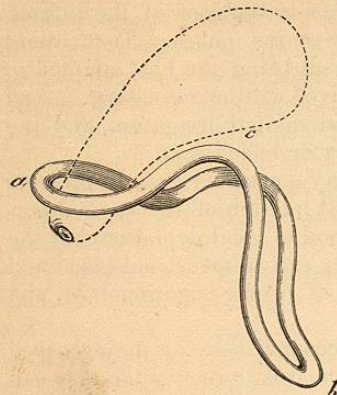


The most ingenious contrivance is that of Dr. Graily Hewitt. This, "the cradle-pessary," seems to me the best designed. Fig. 129 gives a general idea of its form. But form and size require careful modification to the particular case. It should not fit tightly, but nursing the uterus, so to speak, it and uterus should move together. The middle arms, which support the anterior surface of the uterus vary in length, but as a rule they must be long enough to reach the body of the uterus, that is, to bear on the body end of the uterine lever.

FIG. 129.



To illustrate Graily Hewitt's "Cradle-Pessary."

The dotted outline represents the uterus in anteversion. *a.* The posterior arm of the pessary. *b.* The anterior arm which sits behind the symphysis. *c.* The middle rise of the pessary which supports the anterior wall of the body of the uterus.

Professor Thomas has also devised an anteversion-pessary. Its basis is a Hodge's lever; but attached to the anterior aspect of this basis is a horse-shoe lever, set at a moderate angle. The curved part of this horse-shoe rises up behind the symphysis pubis, and lifts up the fundus uteri. The size of the instrument requires careful adaptation to the case in hand. I have derived considerable satisfaction from this instrument. The anteversion pessaries, even more than those for the relief of retroversion, require careful observation. For the first few days the patient should observe nearly absolute rest. If pain occurs, the instrument should be removed, taking note of the cause of the distress, be it inflammation, improper shape, or size of the instrument; and care taken to obviate the cause on readjusting an instrument. During the wearing the patient should lead a life of moderate exertion at best; and submit to examination at least once a month.

I have made the acquaintance of many of the instruments for correcting malpositions through their failure in particular cases. I have been called upon to remove them when they were the causes of distress and even of danger. I feel, however, that it would be wrong to draw from this kind of experience an unqualified adverse opinion. The use of these same instruments may in many other cases have been beneficial; and, naturally, these cases would not be so likely to come under the observation of another physician.

A pessary which compels the wearer to forego exercise, to keep on the sofa, may be pronounced a failure. Under these conditions the health must give way; there can be no improvement in tissue.

Surgery, again, offers resources for the relief of this malposition. It is obvious that if we could so shorten the anterior wall of the vagina at its upper part as to drag upon the cervix, we should bring this part of the uterus downwards and forwards. This may in some cases be accomplished by removing a triangular piece of mucous membrane from the vagina in front of the cervix, and contracting the part by bringing the

edges together. The object might also be attained by establishing a cicatrix at this part by potassa cum calce or the actual cautery.

3. Concurrently with the endeavor to correct the malposition, it is desirable to carry out the third indication, namely, to improve the general tone and nutrition. To complete and especially to maintain a cure, we want good muscular fibre and sound tissues. The first condition to obtain these is obviously healthy nutrition, the capacity for converting food into healthy structure. We may aid in correcting this fault by two methods. First, by placing the patient in good hygienic conditions, and the use of tonic medicines, as strychnine, iron, quinine; and, secondly, by local applications to the weak tissues of the vagina and uterus. Some amount of uterine catarrh is almost constant. This is best treated by introducing two or three grains of solid sulphate of zinc into the uterine cavity, or swabbing with tincture of iodine every four or five days. Astringents to the vagina, in the form of injections or pessaries, will lend material help.

Emmet has arrived at some remarkable conclusions (*Gynæcological Trans.*, 1876) as to the etiology of flexions. He distinguishes flexions of the cervix and flexions of the body as a whole. His statistics show that the woman who has been impregnated is rarely found with a flexion of the cervix, and that in comparison with other women, she is but little liable to flexion of the body. Future observation he thinks will settle the point that the existence of a flexion of the cervix should be proof that impregnation had never taken place. Flexions of the body forward are the most frequent. Emmet's observations are extremely interesting, and challenge further examination. I fully recognize the relative frequency of flexions in women who have been pregnant. But I am unable at present to concur unreservedly in his opinion that flexion of the cervix is proof of non-impregnation.

Flexions of the cervix have, says Emmet, their origin at about the age of puberty by the balance being lost between the relative growth of the body and cervix.

