæmorrhagic, the product of engorgement. It is a common history to hear from women suffering from uterine obstruction that they have periodical gatherings like an abscess in the womb attended by severe colic and expulsive pains which are relieved by the "bursting" and escape of a quantity of discharge. These cases are of the kind above described, although they may not exhibit equally regular periodicity.

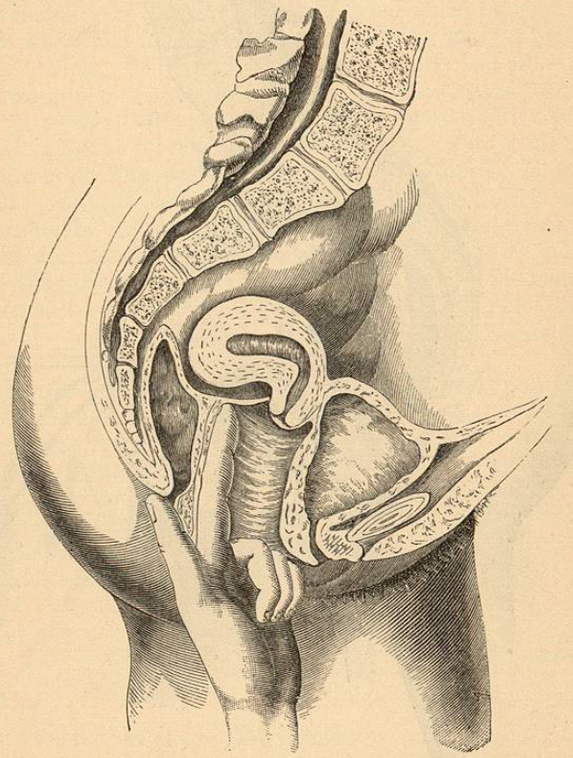
Serious dangers attend retroflexion from the persistence of this condition after conception has taken place. The unfavorable shape of the uterus, and its retention in the pelvis, oppose the due development of the organ. Hence frequently abortion ensues; and when this does not happen, there is the more formidable danger arising from the locking of the enlarged uterus in the pelvis about the third or fourth month. The history of this accident is fully described in my *Obstetric Operations*. These probable events strongly enforce the expediency of curing retroflexion.

The flexions found in *advanced life* may be the persistent flexions from an earlier age. But some undoubtedly take their origin after the climacteric period. The body of the uterus, which has failed to undergo the normal senile retrogression or atrophy is pulpy, traversed by degenerating vessels, it is softer and thinner; its cavity is dilated, filled with catarrhal secretion; its cervix is beset in its connective-tissue substratum with Nabothian vesicles, and often from the persistent production of these bodies it is atrophied and degenerated to a mere frame-work from their dehiscence in the tissue. This condition is principally found at the seat of the os internum; indeed, here it has often proceeded to a scar-like retraction of the atrophied connective tissue, amounting to atresia. This is seen in Fig. 136. At this spot the uterine body sometimes bends in the shape of a fracture; it may be backwards or forwards.

The *diagnosis of retroflexion* differs in some degree from that of retroversion. The os uteri, instead of pointing forwards near the symphysis pubis, points more or less downwards, and may be near the middle of the pelvic cavity. When the body is much enlarged, however, the vaginal-portion is pushed forwards, so that the os points downwards near the symphysis. The position and direction of the os uteri being determined, the exploring finger feels in front of the vaginal-portion seeking to trace the cervix and body of the uterus forwards through the anterior roof of the vagina, the normal seat of the organ. Instead of feeling it here, the finger misses the resistance of solidity, and by combining abdominal palpation, the two hands may be brought to approach each other, when the absence of the uterus from its natural place is determined. The exploring finger next feels on either side, and determines the condition of this

part of the roof of the vagina. It is then carried behind the roof of the vaginal-portion and feels a firm uniform globular mass through the posterior wall of the vagina. Tracing this on to the vaginal-portion, the tip of the finger sinks into a groove between the two. It is generally possible to determine the continuity of these two parts. This is best done by keeping the finger behind the vaginal-portion, so as to feel the body of the uterus, then to combine the abdominal touch so as to embrace the cervix between the two hands. Movement imparted by one to the body between will be felt by the other.

Fig 137.