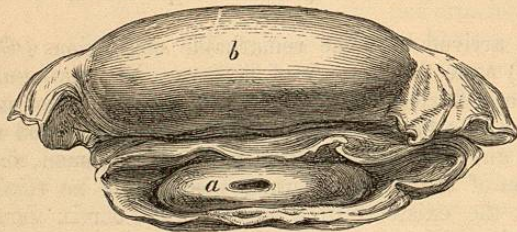
ANTEFLEXION.

Version may pass into flexion. The position of the cervix being maintained by its relation to the bladder on the axis of suspension, and the body being movable and soft, pressure acting upon its hinder surface will gradually bend it down, breaking it as it were at the union of body and cervix.

The causes of antelexion are similar to those which lead to anteversion, excepting coitus. To these may be added a state of weakness at the juncture of cervix and body from relaxation, which disposes the organ to bend at this point. It may be congenital or acquired. The congenital antelexion, being a persistence of the natural condition in an exaggerated form, tends to be corrected with time, and especially by pregnancy, should this take place. But not rarely the bending is much in excess of the normal degree. The organ has quite the form of a retort, the fundus nodding so low that the summit looks down, and is almost on a level with the os. There is commonly some degree of general deficiency of sexual

development associated with this condition, more especially a small conical vaginal-portion with a minute os externum, and a short vagina. This form may lead to no trouble until the advent of puberty or marriage. It is difficult to form even a rough estimate of its influence as a cause of dysmenorrhœa or of other disorder, since it is only those cases in which actual disorder arises that come under medical care. There may then possibly exist many cases of extreme ante flexion, unattended by distress. On the other hand, it is certain that in many women who seek relief for menstrual disorder, dyspareunia, sterility, we find marked ante flexion; and I am disposed to infer that ante flexion rarely fails to entail trouble. It is obvious that extreme flexion of the uterus, with a depending fundus, must present a mechanical difficulty to the flow of the menstrual fluid. Hence a degree of retention, causing pain, and engorgement of the organ;

FIG. 130.



Extreme Ante flexion of the Uterus (R. B.).

a. The os uteri; b. the fundus, both looking forward. (Nat. size, London Hospital Museum.)

and sooner or later hypertrophy of the fundus. Especially in married life these conditions are apt to be followed by metritis. Catarrh and dilatation of the cavity of the body of the uterus are rarely absent. Retrograde ovarian irritation is induced. If under the general engorgement of the ovaries, tubes, and uterus attending a menstrual period, any perturbing cause, as cold, shock, sexual intercourse intervene, the transition into inflammation in the form of metritis, oophoritis, peritonitis, or perimetritis is easy.

When relaxation of the uterine tissues and the surrounding structures has taken place, as from general loss of tone, or from local disorder, the fundus may be forced down upon, or behind, the bladder by the superincumbent pressure. This may take place gradually, or suddenly under violent exertion or succussion.

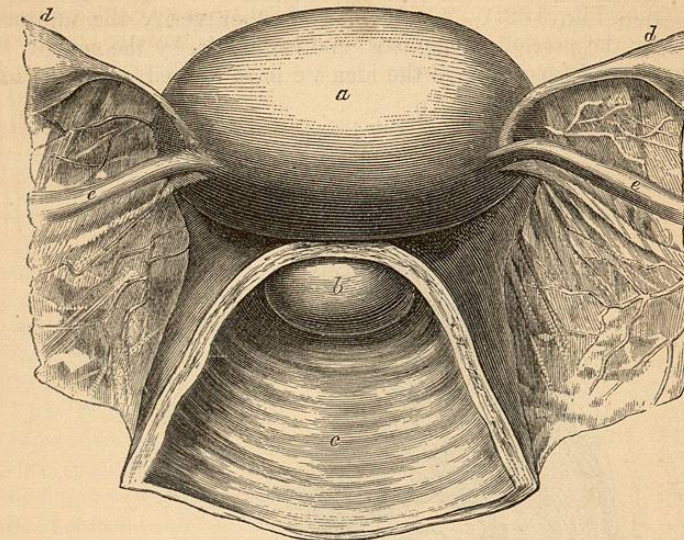
The same features are also well shown in Fig. 131, taken from Boivin and Dugès.

If not existing before the ante flexion, congestion, hyperplasia, hypertrophy, are pretty sure to be developed afterwards, and to aggravate the displacement.

Ante flexion has little tendency to spontaneous cure. Rokitansky says that flexions sometimes tend to pass into versions, that is, the bent-down cervix rises so that the uterus straightens itself. It is intelligible that the uterus which has suffered sudden ante flexion may gradually, under a resilient force, lessen the bend imparted to it. But to do this, the rising cervix must drag upon the cervico-vesical connections, and either pull up

the base of the bladder, or the connective tissue between must stretch. There must, in short, be shifting of the axis of suspension of the uterus. No doubt one or other or both these events take place in primary ante version, and it is therefore not improbable that they may take place in

FIG. 131.



Ante flexion of the Uterus.

a. The fundus uteri; b. the vaginal-portion—both looking forward. c. The vagina. e. e. Fallopian tubes. d. d. The ovaries. (From Boivin and Dugès.)

the secondary ante version of Rokitansky. But clinical evidence of this change has escaped me. I have known many cases of ante flexion that have lasted as such for lengthened periods.

Ante flexion, like ante version, produces three sets of symptoms. The first are due to changes in the uterus itself. These cannot be called special to ante flexion. They consist in difficult function, as dysmenorrhœa, in the symptoms proper to congestion, inflammation, and hypertrophy. Hence, menorrhagia and leucorrhœa are very common. But in many cases of congenital ante flexion, menorrhagia does not occur, or at least is not a continuous symptom.

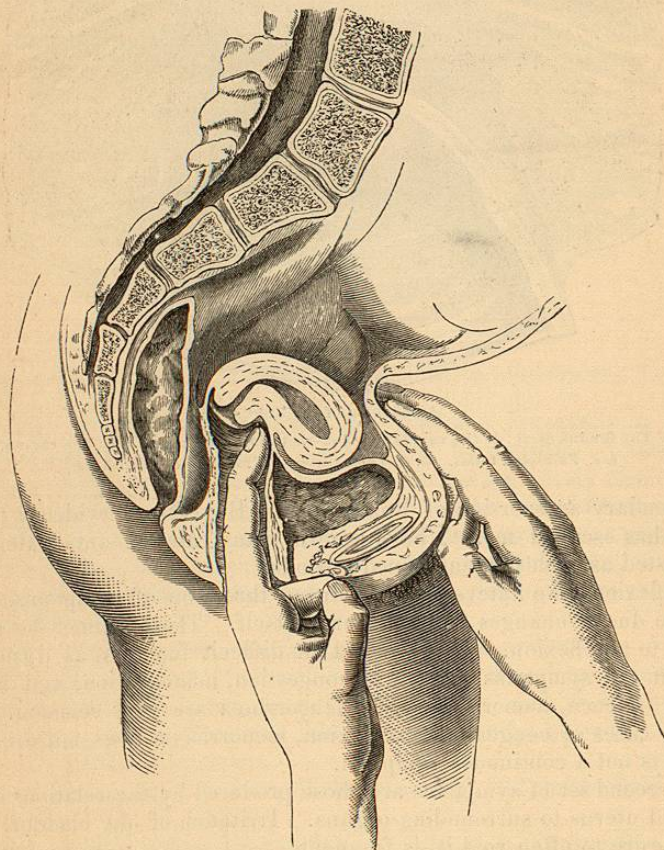
The second set of symptoms are those produced by the relations of the displaced uterus to surrounding organs. Irritation of the bladder, leading to desire to often void it, is frequent.

The third set of symptoms are the remote or constitutional.

Diagnosis of Ante flexion.—All trustworthy means of diagnosis are centred in physical exploration. 1st. Vaginal digital touch feels the os uteri centrally or perhaps anteriorly or posteriorly situated, pointing downwards or a little backwards. Passing the tip of the finger round the vaginal-portion, it feels behind, the elastic roof of the vagina at the angle of reflection from the vaginal-portion, and no solid substance through it; in front between the vaginal-portion and the symphysis pubis it feels

the vaginal roof, and through this resting upon it a rounded solid body; on tracing this solid body backwards towards the vaginal-portion, a deep sulcus is felt between them at the point of union. 2d. The vaginal touch is assisted and corrected by abdominal palpation with the other hand. In this way we may embrace the body of the uterus between the two hands, and movements imparted to it by either hand will be propagated to the other. (See Fig. 132.) 3d. We may further verify the information gathered by the preceding methods, and extend it, by the sound. This should be curved according to the idea we have formed as to the extent

FIG. 132.



Showing Diagnosis of Ante-flexion of Uterus by Combined Abdomino-vaginal Touch (R. B.).

of the flexion, and introduced with the concavity forwards. When the point has reached the os uteri internum, the handle is carried backwards so as to direct the point into the cavity of the body. The passage of the isthmus may often be facilitated by tilting up the body of the uterus with the finger so as to straighten the organ. When the point has reached the fundus we have warning by the objective sense of resistance, and by

the subjective sense of pain. Then by depressing the handle of the sound, the fundus is further lifted up, so that the hand above the symphysis feels it supported on the sound. This is brought into clearer evidence by giving gentle lateral and elevating movements to the sound, when the uterus carried on it will be felt to move in accordance under the hand. The sound thus passing along the entire length of the mass felt in front of the vaginal-portion, demonstrates that it is the uterus and not a body external to it. It gives further information as to the size, shape, and relations of the uterus. It takes measure of the length of the uterus, it enables us by palpation to distinguish its outline, and by moving the uterus we get some idea of its relations.