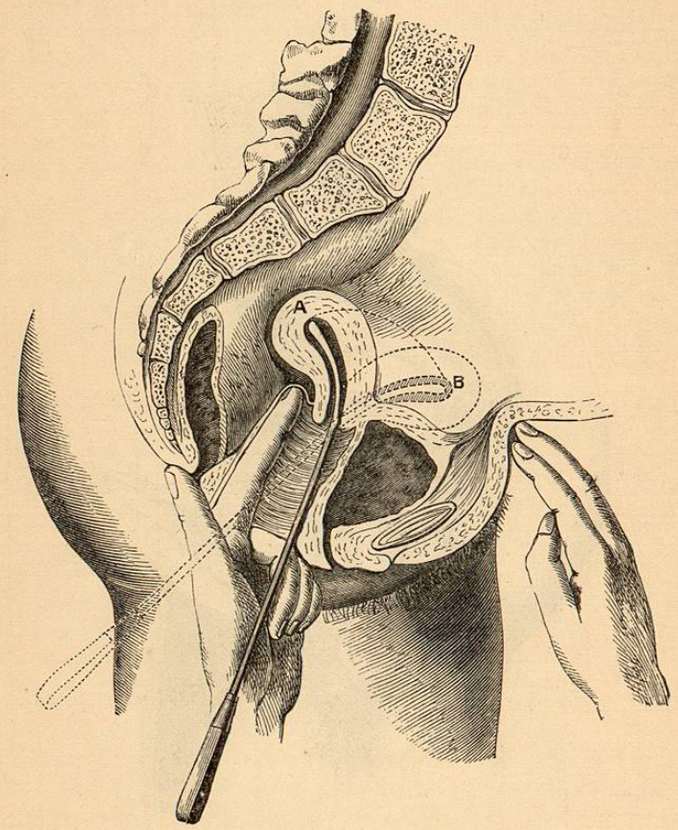
Illustrating the diagnosis of retroflexion by the vaginal touch (R. B.).

This is made clearer still by the rectal touch. The finger in the rectum will travel round the outline of the post-cervical tumor to a greater extent than can the finger in the vagina. The abdominal touch combined with the rectal also affords more positive evidence than the abdomino-vaginal touch.

The *experimentum crucis*, however, is performed with the sound. Before passing it the probability of pregnancy must be carefully weighed. In the great majority of single persons, and of those who have lived a

married life for several years without having children, the probability is strongly in the negative. The presumption is also in the negative in those who, having had children, seek relief from the consequences of retroflexion. Among these consequences frequently is acquired sterility. Two things help in forming an opinion: the date of the last menstruation, and the bulk of the uterus. If the bulk be sensibly increased, and a period have been missed, of course the sound should not be used. It should

Fig. 138.



Diagnosis and reposition of the retroflected uterus by the sound (R. B.).

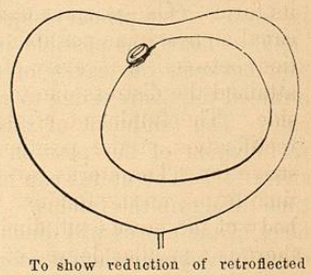
A. The uterus in retroflexion, the sound in its cavity. B The uterus brought forward by reversing the sound. The fundus can now be felt by fingers pressing in the abdominal wall above the symphysis.

not, however, be forgotten that increased bulk of the uterus is an almost constant attendant upon retroflexion. To pass the sound a curve is given to it corresponding to the idea formed of the degree of retroflexion. (See Fig. 138.) For example, if the mass supposed to be the fundus of the uterus falls below the level of the cervix, and the angle or groove behind the cervix be very marked, the curve given to the sound must be

considerable. But in the majority of instances a moderate curve will be enough. By a little manœuvre, by lifting up the fundus by the finger whilst the point of the sound is passing the os internum, the seat of chief flexion, the whole organ is somewhat straightened. This wonderfully facilitates the passing of the sound. The first stage of the introduction of the sound is best effected by passing the point into the os externum as far as the os internum, with the concavity of the curve directed forwards; then the point should be turned backwards by making the handle describe a large circle, thus bringing the concavity backwards. The handle is then carried forwards whilst the guiding finger lifts up the fundus; the point then following the curve of the canal penetrates to the fundus. When the sound has gone the normal length of two and a half inches, the mobility of the uterus must be ascertained by gently bringing the point of the sound forwards again, so as to fill the fundus and bring it into anteversion. This must be executed gently lest adhesions exist. It is also important, in order to avoid dragging the uterus, and the pressure upon its internal surface which a large revolution of the point of the sound would cause, to reverse the sound by making the handle describe a large revolution. The portion then inside the uterus, if moderately curved, will move upon its axis describing a very small circle, and consequently turning in the cavity without exerting any injurious pressure. In short, the uterine sound should be handled with the same gentle touch, and in a similar manner as the catheter in traversing the male urethra. The *tour-de-maître* practised in reversing the catheter to clear the portion of the urethra under the pubic arch, must be imitated when we seek to bring the retroflected uterus forward into anteversion.