The conditions which are most likely to simulate ante-flexion of the uterus are: *pregnancy*; a *fibroid tumor* in the anterior wall of the uterus; a *tumor in the bladder*; or a consolidated *hæmatocele* in the ante-uterine peritoneal pouch, or in the connective tissue between bladder and uterus. These two last conditions might easily pass for ante-flexion, if we trusted to the touch alone. Both give the sensation of a solid body separated by a groove or depression from the vaginal-portion; and both may be felt behind and above the symphysis pubis. The sound will usually make matters clear. If the mass be a fibroid, the sound will not pass into it in the direction of its axis; it will probably run up in a straighter direction, more in the axis of the pelvic brim behind the tumor, when we shall realize the existence of a thicker mass between the sound and the finger in the vagina, or the finger above the pubes; we shall make out the increased bulk and weight of the body; we shall, perhaps, ascertain that the shape is not uniform like that of the uterus, but bulging more on one side; the mass will be harder than the uterine wall; and in some cases the sound will only pass in a tortuous course.

The tumor in the bladder may be distinguished by fixing the uterus on the sound, when the tumor can be made to move or glide independently.

The ante-uterine hæmatocele may be distinguished by a similar course of analysis; the mass is felt to be distinct from the uterus which is moved apart upon the sound. The history, also, may help. But pelvic diseases present no exception to the general fallacy of history, so that I am accustomed to rely upon no diagnosis which cannot be reasonably based upon clinical objective signs.

The Treatment of Ante-flexion—The rectification of the ante-flected uterus is more difficult than that of the anteverted one. We can get no power upon the cervical arm of the lever which will have much effect in lifting up the fundus. We have to rely mainly upon propping up the fundus from below; upon taking off the superincumbent weight; upon straightening the cervix by inserting a more or less rigid internal rod—a doubtful remedy; and upon diminishing the unnatural weight of the body of the uterus. This last object it should be our endeavor to attain first, inasmuch as it may depend upon congestion and inflammation, and this state may forbid the immediate application of mechanical means. A few leeches to the roof of the vagina in front of the os uteri may be useful if there is obvious fulness, with pain and increased heat of the part; emollient injections will help. During this preliminary treatment rest in the recumbent posture must be enjoined.

If the patient be very stout, with flaccid abdominal walls, a good belt will aid in diminishing the pressure upon the bowed-down uterus. Keeping the bowels open by suitable aperients, and the large intestine clear by an occasional enema, must on no account be omitted.

The uterus may be propped up from below by one of Thomas's or Hewitt's pessaries. But the effect of pressure so applied to the fundal arm of the uterine lever will sometimes be to cause the uterus to revolve upon its axis of suspension, the cervix retaining its flexion, and the os coming forwards.

To straighten the cervix there are two adjuvants. First, we may pass an intra-uterine pessary. If this can be borne, it may be sufficient of itself, or if not, it will convert the uterus into so good a lever that the external pessary will act efficiently. The best internal pessary for this purpose is Wright's, made of vulcanite. Its expanding branches, diverging when *in situ*, tend to lift up the fundus; or my galvanic coil pessary sometimes answers well.

The axis of the cervix may also be brought into coincidence with that of the body of the uterus by inserting a laminaria tent. The dilatation of the entire uterine canal thus effected will not, indeed, be permanent, but it may be a step by which other means may be utilized. It is also serviceable by giving free vent for any fluids that may have accumulated in the cavity of the uterus. I do not, however, advise the use of tents as a general rule. They are not free from objection on the score of inflammatory complications and pyæmia. Free access to the uterine cavity being obtained, we may reduce the bulk of the uterine body, and induce a healthier mucous membrane, by swabbing with tincture of iodine.

In a considerable proportion of cases, some straightening may be obtained by the bilateral division of the vaginal-portion. Or, as Sims has shown, we may obtain a straighter canal by dividing the vaginal-portion through the posterior lip.

Occasional passage of the uterine sound will be useful not only to verify the condition from time to time, but also to straighten the uterus and lift the fundus out of its unnatural depression.

If the displacement be associated with weak fibre, it is only by slow degrees that the uterus acquires the power of preserving its proper form and position. Some months, perhaps many, will be required for a cure; and we must ever be prepared for disappointment. Tolerance or accommodation may, however, come with time, and when the periodical congestion of ovulation has ceased, the troubles of anteflexion may subside.

The cure will be even more protracted if there is any marked degree of atrophy or thinning at the angle of the flexion. In this case new growth must take place. In proportion as this process goes on, the inferior or anterior wall gets strengthened, as we may imagine it would if we could apply a splint to its length. I believe that in some cases in which the patient has not reached the climacteric, this does take place when the uterus is maintained in a straightened condition by mechanical supports. And I also believe that atrophy at this point is not a necessary condition of flexion.

RETROVERSION; RETROFLEXION.

Retroversion simple is, I believe, not common in the unmarried. Nor is it very common in the married who have not had children. It occurs most frequently as a condition of prolapsus, under which head it has been described. It is not nearly so frequent as retroflexion. This may, perhaps, be partly accounted for by the tendency which the uterus has to bend at the junction of neck and body when force is applied to the fundus. Thus, when the fundus is once inclined a little backwards, as in the early stage of retroversion, receiving the superincumbent weight more and more upon its anterior surface, it rolls back, whilst the cervix, being held down on its axis of suspension, maintains its position.

The history of retroversion and retroflexion of the gravid womb I have drawn with some fulness in my work on *Obstetric Operations*, and do not therefore discuss it here.

The course and effects of retroversion do not require lengthened description, since a great part of the history of retroversion belongs properly to that of prolapsus. The healthy uterus is not very liable to retroversion. This displacement is usually secondary upon engorgement, enlargement of the body of the uterus, upon atrophy, or upon the presence of a tumor. I have also known it to be produced by the residual adhesions of a retro-uterine hæmatocele. If the uterine body be a little enlarged from any cause, as during menstruation, sudden exertion or succussion may throw it back, more or less descent attending. This may be distinguished as *acute retroversion*. As in acute prolapsus, there will be, first, the pain produced by the violence done to the uterine supports. This will last for several days, or even weeks. Pelvic peritonitis may even be provoked. In the next place, and often very quickly, irritation of the bladder and rectum ensues, and there may even be retention of urine, and of feces, and tenesmus. Then the obstruction caused by the altered relations of the parts to the circulation of the uterus, leads to increased engorgement of the organ, especially of its body. The uterus itself becomes the seat of pain of a throbbing character, with a sense of heat, local oppression, and bearing-down. This tenderness is also productive of dyspareunia. The pain radiates to the sacral and lumbar regions, to the groins and down the thighs, generally down one leg more than the other. There is often a considerable amount of constitutional disturbance evinced by accelerated pulse, and by nervous phenomena, as hysteria. If the uterus be much depressed, "expulsive pains" may be excited, and sometimes sacral pain—coccygodynia is produced.

When retroversion is produced gradually, it is most commonly preceded by some morbid alteration in the substance of the uterus; and the symptoms proper to the complicating disease will be added to those due to the displacement, but the local symptoms will be less acute.

That retroversion is a condition of prolapsus is especially true of what may be called the *senile retroversion*. In this case it is not necessary that there should be any antecedent disease of the uterus. The essential preliminary condition is atrophy. The uterus has shrunk below its normal dimensions; the absorption of the fat which makes up the padding

of the pelvis, and the loss of tonicity of the tissues generally, facilitate prolapsus. As the uterus falls, its fundus rolls back, so that when prolapsus has passed into procidentia, the bag formed by the inverted vagina contains the uterus completely retroverted, where it may be grasped and surrounded by the fingers.

This position of the uterus may also be found in young women as the result of prolapsus after labor, the posterior wall of the vagina being weakened perhaps by perineal laceration.

Retroversion may, as Rokitansky says, be promoted by a very small inclination of the pelvis. That is, if we suppose the axis of the pelvis to approach the brute type, the axis of the brim being parallel with the vertebral column, the pressure of the superincumbent intestines will take the fundus uteri in front, and thus throw it over backwards. In the stooping or kneeling posture the inclination of the pelvis is much lessened. Hence the distress often felt in this posture.

The Diagnosis of Retroversion.—Physical exploration reveals the exact condition. The patient is placed in the semi-prone posture. Vaginal touch shows the os uteri tilted forwards behind the symphysis pubis; the vaginal roof behind the vaginal-portion is put on the stretch, forming an inclined plane, tending downwards and backwards, thus reversing the normal direction of the vaginal canal. Through this stretched vaginal roof, the cervix and body of the uterus are felt extending in a line with the vaginal-portion, as a solid rounded mass, which makes the posterior wall of the vagina protrude forwards, compressing it against the anterior wall and the bladder. Often, however, the uterus takes an oblique direction; its long axis being not quite coincident with the conjugate diameter of the pelvis. This is why the bladder and rectum so often escape disturbing pressure. Pressure upon the uterus in recent cases will generally evoke acute pain, and in chronic cases some degree of tenderness on touch is rarely absent. There is commonly a free secretion of mucus, the exponent of the local congestion.