The *reduction of the dislocated uterus* to its normal position is a distinct stage of the operation. The following rule should always be observed, and the more carefully whenever the body of the uterus is enlarged and tender. The fundus uteri must not be lifted directly upwards, lest it impinge upon the lower surface of the overhanging promontory. To clear this, *the fundus must be directed to the left*, towards the sacro-iliac joint. Here there is plenty of room. This movement is effected by the combined pressure of the finger, and the revolution of the sound. (See Fig. 139.)

Fig. 139.



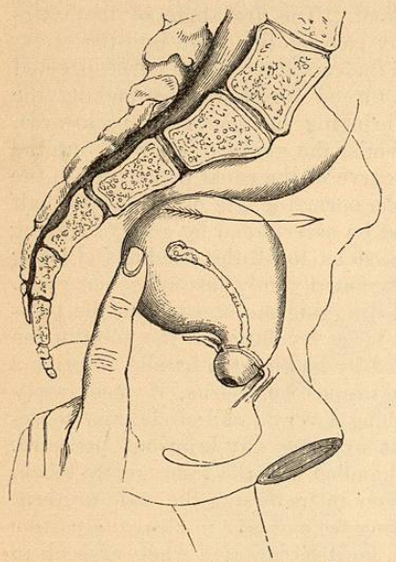
To show reduction of retroflected uterus by finger. View from above. The tip of finger is seen pushing fundus of uterus to left of sacral promontory (R. B.). *See also Fig.* 140.

When the fundus has cleared the promontory, it is then brought forward to the symphysis pubis describing a half-circle round the left side of the pelvic brim.

When restoration is accomplished the demonstration is complete. There is no room for ambiguity. The tumor behind the cervix has disappeared; it has been brought forward to the normal place of the body of the uterus. Supported on the sound it can now be felt by the hand pressed in above the symphysis pubis; and the pressure so exerted upon it is felt by the finger which keeps watch upon the vaginal-portion inside. On withdrawing the sound, the uterus will

often for a time maintain itself in its restored position. But more frequently its fundus will roll back again. If we get all this evidence it is superfluous to discuss what are the conditions which might be mistaken for retroflexion. Nothing but retroflexion will give the evidence described. But it may not be possible or prudent to pass the sound. The two conditions most nearly simulating retroflexion are: a *fibroid tumor* in the posterior wall of the uterus, and a *retro-uterine hæmatocele*. In both cases a firm rounded mass may be felt behind the vaginal-portion separated from it by a groove, and bulging forward the posterior wall of the vagina. But in both cases the body of the uterus may be felt by combined vaginal and abdominal touch above or behind the symphysis pubis. In the case of the retro-uterine hæmatocele the uterus is pressed bodily forwards, and the cervix is generally very close behind the symphysis pubis. Neither of these conditions *per se* excludes the sound. If this be passed, it is easy to demonstrate the position of the body of the uterus, and to distinguish it from the tumor behind the cervix.

Fig. 140.