The position is made still clearer by rectal touch. The finger in the rectum easily makes out the enlarged rounded fundus of the uterus projecting into the rectal cavity. It lies in Douglas's pouch. The tip of the finger can in most cases without difficulty travel all round the circumference of the uterine mass, getting above it, whilst at the same time, by abdominal touch, we endeavor to make the two examining hands meet, we place the whole mass whose nature we are seeking to identify between them; and thus, having brought it, isolated from the abdominal cavity into a limited space, we can define its outline and relations, and determine accurately its nature.

The last and most conclusive evidence is obtained by the sound. The patient lying on her left side, the examiner feels for the os uteri, and guides the point of the sound, which is very gently curved, into it with the concavity turned backwards; when it has run about an inch, it will generally be found to pass more easily by lifting up the fundus of the uterus with the guiding finger, whilst the point of the sound is directed backwards; by this consentaneous manœuvre the sound will penetrate to the fundus, of which intimation is obtained by the arrest of the instrument, by the sense of pain which almost invariably attends touching the

fundus, and by the length to which the sound has penetrated—that is, two and a half inches or more.

The final evidence is obtained by what may be called the crucial test of replacing the uterus. The handle of the sound is made to describe a large radius by raising the handle whilst the finger on the body of the uterus, carries this part over to the left, then by the gentlest possible movement, the point is made to turn in the uterus with the smallest possible radius, until its concavity looks forwards; then the handle is gently carried backwards in a straight line, or if the uterus is sensibly enlarged, a little obliquely backwards, so as to lift it on one side of the projecting promontory of the sacrum. The uterus, thus forming a common lever with the sound inside it, has its fundus brought forwards towards the pubes, where it may now be felt through the abdominal walls, the region hitherto occupied by the solid rounded mass being left void (see Figs. 138, 141).

Demonstration cannot be more complete. The patient is usually conscious of immediate relief.

The conditions that may lead astray are—1. *A tumor in the posterior wall of the uterus.* This may be distinguished by the sound passing well in front of the mass behind the vaginal-portion along the natural direction of the uterine cavity, or even more anteriorly, and especially by our being enabled to feel the fundus uteri supported on the sound above the pubes. 2. *A retro-uterine hæmatocoele.* This is distinguished from retroversion by the same means; we make out the uterus well in front of the tumor; and usually the os points downwards or backwards, and the whole uterus is pushed forwards upon the symphysis. 3. *A small ovarian tumor in Douglas's pouch.* This is distinguished by the same means. 4. *A mass of hardened scybala in the rectum.* Such a mass, coming down to a level or nearly, with the cervix uteri, is at times very deceptive. It may be distinguished by its yielding under the pressure of the finger; and subsequently by the sound showing the fundus uteri to be in a different place.

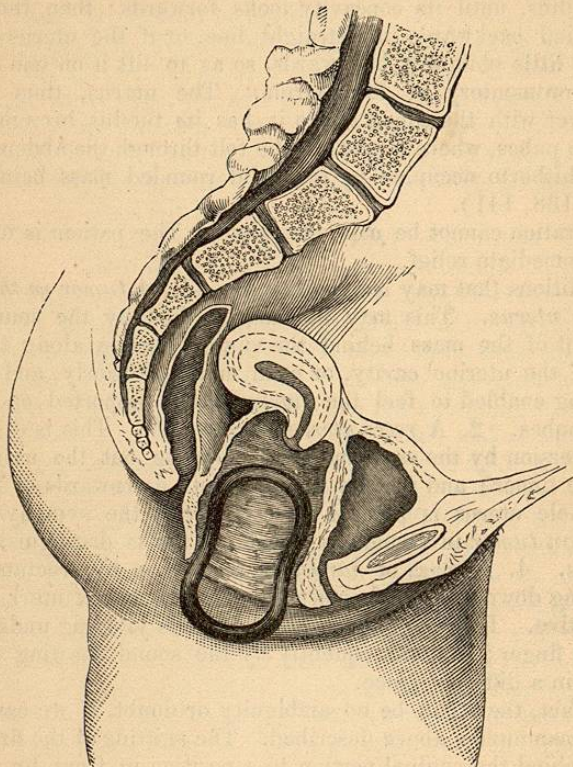
But, in fact, there can be no ambiguity or doubt, if we carry out the diagnostic manœuvres above described. The shifting of the firm rounded mass felt behind the vaginal-portion to a position in front by the sound, so that it is felt above the symphysis, is characteristic, and conclusive of retroversion.

We must, however, bear in mind that the fundus of the uterus may be tied down by adhesions, so that it becomes unsafe to attempt to lift it up by the sound. The occasional occurrence of this complication dictates great care and gentleness in reversing the point of the sound. The handle should be carried back with the minimum of force, pressure by the finger on the fundus aiding, the lightest touch only should be added to help its gravity. If any resistance be experienced, the attempt at reduction must be abandoned.