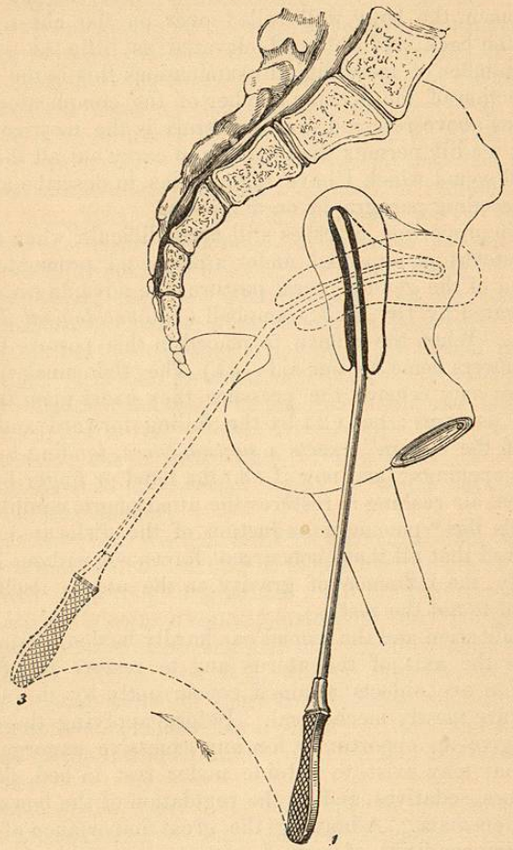


To show the reduction of the retroflected uterus by the finger. The body of uterus is pushed across to the left of the promontory (R. B.).

The principle of *treatment of retroflexion* is essentially the same in all its forms. One primary object to strive for is to bring the cervico-uterine canal as nearly as possible into one axis, so as to afford free communication between the cavity of the uterus and the vagina. When this is attained the distress due to retention of blood, clots, or mucus will subside. The fulfilment of this indication further implies a considerable rectification of the position of the uterus, which is the next object to strive for. The uterus can hardly be made straighter without at the same time lifting up the fundus. When this is done, the engorgement of the body of the uterus will diminish, very often quickly; as the bulk lessens there is a smaller degree of vicious leverage to counteract, so that the cure may be expected to go on at an accelerated pace. The combined progress of rectification and of diminution of bulk brings immense relief to the organs hitherto pressed upon. The rectum especially, and the inferior part of the alimentary canal, are amongst the first organs to benefit by the change. I have known constipation, heretofore obstinate, speedily give way to healthy and regular action of the bowels. And it is needless to say that general amelioration soon follows. The local irritation being lessened, irregular nervous manifestations tend to subside. Greater power of locomotion is gained; and what with freedom from pain and the renewed capacity for exercise, nutrition is often remarkably improved.

A third indication to take is to treat the local complications, whether effects or causes, of the retroflexion. These, that is, the engorgement, endo-catarrh, and other changes in the uterus will, it is true, tend to subside under the means employed to rectify the malposition. But their cure may be accelerated by treatment *ad hoc*.

Fig. 141.



To show the reduction of retroflected uterus by sound. 1. The first position of sound. 3. The final position. The arrows and dotted lines show the movement of the handle and joint. (R. B.).

The first indication is naturally *the reduction of the uterus to its normal relations*:—1. The reduction of simple prolapse with its corresponding retroversion of the uterus is rarely difficult. It is generally enough to lift up the body of the uterus with the finger.

2. Reduction of retroflexion when complicated with considerable enlargement of the uterus as from fibroid tumors or hyperplasia may present considerable difficulty. This difficulty increases with the size of the uterus and the degree of overhanging of the promontory of the sacrum underneath which the enlarged uterus may be locked.

3. Reduction of a retroflected uterus, enlarged as it rarely fails to be after long retention in this unnatural position, may be more difficult still.

4. In the more difficult cases then it is desirable to bring to our aid all the mechanical means at our disposal. The first of these is *the placing the patient in the most favorable posture*. There are two positions which are eminently useful. The first is that known as Sims's, the semi-prone position. In this the woman lies on her left side, with the knees placed on the abdomen, the body well rolled over on the chest, the left arm turned over the back, and the head elevated as little as possible. For the greater number of mere digital examinations this is the best posture. For the reduction of the greater number of the complicated dislocations and distortions above referred to this posture is the most convenient and effective. It readily permits the operator to carry out all the manœuvres by finger and sound which I have taken pains to describe and illustrate under the preceding paragraphs on diagnosis.

In a certain proportion of cases still more difficult, when the enlarged retroflected uterus is impacted under a projected promontory, we may invoke the aid of the genu-pectoral posture, the advantages of which are so well illustrated by Dr. H. F. Campbell (*Gynæcological Transactions*, vol. i. 1876). When the woman is placed in this posture the following mechanical powers come to our aid: (1) The abdominal viscera falling downwards not only remove the pressure they exert upon the uterus in the ordinary postures; but (2) by the falling forward and downward, this "draft of the viscera" exerts a *suction-force*, tending to draw in air by the pelvic openings; and now if (3) the hand or finger be introduced into the vagina, air rushing in restores the atmospheric equilibrium. This Campbell calls the "pneumatic reduction of the dislocated womb." It will be observed that all these concurrent forces act without invoking the fourth, namely, the influence of gravity on the uterus itself, which will of course tend to aid the rest.