The *treatment* of retroversion consists mainly in keeping the uterus in its normal position by mechanical support until its natural supports have recovered the power of doing their work. In some cases it is necessary to begin by removing or lessening local congestion or inflammation. This is done by rest, by the application of leeches, but this is not often neces-

sary; by sedative pessaries; by the use of poultices or warm water irrigations if the pain is great; by saline and sedative medicines. The mechanical treatment consists in the use of the sound and pessaries. The sound already used for diagnostic purposes is now applied to treatment. If by its means the uterus be replaced just before a menstrual period,

FIG. 133.



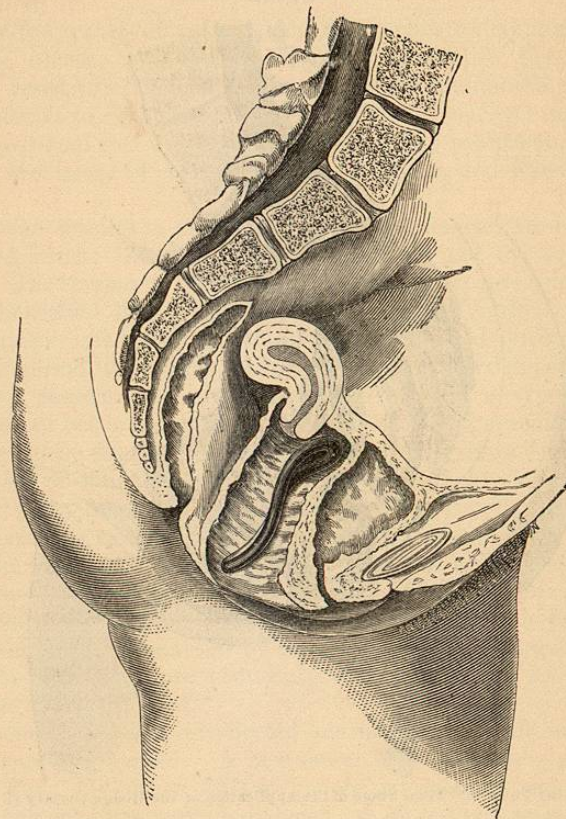
Illustrating the mode of applying the Hodge or Lever-pessary for Retroversion or Retroflexion (R. B.).

The diagram represents the first stage of introduction. The pessary is passed edgewise in the line of the vulva fissure. During its passage the perineum is held back by the finger, and the pessary is pressed backwards so as to avoid the symphysis.

and the patient be kept at rest, it is possible that the proper position may be maintained throughout the period. Should this happen, the period will pass off more easily, and a step will be gained towards cure. The uterus will escape an increment of excessive congestion; and it may soon be able to bear the contact of a pessary. The best form of pessary is one of Hodge's. The size is selected according to the capacity of the vagina, bearing in mind the rule that it must not be so large as to stretch the canal. Its upper limb must rise to fill the *cul-de-sac* behind the vaginal-portion, whilst the lower limb rests upon the anterior wall of the vagina, not descending below the middle of the symphysis pubis. Imme-

diately before applying the pessary it is desirable to restore the uterus by the sound or finger. One great test of the fitness of the pessary consists in its being borne without pain. If it cause pain, it must without hesitation be withdrawn, and, guided by the information obtained by the failure, we select another pessary.

FIG. 134.



The Second Stage in the application of the Hodge-pessary (R. B.).

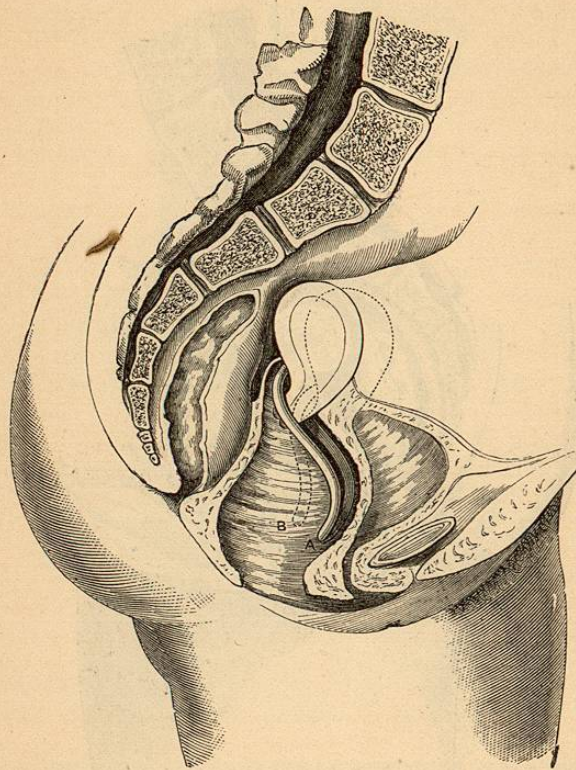
The pessary has been turned in the transverse diameter of the pelvis after clearing the vulva. The upper limb runs up in front of the cervix uteri.