The first indication and the second can hardly be dealt with separately. To straighten the axis of the uterus and to restore the fundus to its normal position are objects attained concurrently by the same means. These means are mostly mechanical. Before applying these it is often desirable to give an opportunity for any excessive engorgement or inflammation that may exist, to subside under rest in bed, perhaps local bleeding, salines, sedatives, and by the regulation of the bowels by gentle aperients and enemata. Admitting the great importance of this course as a preliminary condition of cure, I cannot agree with those who rely upon it as sufficient to cure. I have indeed, in not a few cases, seen retroversion and retroflexion of the secondary form relieved, the womb regaining its position apparently spontaneously under rest and the other means enumerated. But in some, at least, of these the cure would probably have been accelerated and made more sure by the timely recourse to mechanical support. And expectancy, aided or not by these means, will certainly bring no rectification of a primary retroflexion. The management of a primary retroflexion will often differ from that of a secondary retroflexion in this: The primary retroflexion is often complicated with a marked degree of stenosis of the os uteri externum. This is an additional cause of obstruction and retention which rarely exists in the

secondary form. It is the first thing that requires treatment. The os externum should be enlarged, whether it be the case of a single woman applying for relief of dysmenorrhœa, or that of a married one, to whose menstrual difficulty are superadded dyspareunia and sterility. The operation is in all respects the same as that described under dysmenorrhœa from stenosis of the os externum. The os is divided on either side so as to give a free opening into the cavity of the cervix. This in itself diminishes the down-curving of the vaginal-portion, and independently of special means for straightening the uterus it virtually straightens its canal. This obstacle being removed, the treatment of the primary retroflexion becomes the same as that of the secondary form, excepting in this, that there is more likely in the latter form to be an inflammatory complication of the cervix. This requires special treatment, which may, however, go on concurrently with the treatment for rectification.

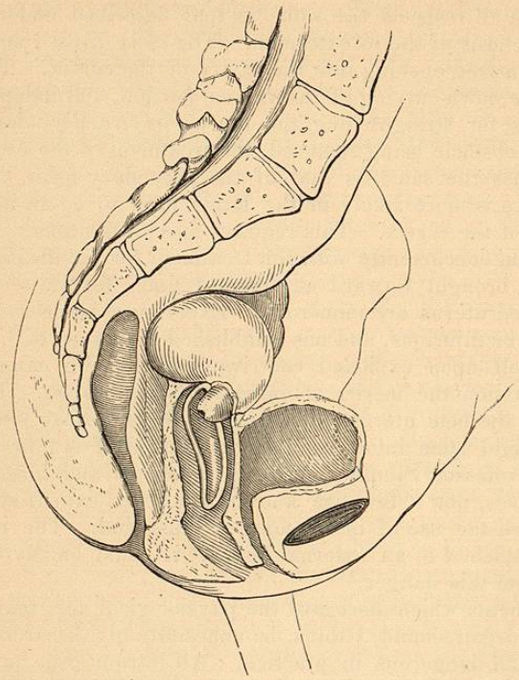
The means brought forward at different times for the rectification of the retroflected uterus are numerous. Experience has eliminated some as ineffective or injurious, and has established the value of others. We need not dwell upon exploded contrivances; but we cannot pass by without discussion the merits of *intra-uterine pessaries*. The idea of straightening the bent uterus, and fixing it in its normal position by introducing a rigid stem into its canal, was revived, if not first conceived by the late Professor Simpson. It was taken up and largely tried by Valleix. Cases, not a few, are known in which death from metroperitonitis followed the use of instruments of this kind. The intra-uterine stem being attached to an external support it could hardly be expected to be free from this danger.

All instruments which disregard the physiological fact that the uterus is a movable organ should, I think, be unhesitatingly discarded as vicious in principle and dangerous in practice. All intra-uterine stems carried on supports having a *point d'appui* outside the body fall under this ban, even although a certain amount of elasticity be introduced into some part of the apparatus. It may be said, without injustice to the ingenuity displayed in the elaboration of these contrivances, that they have fallen into disuse under the combined influence of the disasters which attended their use, and of the introduction of better means, especially of Hodge's lever-pessaries.