If the pessary fits well, the patient needs no longer to be confined to the recumbent posture. It is not the least of the many useful points of this admirable instrument, that its beneficial action is even promoted by moderate exercise. In the upright posture the inspiratory effort carries down the anterior wall of the vagina, and with this the lower limb of the lever; the upper limb rises and comes forward, gently pushing the body of the uterus before it; the long axis of the lever under these circumstances oscillates lightly a little on either side of the vertical line; every

movement, every respiration, carrying the fundus of the uterus towards its natural inclination.

Gradually under the influence of this support, the tumefaction of the body of the uterus diminishes, and with it the tendency to fall over backwards; the vagina and other supports, relieved of undue strain, recover their tone; and, by-and-bye, the pessary can be dispensed with.

FIG. 135.



Showing the Third and Final Stage of the Application of the Hodge-pessary (R. B.).

The upper limb has been carried by the finger behind the cervix; the lower limb lies behind the symphysis pubis. A shows the ordinary position of the pessary during expiration; the dotted pessary B shows the retreat of the lower limb during inspiration.

This is the essential principle of treatment; but certain accessory means are often useful. Morbid complications, local or general, must be dealt with according to their indications. Since not uncommonly there exist some engorgement with abrasion of the vaginal-portion, and catarrh of the cervico-uterine cavity, an occasional touch of nitrate of silver or the introduction of a small stick of sulphate of zinc, or painting with tincture of iodine, will much accelerate the cure. Astringent vaginal injections will also be useful.

An important point is to obviate constipation and accumulation of feces. When adhesions bind down the retroverted body of the uterus, the use

of the sound to rectify the malposition must be omitted. But the lever-pessary will still be useful. It will sometimes be necessary to use in the first instance a smaller pessary. The adhesions will generally slowly stretch under the continuous gradual action of the lever; and under this gradual elongation the adhesions disappear by atrophy. Pregnancy will sometimes in like manner stretch and induce atrophy of the adhesions. If not, by hindering the development of the uterus, they may cause abortion.

Probably few cases of retroversion uncomplicated by tumors in the walls of the uterus, or not caused by the pressure of tumors outside, would long resist treatment, if we could exclude counteracting accidents. But it is difficult to command all the conditions of success: especially the securing functional rest of the organs affected, the postponement of pregnancy, the avoidance of excessive bodily exercise, and other disturbing causes.

Retroflexion consists in an arching of the uterus backwards. We distinguish two forms: the primary, or congenital; and the secondary, or acquired. The *primary* cases may be often discovered in the early years of menstrual life. They are found in the virginal state. The rational clinical inference is that the flexion existed during childhood. During this period, the uterus, having no functional existence, lies small, undeveloped, passive, and gives rise to no subjective symptoms. But when the organ becomes subject to the periodical hyperæmia of menstruation, the obstacle set by this malformation gives rise to dysmenorrhœa. And the body of the uterus being enlarged by the development incident to its entry upon functional activity, and also abnormally by the congestions to which it is exposed, and the impediment offered to its circulation, becomes the source of other troubles which cannot be overlooked.

Still, although something beyond the normal degree of enlargement generally takes place after the onset of menstrual life, this primary form of retroflexion is rarely marked by such considerable enlargements of the body of the uterus as are commonly observed in the acquired forms which ensue upon child-bed.

When women having a retroflected uterus marry, their suffering commonly becomes aggravated. A new source of congestion is added to the menstrual flux; the organ fails to get the intervals of rest it needs; a state of persistent hyperæmia is induced, which borders on inflammation; this easily leads to hyperplasia, and hence to hypertrophy of the body of the uterus. Its functions are performed with increasing difficulty. The dysmenorrhœa is more severe; menorrhagia is not uncommon; and dyspareunia is almost constant. This last effect often entails another—sterility. But sterility in association with retroflexion is more commonly due to the frequent complication with a narrow os externum. This complication also aggravates the other evils, especially the dysmenorrhœa.

The *secondary or acquired form of retroflexion* most commonly arises after childbirth or abortion. Labors attended by exhausting conditions, as hemorrhage, dispose especially to this displacement. The retroflexion often takes place within a few days of labor. At this time its tissues are soft, flabby, pliable; the bulk of the uterus, especially of its body, is greatly above the normal size; its weight is greater; and as the