The objection above urged does not apply to the simple intra-uterine stems which are unconnected with external supports, and which do not control the uterus in its movements. The best of these is the late Dr. Wright's, or a modification of it. The safest is made out of one piece of vulcanite. This instrument is about two or two and a quarter inches long. When mounted on its carrier for the purpose of introduction it is a single solid stem. When introduced and the carrier is withdrawn, the stem opens by the elasticity of the two branches of which it is composed, so that the ends fit the normal triangular shape of the cavity of the cervix. This expansion helps to lift up the fundus, and the uterus thus supported is kept nearly straight. Still this will not always bring the fundus forwards; it remains in retroversion. For complete restitution we must rely upon Hodge's lever-pessary. This will now operate with increased advantage, as the lever formed by the uterus upon which it

has to act is straighter and firmer. This separate mode of using the intra-uterine and the extra-uterine pessaries is, in my opinion, the safest

Fig. 142.



Illustrating occasional vicious action of the Hodge in extreme retroflexion of the uterus (R. B.).
The upper limb gets wedged in the angle of flexion, and lifts the whole organ up without straightening it.

and most satisfactory in its results. The mobility of the parts is sufficiently respected; and opportunity is given for the recovery of the natural tonicity of the cervix uteri (see Fig. 143).

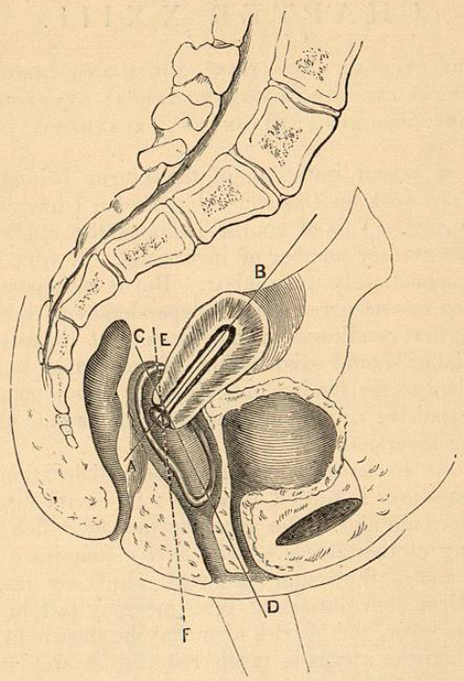
I cannot approve of those instruments in which the intra-uterine stem is set on a ball or ring, or the cross-bar of a Hodge's pessary. This is a kind of impalement which limits too much the mobility of the uterus, and which is apt to cause inflammation of the uterus or surrounding tissues.

All intra-uterine pessaries are apt to cause pain, hemorrhage, and inflammation. The patient must be carefully watched during their use; she should observe the utmost moderation in everything; and in the event of pain the instrument should be at once removed.

Before using any form of intra-uterine pessary, it is desirable to ascertain whether the object cannot be attained without using them at all. The cases where it is necessary to use them are exceptional. The Hodge has happily almost driven out of use the fixed intra-uterine stem. Before applying a Hodge, it is useful to bring the retroflected fundus forward

into its proper position. We thus increase the length of the post-cervical vaginal *cul-de-sac* and give room for the pessary to rise well behind the cervix, a condition of its efficiency.

Fig. 143.



Illustrating the combined action of the intra-uterine pessary and the Hodge (R. B.).
The first straightens the uterus, converting it into a firm lever A B. Then the second forming another lever, C D, lifts up the fundus. E F shows the leverage-movement of the Hodge C D. Under inspiration, E lifts up the body of the uterus.

In the majority of cases a simple Hodge-pessary modified in shape and size to suit the peculiarities of the case, is the best instrument to use. It may be worn continuously for several months, under occasional inspection. Pregnancy not infrequently takes place whilst it is worn. Indeed, I have little doubt that the action of the instrument favors impregnation. When this occurs it is desirable to continue the use of the instrument until the end of the third month of gestation, that is, until the fundus of the uterus has risen out of the pelvis. By this plan the dangers of abortion and of locking of the uterus in the pelvis are greatly lessened.